

Varazdin Development and Entrepreneurship Agency and University North  
in cooperation with  
Azerbaijan State University of Economics (UNEC)  
Faculty of Management University of Warsaw  
Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat  
Polytechnic of Medimurje in Cakovec



# Economic and Social Development

55<sup>th</sup> International Scientific Conference on Economic and Social Development

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Editors:

Altay Ismayilov, Khatai Aliyev, Manuel Benazic



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## **IMPACT OF E-GOVERNMENT SERVICES ON BUSINESS ENVIRONMENT DEVELOPMENT IN AZERBAIJAN**

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### **ABSTRACT**

*In this paper author describes impact of e-government services to the business environment in Azerbaijan. Paper also discusses strategies and specific regulations which give tangible results in economic development.*

**Keywords:** *Economy, E-government, business environment, development, government-business relations, entrepreneurship, e-services*

### **1. INTRODUCTION**

One of the important directions among the 12 strategic roadmaps defined in the "main directions of the strategic roadmaps on the main sectors of the national economy and economy" is the provision of wider opportunities for communication and cooperation between local and international private sector representatives. Currently, there is a further strengthening of the government's leading role in creating a favorable business environment in the country. The government's focus is on the development of entrepreneurship, improvement of state regulation in the direction of increasing its competitiveness, formation of attractive business and investment environment in accordance with advanced international experience and further increase of its affordability, regulation of motor skills and legal base in this field. In order to achieve these goals, the state has consistently implemented comprehensive measures in the field of development of State-entrepreneur relations, elimination of illegal interference in entrepreneurial activity, expansion of competitiveness and export opportunities, formation of state support and incentives for entrepreneurs, provision of e-government services in accordance with international standards. These include the establishment of the Center for Analysis of Economic Reforms and Communications, opening of EnterpriseAzerbaijan.com Portal - [www.azexport.az](http://www.azexport.az) and an online portal of EnterpriseAzerbaijan.com to provide local and foreign investors with information on investment projects, assets, natural resources and investment opportunities created by legal entities and individuals, creation of "Single Window" Export Support Center, adoption of the "State Program on Enhancing Digital Payments in the Republic of Azerbaijan for 2018-2020", Real Estate Services Facility, which will create more efficient and efficient property registration opportunities; launch of the Monitoring.az Portal, which aims to reduce the "communication distance" between agencies in monitoring and evaluating strategic roadmaps and other government programs, including the creation of an "Electronic Execution" system to ensure timely and complete enforcement of court decisions; the official website of the Committee on Urban Planning and Architecture of the Republic of Azerbaijan at [birpencere.arxkom.gov.az/en](http://birpencere.arxkom.gov.az/en) "Green Corridor" to create an enabling environment for the entrepreneur in the field of construction activities and to ensure effective management by reducing the role of human factors in business-to-business relations. It can be noted that in the field of state registration of legal entities, an improved electronic appeal system is being created. Also, good to mention [azerp.az](http://azerp.az) portal which aims to support to plan resources of small and medium business in real time. The implementation of these measures once again proves that the process of improving e-government services for the development of a favorable business environment in Azerbaijan is continued as a priority by expanding the application of modern

technologies and simplifying the possibilities of their use. Public e-payment, e-tax, e-intellectual management, etc. supports the development of the digital economy by expanding the organization of electronic services.

## 2. RESEARCH

Azexport portal, the main mission of which is to provide information about the goods of Azerbaijani origin, for the first time launched the presentation of Azerbaijani products on international e-commerce platforms over a single space. As a result, the amount of export orders entered the portal since 2017 amounted to 1.6 billion US dollars. Azexport portal (including USD 475 million in 2017, USD 514 million in 2018 and USD 595 million in 2019) has repeatedly increased the level of representation of “Made in Azerbaijan” products on international e-commerce platforms. So, prior to Azexport's activity, e-commerce opportunities for export potential entrepreneurs were 3%, while in 2019 this figure was 28%. To date, the Azexport portal has received more than 35,000 orders from 150 countries. One of Azexport's major projects is to provide local entrepreneurs with a Free Trade Certificate (SSS) to facilitate access to new export markets. Digital Crossroads, which gives free sales certificates, is based on X-Road technology. This technology is the most secure and perfect protocol for information exchange. Since the certificate is mandatory in many countries, there is a need for local businesses to obtain the same certificate. It is approved by the relevant state agency that the products produced all over the country meet the legislation of the country and are in free circulation. It should be noted that 196 certificates were presented to 7 local companies in 2018-2019 in order to expand the geography of export of products produced under the brand name “Made in Azerbaijan”. Thanks to the free sales certificate presented by the portal to companies, exporters have gained access to 54 new country markets. Since its launch, more than US \$ 270 million of non-oil products have been exported to various countries around the world through the “Single window” Export Support Center. The main parts of exported products are construction and industrial products(steel pipes, steel fittings), precious metals (lead, silver ingots), agricultural products (fruit juices, tomatoes, beets, licorice root, tobacco, cheese). The geography of exported products is dominated by Switzerland, Russia, Georgia, Turkey, Kazakhstan. Six-state agencies provide e-services to entrepreneurs at the Single Window Export Support Center:

- Certificate of origin confirming the country of origin of exported goods is issued by the Ministry of Economy;
- Food safety certificate issued by Azerbaijan Food Safety Agency in accordance with the requirements of importing countries, including EU countries, phytosanitary, animal and animal origin products for plant and Plant Products, International Veterinary Certificate issued for raw materials, feed and feed additives products. In addition, the process of state registration and State Register of entrepreneurs operating in the food sector is being re-established by Azerbaijan Food Safety Agency;
- Cites international permit certificate for the extraction of rare and endangered species of Wild fauna and wild flora by the Ministry of Ecology and Natural Resources;
- Permission document of the State Committee for work with religious organizations on religious literature, audio and video materials;
- Certificate of protection of cultural wealth during export of cultural wealth (carpets and carpet products, paintings, samples of crafts, musical instruments and jewelry) by the Ministry of culture;
- In the preparation of normative documents on the products produced by the Azerbaijan Standardization Institute, Certificate of conformity to the products exported or imported is issued.

Azexport.az portal also supports entrepreneurs in the export procedure of orders submitted to the Single Window Export Support Center. Thus, after obtaining a certificate of export, the entrepreneur can export its products to the world market through Azexport portal. Single Window Export Support Center, together with Azexport.az portal and Digital Commerce Center, create an ecosystem that promotes exports. In connection with the implementation of the event "Creation and updating of investment information Bank as a result of regular analysis" in order to improve business and investment climate in Azerbaijan and ensure the development of small and medium entrepreneurship Enterpriseazerboijan.jum an internet portal has been created. EnterpriseAzerbaijan has a diversified investment portfolio. One of the services provided by the portal is to enable investors to use Crowdfunding for the first time in Azerbaijan. EnterpriseAzerbaijan portal is integrated into many popular portals of the world in this area and promotes projects to a wider audience. For the first time in Azerbaijan, Enterprise Azerbaijan portal gives local startups with creative ideas access to the world financial markets via the popular Kickstarter portal. Looking at the statistics of start-up projects posted on EnterpriseAzerbaijan portal, we can see that the projects placed on the Portal are agriculture, industry, energy, construction, transport / logistics, telecommunications, science and technology and so on. The category covers 12 areas. 42% of projects on the portal are agriculture, 20% - science and technology, 9% - industry, 29% - other fields. Thus, the main goal of the EnterpriseAzerbaijan portal is to constantly improve the business environment of our country, to recognize our creative and innovative young people around the world, to increase their access to finance, to provide mentorship and specialist support at various stages, and to increase capital inflow to foreign investors. As one of the e-government services for the development of a favorable business environment in Azerbaijan, the green corridor is of great importance. As a result of the reforms carried out in the customs system for the purpose of obtaining the right of foreign trade participants to use the "green corridor" issue system permanently, to implement international trade in an easy and fast way, to ensure transparency, to save time. As a result of the reforms, the movement of vehicles was reduced to a minimum. At the same time, the number of documents required during foreign trade operations has been reduced. This figure was reduced to 3 in import and 2 in exports. The "Green Corridor" system allows users to import goods and vehicles directly to their warehouses without applying any customs control, and to export their goods without the presence of a customs officer, by removing the relevant customs security. All system operations are conducted electronically in any location with access to the Internet. Currently, the number of foreign trade participants granted permanent access to the Green Corridor system for export operations is 182, and 288 for import operations. One of the innovations that make the border crossing process easier and faster is the "one inspector - one vehicle" project. This project has helped to increase the number of vehicles crossing the customs checkpoint in real time, which is one of the important factors for trade. One of the measures taken to develop the state-entrepreneur relations is the creation of the "property services space". All services related to the registration of real estate are carried out on the principle of "Single window", with the help of a notary, regardless of where the real estate is located. Various documents required for the approval of the contract are obtained by the notary in real time by means of Information Systems. It should also be noted that as a result of the reforms carried out, including the integration of Information Systems, the digitization of documents, the collection of data in the electronic database, the procedures for obtaining real estate have become much easier and the term has been reduced to a minimum. The document on the right of ownership can also be obtained electronically. Even, an extract from the State Register of real estate can be obtained at any time and place with a message sent from the mobile phone. It is possible to verify the authenticity of the document through the QR-code contained in the document. One of the e-services provided to entrepreneurs in the direction of improving the business environment and further improving the position of our company in

international ratings is the creation of "electronic court" Information System. This system is one of the most advanced measures carried out in the country to support the activities of entrepreneurship enterprises. As a result of the application of the system, the possibility of applying to the economic courts in an entirely electronic manner has been provided and the paper requirement of the documents has been eliminated. Also, electronic payment of the court fee and getting acquainted with the court cases in electronic form in the cases in which all parties participate, complete electronic regulation of the relations between the judge and the entrepreneur was ensured. Paperless, electronic correspondence between the judge and the entrepreneur, electronic submission and receipt of documents, automatic electronic publication of all decisions are among the achievements of the reforms. One of the important measures in the field of entrepreneurship development and creation of favorable business environment is the creation of an electronic application system for obtaining permission for construction and operation of construction facilities. This has been confirmed in the "procedure for authorizing the construction of some construction sites and allowing the operation of the construction site". The basic principles set out in this rule are to determine the characteristics of individual procedures and the number of days for each procedure, to form a favorable environment for the entrepreneur in the field of construction activity and to ensure efficient management by reducing the role of the human factor in the state-business relations. According to the new rules, the permission for construction and operation of the construction object is carried out free of charge, the receipt of feedback and technical conditions from all relevant bodies for obtaining the construction permit is carried out in electronic form without the participation of the entrepreneur. At the same time, by reducing the number of procedures and days required by the entrepreneur to obtain permission for construction and operation, a more operative, transparent and efficient environment is formed for entrepreneurs. As a result of the reforms in this area, all technical specifications and comments regarding construction permits are obtained electronically without the participation of the entrepreneur; Acquisition is carried out electronically on the basis of the "Single window" principle through the official website of the Committee for Urban Planning and Architecture of the Republic of Azerbaijan. [www.birpencere.arxkom.gov.az/en](http://www.birpencere.arxkom.gov.az/en).

### **3. CONCLUSION**

Along with e-government in Azerbaijan, the establishment of an electronic monitoring system ensures flexible and effective public administration. Monitoring.az portal launched in October 2019, enables the creation of Big Data databases as a result of monitoring and evaluation of government strategies, programs, and action plans. On the other hand Azranking.az portal provides for the generation of reforms using the database, and the reforms are also monitored again. In the future is planned to create a functional connection "wise circle" between Monitoring.az and Azranking.az portals. The launch of the e-portal will allow coordination of monitoring and evaluation processes in the country based on the principles of accountability, transparency, agility, objectivity, rule of law, effective decision-making and good governance. Such management primarily serves for fair representation, reduction of bureaucratic procedures, consideration of the needs of the society. The commissioning of such a portal will ensure the authenticity, completeness, reliability and free access to the information provided through the electronic platform, and will facilitate the maximum reduction of time spent on information exchange. On the other hand, with the wide application of modern technologies to this country, will create additional incentives in such issues as increasing the efficiency of the activities of state bodies, establishment of effective, transparent, controllable state management and local self-government, involvement of citizens in public administration and reform process.

Portal institutionalizes the monitoring and evaluation process, digitizes the reform processes, improves coordination and communication efficiency, increases accountability, transparency and efficiency.

**LITERATURE:**

1. Analysis of Economic Reforms and the "Export Overview" of the Communications Center, *November 2018*
2. Database bank of Investment projects [enterpriseazerbaijan.com](http://enterpriseazerbaijan.com)
3. Decree of the President of the Republic of Azerbaijan "On Additional Measures to Strengthen the Position of the Republic of Azerbaijan as a Digital Trade Corridor and Expand Foreign Trade Operations", *22 February 2017*.
4. Decree of the President of the Republic of Azerbaijan "On Analyzing Economic Reforms and Creating a Communication Center". *20 April, 2016*
5. Decree of the President of the Republic of Azerbaijan "On the Main Directions of the Strategic Road Map on National Economy and Major Sectors of the Economy", *16 March 2016*
6. Order of the President of the Republic of Azerbaijan "On Creation of Unified Database of Goods Produced in the Republic of Azerbaijan" *21 September 2016*
7. Portal for monitoring [ems.gov.az](http://ems.gov.az)
8. State Program on Digital Payment Expansion in the Republic of Azerbaijan in 2018-2020, *26 September 2018*
9. State Services Portal [drx.az](http://drx.az)
10. Strategic Roadmap for the National Economy Perspective of the Republic of Azerbaijan. *6 December 2016*



## **ADAM SMITH WEALTH PRODUCTION SCHEME (NEW INTERPRETATION)**

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### **ABSTRACT**

*The main scientific task of Adam Smith was to explain the reasons for the wealth of peoples. Thrift is not the only factor that A. Smith distinguishes. In addition to frugality, he also speaks of labor productivity. Indeed, productive workers can be more or less productive. And, discussing this issue, we come to the next crucial topic that Adam Smith raises - what does labor productivity depend on? Smith's answer - it depends on the division of labor. What is the division of labor? This is the specialization of workers in certain types of activities, in certain operations, which allows them to develop skills and, accordingly, increase their productivity. Smith goes to the factor that we today call technological progress. A factor that, indeed, provides unlimited opportunities for the development of production, but Smith does not stop there. He would not be a great economist if he limited himself only to the technical side of things. He explains that the division of labor itself is possible only where there is a scale in order to produce a lot of products and, accordingly, to divide the labor. And now we can say that the main scheme, as Adam Smith thinks of the production of wealth, is completed. If our society is lean, that is, it is not wasteful on consumption, if it provides a high level of division of labor, then the annual social product will grow and the next year will be richer than the previous one. This is the essence of economic growth. Smith's book *On the Wealth of Nations*, in modern terms, is a book on economic growth.*

**Keywords:** *thrift, labor productivity, division of labor, wealth production, economic growth*

### **1. INTRODUCTION**

A. Smith details the benefits, interconnections and consequences of a free market economy that paved the way for modern capitalism. He believed that it was pointless to offer the market what no one wants to pay for. According to A. Smith, a free market makes monopoly impossible, which means exploitation of workers and consumers. The famous work of A. Smith opens our eyes to the evolution of industry and explains the emergence and progressive development of trade. His purest, unsullied capitalist worldview had its own merits and beneficial consequences. A. Smith conducts a thorough analysis of business from an economic and social point of view and pays a lot of attention to business ethics, although he discusses this topic in more detail in the essay “Theory of moral feelings.” It is the attention to these issues that makes his research so special. He does not just analyze financial, economic and political issues, but considers them in a moral, philosophical and historical context. Thanks to this A. Smith is widely quoted to this day. To isolate only a few key ideas from such rich material was a difficult task. Without trying to grasp the immensity, we decided to narrow our attention and concentrated on the thoughts and theories that are most applicable to today's realities.

Methods used:

- the duality of A. Smith's methodology
- descriptive method
- abstract method
- logical generalization
- historical method

## **2. THE MAIN TASK OF ADAM SMITH**

What Smith wrote at one time was against the tide. At that time, state policy was protectionist. Adam Smith demanded a change of ideology, economic policy, the transition to liberal politics. He argued that the economy was capable of self-regulation, condemned any monopolies, and advocated freedom of trade, especially foreign, against protectionism [3, 42]. But he was not dogmatic in this part. He understood that the state has something to do. He believed that state regulation was necessary to ensure the interests of defense, justice, and identified some types of public works that the state should provide, in particular, related to education, and, finally, he admitted that for some young industries state protection was quite appropriate [1, 419]. In this sense, he was far from some of the more recent radical reforms. In this regard, another question arises. How are his book related to moral feelings and the wealth of the people. The fact is that in the theory of moral feelings he proceeds from the fact that a person should be guided by sympathy for another person. And in *The Wealth of Nations*, he is an egoist [1, 76-77]. And how to combine it? In fact, Smith did have both, but he saw how it fit together. And here's a small quote from *The Theory of Moral Senses*: "In pursuit of wealth and honor, a person can exert all his strength, straining every nerve and every muscle in an effort to get ahead of competitors, but if he tries to push away one of them, the patience of others will come end. This is a violation of the principles of fair play, which is unacceptable". That is, private interest, according to Smith, existed and should have existed within the principles of fair play [2].

## **3. ECONOMIC GROWTH AND THRIFT**

For A. Smith, economic growth is important. And this economic growth is manifested in the fact that every year the growth of the social product becomes more and more [1, p. 262, 348, 516]. The question arises, but what does "social product become bigger" mean? How can we judge that it is getting bigger? And here, perhaps, the most difficult part arises, here we proceed to the most difficult for perception part of Adam Smith's "*Wealth of Nations*", because Adam Smith really thinks about how to measure product growth. This is not an easy task. Thrift is not the only factor that A. Smith distinguishes [1, p. 132.693]. In addition to frugality, he also speaks of labor productivity. Indeed, productive workers can be more or less productive. And, discussing this issue, we come to the next crucial topic that Adam Smith raises - what does labor productivity depend on? Smith's answer - it depends on the division of labor. What is the division of labor? This is the specialization of workers in certain types of activities, in certain operations, which allows them to develop skills and, accordingly, increase their productivity [1, p. 435, 480]. Smith at the very beginning of the "*Wealth of Nations*" describes a pin workshop, where the success of this workshop is achieved precisely by the fact that labor is divided into small operations, and this allows you to produce a huge number of these pins, while if one worker tried to make a pin, then he I would have to spend a lot of effort and time for its production [3, p. 6]. This is primarily a technical problem. And in fact, indeed, Smith goes to a factor that we today call technological progress. A factor that, indeed, provides unlimited opportunities for the development of production, but Smith does not stop there. He would not be a great economist if he limited himself only to the technical side of things. He explains that the division of labor itself is possible only where there is a scale in order to produce a lot of products and, accordingly, to divide the labor.

If you live in a remote mountain village with poor transport, then you will have one shoemaker who will cook, make shoes for the whole village and will not share anything with anyone - there is no place for the second. Therefore, Smith introduces the factor of market size as the most important factor that allows to realize the possibility of division of labor.

#### **4. MAIN CIRCUIT**

And now we can say that the main scheme, as Adam Smith thinks of the production of wealth, is completed. If our society is lean, that is, it is not wasteful on consumption, if it provides a high level of division of labor, then the annual social product will grow and the next year will be richer than the previous one. This is the essence of economic growth. Smith's book "On the Wealth of Nations", in modern language, is a book on economic growth [3, 107]. But here you need to make a few comments, or explanations, the first one is just about the division of labor. As we have already noted, Smith devotes a great deal of attention to the division of labor, and he sees just the specifics of his modern society in that it is a society with a division of labor. And this is true because the ancient societies were subsistence farming societies, the bulk of production was carried out in the same economy where it was consumed. It could be a peasant farm or some kind of landowner farm, there could be artisans, but they served this particular farm. By the time of Smith, the division of labor was already quite developed, and man consumed not only what was produced on his farm [4, 61].

#### **5. WEALTH CONCEPT**

And, accordingly, in Smith the very concept of wealth is changing for this society with the division of labor. In general, he writes about wealth, that each person is rich or poor, according to the extent to which he can use the objects of necessity, convenience and pleasure [1, p. 71, 110, 532]. This is a standard definition in the literature of the time, we find it in different variations by many authors. What Smith adds is some clarification that in the conditions of the division of labor, he (the same person) will be rich and poor, depending on the amount of labor that he can manage or which he can buy, that is, not only what was produced in his household, but also what he can exchange in the market. The ability to provide yourself with everything you need, taking into account the possibilities of exchange in the market, is the specificity of a society with a division of labor, and Smith explains that there may be different ways to enter such a society: you can have the product of your labor, that is, sell your product on the market and in return to get what you need, you can sell your labor yourself, go to hire another producer, and, thus earning, then get what you need in the market too, and finally, you can buy a labor product or money ores of other people, no matter how this money gets to you - as a result of labor, selling a product, or because maybe you have some kind of income that allows you not to work, but to have it [3, 119]. No matter how, but it is also a way to enter into this division of labor.

#### **6. CONCLUSION**

Accordingly, the specificity of Adam Smith's theory lies in the fact that under this concept of the division of labor, he, as we have already said, sees what we today call technical or scientific and technical progress. And another point that is important for the subsequent development of economic theory - here Smith writes that factors, the same factors of production, depending on the degree of division of labor, can give different returns, and since the general prospect is to strengthen, deepen the division of labor, accordingly, Smith has in mind a situation that modern economists call a situation with increasing returns on resources or on factors of production [3, 48]. This is worth mentioning precisely because this side of the theoretical work of Adam Smith has been largely forgotten by subsequent generations of economists, and the theory, the abstract theory that arose from the presentation of Adam Smith, somehow went into statics, in an

economy where technological progress is rarely remembered, and if they were remembered, it was not embedded in the theory itself [4, 20]. And until now there is such a problem in economic science, and in this sense, the covenants of Adam Smith are still far from being realized. The second comment concerns the very concept of the market. As soon as Smith speaks of “the size of the market”, it is important to understand what the size of the market is, the dimensions of which, what are we talking about? And here it is necessary to distinguish between the two meanings of the word market [1, 616]. Today we more likely perceive the market as a kind of interaction mechanism where the laws of supply and demand operate, but when Smith writes about the size of the market, he does not mean this, he means the market as potential demand, or a sales market. And if we make it clear that this is a slightly different matter, it does not matter what the market will be, competitive or not, but if it is there is an opportunity to develop the division of labor, if it is not there, then do not expect technical progress. This is the covenant of Adam Smith regarding the market.

#### **LITERATURE:**

1. Adam Smith - A Study on the Nature and Causes of the Wealth of Nations. Moscow. 2017
2. Adam Smith "Theories of moral feelings"  
[http://gallery.economicus.ru/cgi-bin/frame\\_rightn\\_newlife.pl?type=in&links=./in/smith/works/smith\\_w2.txt&img=works\\_small.gif&name=smith](http://gallery.economicus.ru/cgi-bin/frame_rightn_newlife.pl?type=in&links=./in/smith/works/smith_w2.txt&img=works_small.gif&name=smith)
3. Karen McCready - “The Wealth of Nations” by Adam Smith. Minsk. 2019
4. 4.V.S. Afanasyev - Adam Smith: the political economy of manufacturing capitalism. Moscow. 2017
5. M. Blaug - Adam Smith. Economic thought in retrospect. Moscow: Case, 1994
6. A.V. Anikin - Chapter 1. Adam Smith (World History of Economic Thought: 6 volumes) Ch. ed. V.N. Cherkovets. - Moscow: Thought, 1988 .-- T. II. From Smith and Ricardo to Marx and Engels.

# PROBLEMS OF DEVELOPMENT OF PUBLIC-PRIVATE BUSINESS PARTNERSHIP

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## **ABSTRACT**

The article reveals the essence and significance of public-private partnerships, the advantages and disadvantages of using this form of cooperation. Public-private partnership is a type of interaction between the parties, which includes the optimal distribution of risks, responsibilities and revenues, as well as the effective implementation of industrial and social infrastructure projects. The process of forming a public-private partnership and foreign experience in using this form of cooperation, as well as the work carried out in the field of public-private partnership in the Republic of Azerbaijan, are analyzed in detail. The public-private partnership, which allows attracting additional investment resources for infrastructure projects, is considered as a stimulating tool for replacing imports through local production and as a factor in ensuring the country's economic security. An increase in the share of imported products in the consumer market of Azerbaijan may impede the development of local production, which is not able to compete with foreign products due to the climatic and geographical conditions of the country. The current state of public-private business partnership in the Republic of Azerbaijan has been carefully analyzed and the priority areas for further development have been substantiated. It was proposed to create a Center for Public-Private Partnership under the Ministry of Economy of the Republic of Azerbaijan in order to meet the needs of market consumers in the necessary information on the development of public-private partnership mechanisms, to form a single database, to increase the professionalism of employees and to apply innovative management systems.

**Keywords:** *public-private partnership, interaction between the state and private business, a tool for stimulating import substitution, standard approach, stage of partnership, agreement*

## **1. INTRODUCTION**

In a globalized world economy, it is impossible to achieve the strategic and economic goals of the state without strengthening ties with private business and developing partnerships with the private sector. In this regard, creating mechanisms for government and private enterprise is essential for the formation of an effective economic strategy, increasing the attractiveness of the national economy, innovation, production and social infrastructure, and to increase the competitiveness of the country. The creation of new organizational mechanisms and institutions of interaction between the public and private sectors in the context of the economic downturn, allowed for large-scale reforms in the country, the organization of business activities, as well as the formation of the necessary industrial and social infrastructure. Public-private partnerships (PPPs) are the most common form of such a mechanism of interaction in the world. Issues related to the use of public-private partnerships in terms of more efficient use of available resources and sustainable economic development are of particular importance, and there is an urgent need for their research.

## **2. CONCEPTUAL FRAMEWORK FOR PUBLIC-PRIVATE PARTNERSHIPS**

A public-private business partnership is an interaction between participants that ensures an adequate distribution of risks, responsibilities and revenues, as well as responsibility for the provision of traditional services to the public sector, in whole or in part, under government control.

The reasons for creating public-private partnerships are as follows:

- Lack of budget funds for the implementation of socially significant projects or the maintenance of public facilities;
- An attempt by any of the participants in a public-private business partnership to obtain economic benefits in the form of tax deductions in entrepreneurship and to obtain income using state and municipal property.

One of the main factors in slowing socio-economic development is the poor development of infrastructure, the lack of investment in the creation of new infrastructure and the lack of modern management resources and innovative technologies. One of the most effective ways to attract investment and innovative technologies for infrastructure projects is the use of public-private partnerships. It is public-private business partnership that accelerates the creation of new infrastructure facilities, the modernization of existing public infrastructure, which is important for the development of the economy as a whole. The main principles of public-private partnership are the following [1, p.213]:

- Priority of regulation of PPPs contracts .The contract is an effective and accurate PPPs tool that takes into account the interests of both parties as much as possible;
- transparency and publicity of partnerships;
- PPP risk insurance;
- Equality of parties in an agreement between the public and private sectors
- Tender procedures for an agreement between the public and private sectors;
- autonomy of the parties public-private business partnership
- Independence at the conclusion of an agreement on public-private partnership and its conditions.

Within the framework of public-private sector partnerships, the models of organization, financing and cooperation are differentiated depending on the nature of solving specific issues. In world practice, there are various forms, types and options for implementing partnerships between the state and private business. Types of PPPs can be divided into two main categories: An institutional PPP that covers all forms of joint ventures created by participants in the public and private sectors; Contractual PPP. Forms of PPPs can be classified as follows:

- Contract as an administrative agreement between the state and a private company for the implementation of certain socially necessary and useful actions;
- agreement in the form of lease and leasing;
- Production Sharing Agreement.
- Joint venture. This is a common form of partnership between the state and private business.

PPPs use the innovative method used by the public sector to conclude a contract with the private sector, which uses equity and management methods to implement projects in accordance with established time frames and budgets. At the same time, the public sector is responsible for providing the population with basic services and has a positive impact on sustainable economic development and improving the welfare of the population.

### **3. STANDARD APPROACHES TO PUBLIC-PRIVATE BUSINESS PARTNERSHIPS**

Public-private partnership is carried out through three stages of socio-economic development:

- 1) Initial stage;
- 2) Stage of creating a mixed partnership model;
- 3) Partnership model improvement stage.

Many countries of the world, including the Republic of Azerbaijan, are still in the early stages of PPP development. This may include the policy of establishing relations between the public and private sectors and developing a legal framework. To implement this policy, create a market for participants and form a system of interaction, a special body is created. The disadvantage of public-private partnerships at the initial stage of development is the lack of a clear understanding of the participants about the economic viability of the project. To overcome this shortcoming, it is necessary to use the best practices of countries with market economies of the past. Public-private partnerships will allow you to correctly determine the interests of participants, investors, various financial bodies, experts and consultants, as well as determine the available resources and their sources. In the framework of public-private partnerships, the state solves the legal issues of the owners, provides guarantees and tax deductions, receives and controls the financial debt of the project. And business entities provide financing, provide effective management, flexibility and efficiency in decision making, reveal the creative abilities of people and, as a result, expand access to new innovative products. In countries with developed market economies, the mechanism of public-private partnerships has already been formed and is constantly being improved. The UK is the leader in the number of PPP agreements that completed 31 public-private partnership projects worth 6 billion euros in 2015. In this country, the risk assessment system is being improved, a new training system is being introduced, and the life cycle of projects is increasing [2, p.365]. France is in the process of developing a mixed partnership model, which means that the PPP market is being structured and updated, new sources of financing are being identified and laws are being adopted governing the project. A mixed partnership model is also used in Germany. Here, public-private partnerships are seen as an agreement on the planning, construction, financing and implementation of the project. In accordance with PPP, business entities are forced to impose some restrictions on their activities and income policies in exchange for tax benefits.

#### **4. PUBLIC-PRIVATE BUSINESS PARTNERSHIPS AS A TOOL TO STIMULATE IMPORT SUBSTITUTION**

From the moment of independence to the present time, there is a tendency to increase the demand for imported products in Azerbaijan. However, in recent years, the balance of imports and exports in Azerbaijan has been positive, that is, exports have prevailed. But, the development of all sectors and spheres of the economy largely depends on the import of foreign goods, both industrial and consumer. In the conditions of sharp global fluctuations in oil prices, a sharp depreciation of the national currency and an increase in demand for imported products, the cost of production at local enterprises has increased significantly, which negatively affects their production and economic indicators. Undoubtedly, the replacement of imported products by local production is an urgent problem, and participants in a public-private business partnership should always keep it in the spotlight to find solutions to this problem. The theory and methodology of import substitution are considered in studies of foreign economists. For example, the American economist P. Linder studied the effect of import substitution on changing international trade conditions. Kizieva's studies substantiated the benefits and mechanisms of increasing the rate of import substitution. Kadachnikov investigated the influence of macroeconomic processes on the development of import substitution. P.P. Ismayilova outlined trends and mechanisms for the development of import-substituting products in the region. D.N. Zaitsev proposed the organization of import-substituting production as a priority area of the socio-economic development of the region. S.Redko described the import substitution of certain product groups as a factor in ensuring the economic security of the country. A.P. Terekhov investigated the problem of increasing the competitiveness of import-substituting industrial products [3, p. 180]. A.P. Terekhov investigated the problem of increasing the competitiveness of import-substituting industrial

products [3, p. 180]. The openness of the Azerbaijani consumer market for imported products creates a number of problems. The growing dependence of the Azerbaijani economy on foreign producers may, on the one hand, jeopardize national security if imports cease, on the other hand, it may hinder the development of local production without the ability to compete with foreign products due to climatic conditions in the country and geographic conditions. Of course, the solution of the problem of import substitution requires large financial resources, which cannot be fully paid from the state budget. Therefore, to stabilize import substitution, various economic instruments should be used, including the mechanism of public-private business partnership. As society develops and socio-economic problems increase, the state will have to delegate some of its functions to the private sector, which, on the one hand, is the basis for the implementation of certain public functions, and on the other a tool used in the investment activities of private companies, is very attractive. [4]. One of the conditions for the implementation of projects in the framework of public-private partnerships in the development of import-substituting products is the correct establishment of relations between the parties. In the existing regulatory acts regulating public-private partnerships, there are more than 18 forms PPPs. The cost-effectiveness of each of these forms should be analyzed and evaluated.

## **5. TRENDS IN THE DEVELOPMENT OF PUBLIC-PRIVATE BUSINESS PARTNERSHIP IN AZERBAIJAN**

The Azerbaijani government pays particular attention to the development of public-private partnerships, a concept paper has been developed containing a comprehensive perspective and policy principles on this issue. As part of this concept, some work has been done to develop public-private partnerships in various sectors and spheres of the economy, and some social projects have also been implemented. Now let's briefly and succinctly explain these projects.

“ASAN Service”, a trademark of the Republic of Azerbaijan, is a special type of partnership between the public and private sectors. “ASAN Service” provides various services to both government and business entities. The state incurs customs duties on agricultural machinery and breeding animals imported to farms through OJSC Agroleasing, as well as fertilizers and other chemicals sold at a price 50–70% lower than their cost. As a result, farmers receive significant benefits from leasing services. The Law of the Republic of Azerbaijan “On Agricultural Insurance” establishes 50% of the cost of agricultural insurance, and all damage caused by risks is paid by the state. The use of this form of state-agribusiness partnership contributes to the innovative development of agriculture and providing the population with high-quality, environmentally friendly food. The State Tourism Agency of Azerbaijan provides marketing services to the population, families in rural areas, provides useful advice and organizes the sale of their products. “The Youth Foundation” under the President of the Republic of Azerbaijan provides assets for those who want to engage in family business, especially for people with disabilities. The use of this form of partnership between the state and the family has a positive effect on the growth of self-employment and the growth of real incomes of the poor. The Ministry of Labor and Social Protection of the Population of Azerbaijan provides 50% of employees' wages in the form of subsidies for one year if they hire young workers. The development of this form of partnership between the public and private sectors can play an important role in solving the current problem of employing young people who do not have work experience in the country. The Asian Development Bank (ADB) has established a center for the development of public-private partnership with the government in Azerbaijan and is actively working with business entities. Thus, ADB intends to use the income from its bonds in Azerbaijani manats to meet the needs of private companies. In the future, ADB intends to expand its activities in areas such as public-private partnerships, financing of the trade, agribusiness, construction and renewable energy. ADB also implements the Trade Finance Program (TFP-Trade Finance Program) to support export-import operations.



This program brings significant benefits not only to banks and their customers, but also to the economy of Azerbaijan as a whole. To solve current financial problems, ADB provides support to micro, small and medium-sized businesses, especially in non-cyclical areas, such as agricultural production and processing through accessible intermediaries, including non-bank financial institutions.

## 6. CONCLUSIONS

- 1) A partnership between public and private business is a type of interaction between the parties, which includes the optimal distribution of risks, responsibilities and revenues, as well as the effective implementation of social and infrastructure projects.
- 2) It is important to create a “Center for Public-Private Partnership” under the Ministry of Economy of the Republic of Azerbaijan in order to meet the needs of market participants in the necessary information about the development of public-private partnership mechanisms, to create a single database that improves the professionalism of employees and to implement innovative management systems.
- 3) Public-private partnership, which allows attracting additional investment resources for the implementation of projects, is the most stimulating tool for replacing imported products with local production. To do this, the following measures are required:
  - determine the list of types of economic activity that require the development of local production, replacing imports;
  - analyze and evaluate the effectiveness of specific forms of public-private partnership for the implementation of import substitution projects.

## LITERATURE:

1. Pushkin A.V., Annatov A.A. Public-private partnership. Implementation mechanism. - M.: 2010. -- 375 p.
2. Economics and entrepreneurship. 2017, No.2, 1233 p.
3. Economics and entrepreneurship. M., 2015, No. 6, 1178 p.
4. Antonova K. A. Public-private partnership as a factor of social and economic development of Russia: abstract of the thesis candidate of economic Sciences. Moscow, 2012.
5. Emelianov Y. S. Public-private partnership in the sphere of innovation: foreign and Russian experience. - Moscow: Libro com, 2012.- 256 p.
6. Fomina V.P., Afonin S.N. Public-private partnership and its development opportunities in regions and municipalities. Microeconomics, - 2013, No. 4.
7. Fedosenko E.A. Public-private partnership in the field of education: institutional foundations and development directions / Theory and practice of service: economy, social sphere, technology. - 2012, No. 2.
8. Klochko E. N., Bugayenko V. E. Public-private partnership as a mechanism for creating zones of intensive development of human capital in the southern Federal district/Economics and entrepreneurship. - M.; 2016, No. 6.

# THE ROLE OF BIG DATA TECHNOLOGY IN THE EDUCATION MANAGEMENT SYSTEM

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## **ABSTRACT**

*In modern conditions, the main educational trends are personalization, adaptive learning, the involvement of the learner in the process of forming the content of the program, the use of open data, active interaction of students and intercollegiate educational projects. Big data technologies can be considered as means of developing educational systems. The article discusses the possibilities and prospects of using big data analysis in education in the context of rapid technology development, identifies the distinctive features of big data technology, structured the system management processes, the direction of data collection in education, and defines the properties of the collected base given big data in education.*

**Keywords:** *digital technologies, big data technology, management, educational systems*

## **1. INTRODUCTION**

The digital economy involves the widespread use of modern information and communication technologies. This is directly reflected in management methods both at the macro level and at the level of commercial structures. Intelligent systems make it possible to efficiently use big data (big data), which is understood as a set of methods for processing data arrays to obtain certain dependencies between phenomena. Big data are prototypes of artificial intelligence, which are used in the management of both in business and at the state level. The scope of using big data methods is multifaceted. Digital technologies began to penetrate into various areas - marketing, management, and education was not an exception [1, p. 164]. Digital technologies are changing the world and, inevitably, the education system itself. Modern digital technologies provide new tools for the development of educational institutions around the world. Digitalization provides opportunities for sharing experiences and knowledge, allowing people to learn more and make more informed decisions in their daily lives. The questions now facing universities are reduced to the choice of a strategy for further development and the choice of the direction on which it is planned to focus. Obviously, a digital transformation program should be developed now for the transition to a future competitive educational and research model [2, p.215]. The educational system continuously creates and accumulates a significant amount of data, and the question of systematic work with this data by a wide range of subjects of education today can be called one of the most significant. Big data can be a powerful tool for transforming learning, rethinking approaches, reducing long-standing gaps and adapting experience to improve the effectiveness of the educational system itself. The task of describing the technology of operating with big data, aimed at the development of educational systems through the identification of established patterns in the education system, remains highly relevant.

## **2. BIG DATA AND VIRTUAL CAMPUS**

Begin to study the topic of introducing big data into modern education is to concretize the concept itself. What is big data and why analyze it? Unfortunately, the well-established conceptual apparatus in this area has not yet been formed, but the substantive characteristics of the various definitions of the concept of “big data” can be represented as follows: big data is a combination of approaches, tools and methods designed to accumulate and analyze unstructured data in order to extract of which new knowledge [3].

It is important to make two clarifications. First, such approaches, tools and methods are designed specifically for fast (relative to other methods) processing of large databases with speeds as close as possible to real time [4]. Secondly, because of its size and structure (or rather, its absence), it is almost impossible to process big data using traditional software and hardware information analysis tools, and without processing and analysis they are useless or almost useless [5]. These two facts were the impetus for the creation of own data for big data and the technologies for storing and extracting knowledge from them. Big data is a specific technology that makes it possible to analyze and extract new knowledge from arrays of unstructured data. Just seven years ago, incredible amounts of information accumulated on the information carriers of various organizations, the use of which was economically impractical due to the lack of a clear structure and high complexity of extracting useful data. Big data allows using a set of mathematical and statistical tools to form a universal data structure and extract useful information from previously inactive arrays, applying it in various fields of activity. Handling big data in education is a technology of analytics of the educational system, including measuring, collecting, analyzing and presenting structured and unstructured data of huge amounts about students and the educational environment in order to understand the features of the functioning and development of the educational system. Historically, the education system has accumulated a significant amount of data. The question of how affordable it is to start processing a large amount of data is removed thanks to the advent and expanded use of information and communication technologies. Today, big data is becoming the language of communication for educational organizations that seek to improve their strategic and tactical decision-making technologies [6]. The current development of big data technology in education is described through a variety of approaches and models, which prevents systematic accumulation of data on big data for the development of the education system. In the field of education, there are five main types of data:

- personal Information;
- data on the interaction of students with electronic learning systems
- data on the effectiveness of educational materials;
- administrative data;
- forecast data.

There are some distinguishing features of big data in education from other data samples. The characteristics of big data can be described by the rule "5V":

- 1V (volume): the amount of physical data is significant,
- 2V (velocity): data acquisition speed and processing speed is relatively high,
- 3V (variety): variability of processing algorithms for different types of collected results,
- 4V (veracity): high reliability of the collected data, allowing to formulate representative results,
- 5V (value): the value of the accumulated data should be enclosed in the possibility of formulating useful multi-aspect dependencies of the educational system on their basis.

To structure Big Data management processes in education, five interrelated groups of processes can be distinguished (Fig.1). Summarizing the groups of management processes and sources in the areas of Big Data, we can formulate a number of properties of the collected database, allowing to increase the efficiency of using Big Data in education.

- Partial independence  
There is local data management on each database segment. At the same time, each segment is a component of the entire database, but it can be considered as a separate small database with its own set of procedures and rules.

- **Uninterrupted**  
The ability to receive data from any database segment, even if data on this segment are already used for other processes.
- **Transparency access**  
If there are rights to access data, the analyst should not take into account the parameters of the physical location of information. Data delivery is carried out automatically with built-in tools.
- **Multiplication Data**  
Multiplication is the process of transferring data from one database to another database. The ability to multiply should allow data from different systems to integrate with each other.

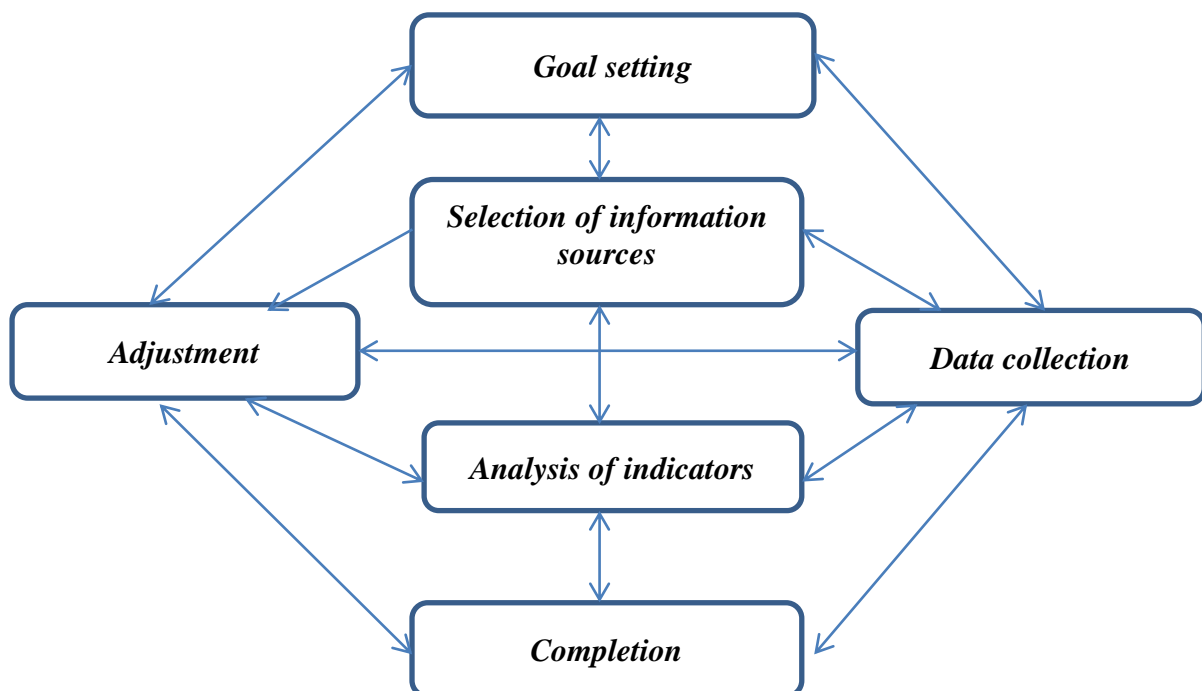


Figure 1: Diagram of big data management processes in education

- **Distributed queries**  
The collected data should be able to be retrieved through distributed queries, that is, through parallel queries to multiple database segments.
- **Free tools**  
As a means of data processing can be any software and hardware solutions.

### 3. CONCLUSION

Big Data in education as a technology is characterized by distinctive features, the structuring of management processes, a system of directions for data collection, as well as the properties of the collected database, which make it possible to increase the efficiency of using big data in education. So, the analysis of big data opens up prospects for creating a new positive educational experience - all participants in the educational process will be able to freely exchange information with each other, expanding their competence mutually and efficiently throughout their lives.

We specify such perspectives [7, 8, 9]:

1. Early vocational orientation.
2. New adaptive educational trajectories.
3. Control of the professional trajectory.
4. Openness and transparency of education.

Summarizing the above, it should be noted that the analysis of big data and their free circulation can serve as the basis for qualitative changes, the formation of a new modern and dynamically developing education system.

#### **LITERATURE:**

1. Development of management in the transition to a digital economy [Electronic resource]: materials X All-Russia. (with international participation) scientific-practical. conf. (Perm, Perm State National Research University, December 7, 2017) 329 p.
2. Uvarov V.I. Problems and prospects of the introduction of digital technologies in the educational process of secondary schools, materials X Vseros. (with international participation) scientific-practical. conf. (Perm, Perm State National Research University, December 7, 2017, p. 215-219
3. Cringely R.X. Thinking about Big Data. URL: <http://www.cringely.com/2016/07/05/thinking-big-data-part-one> (the date of the appeal: 07.11.2017)
4. Yan J. Big Data, Bigger Opportunities. Conference on Data Engineering Work (ICDEW)
5. Siemens G., Long P. Penetrating the fog: Analytics in learning and education // *Educ. Rev.* 2011. Vol. 46, № 5. P. 30-32.
6. Liebowitz J. Thoughts on recent trends and future research perspectives in big data and analytics in higher education // *Big data and learning analytics in higher education: Current theory and practice.* – January, 2016. - P. 7-17. doi: 10.1007/978-3-319-06520-5\_2.
7. Mamedov G.A., Zeynalova L.A., Melikov R.T. Big data technologies in electronic education, *Open education Vol T. 21. No. 6. 2017*, pp. 41- 48
8. Frumin I.D. Trends in the development of educational content: key competences and new literacy // *Proceedings of the IV International Forum on Teacher Education.* - URL: <http://ifte.kpfu.ru/ru/lectures/trendy-v-razviti-sod>.
9. Dwivedi S., Roshni V. S. K. Recommender system for big data in education // Paper presented at the Proceedings - 2017 5th National Conference on E-Learning and E-Learning Technologies, ELELTECH 2017. doi: 10.1109/ELELTECH.2017.8074993

## THE USE OF COMMUNICATION IN MANAGING COMPETITIVENESS

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### **ABSTRACT**

*The role of marketing communication in management of competitiveness is investigated in the article. Here, evaluation of the enterprise's competition relations and information and communication support in the management of marketing is analyzed. The use of marketing conception in modern period is not satisfied with production of qualitative product conforming to the requirement of consumers and determination of suitable price for consumers. It also requires to create a need for the product produced, to encourage the sale of product, to pass necessary information to its own consumers for this purpose, to select information attentively and to establish opposite relation with consumers. Implementation of all such measures and fulfillment of duties arising out of them make necessary the creation and realization of communication system of marketing. Communication provides normal activity of internal environmental system and creation of mutual relation with environment. In order to achieve to efficient communication system, the firm uses of services of specialists on encouraging of sale, the specialized advertising companies and direct marketing. The most firms are interested in the issue of the number of funds to be spent for communication measure rather than establishment of relation with consumers and the methods of information transfer. Each category of consumer requires the application of specific methods of relation and implementation of proper measures. Exterior design of products, their price, packing form, sellers' clothes and behaviors and other such features give certain information to buyers. In order to achieve more efficient relationships as possible, it is necessary to coordinate not only communication system of the firm, but also all marketing complex profoundly. The competitiveness of enterprise is determined thanks to the product produced by it. The main method for increase of competitiveness of processing industrial enterprises is creation of condition for determination of the stages such as correct selection of competition strategy, determination of funds and provision of competitiveness. It is possible to provide objective evaluation in the process of investigation of the evaluation method of competitiveness thanks to complex methods of evaluation of competitiveness - development of integral indicators of competitiveness. Competitiveness is one of the main features for development of processing industrial enterprises.*

**Keywords:** *competitiveness, producer, consumer, qualitative product, communication, methods for evaluation of competitiveness*

### **1. INTRODUCTION**

The creation of competition environment in economy, raising it to the civil level and its formation is very difficult and also long-term process. The competition environment undergoes to the impact of different limitations, therefore its formation conforming to the requirements of modern period may be realized only on stages. The main role must be given not to seller, but to buyer for establishment of markets conforming to civil, international laws and anti-monopoly principles according to modern requirements, prevailing of offer over demand, i.e. formation of buyer market, not producer-seller market is necessary. Only in such markets, any space may be created for acute competition struggle between total market subjects and consumers and there may be high demand for the goods offered.

## **2. EVALUATION OF COMPETITION RELATIONS IN ENTERPRISE**

A competition increases for competition regime in modern condition, struggle against buyer and profit in the organized markets, also ram material markets between producers and sellers, labor reserves, capital, the right of use of scientific and technical discoveries. Especially labor reserves, competition for application of scientific and technical innovations became more aggravated among leading subjects of markets recently. It is related to development of science-intensive fields and increase of productions required an innovation. The competition turns the consumer into an indicator of entrepreneurial activity in practice. The learning and evaluation of the competitiveness of the enterprise is an important condition for ensuring its development. But, there are many problems in evaluation and management of competitiveness level. It was known at the time of investigation of existing approaches dedicated to evaluation, management and predicting of competitiveness of the enterprise that, competitiveness, quality of personnel's work in all stages of the life cycle of product and resource capacity is in the centre of attention. There is a shortage in international documents concerning the evaluation of competitiveness. The majority of evaluation methods of evaluation of competitiveness of enterprises is based on application of different coefficients for production activity and financial condition and analysis of efficient investment. For example, A.A. Lazarenko [1] offers to accept the followings as the main indicators of enterprise in his articles: economic potential and efficient activity (main capital, credit, capacity of sale, market portion,); management level; product production and sale potential of enterprise in necessary quantity during a time required; financial condition; influence of enterprise, its market strategy, innovation activity; qualification of workforce, etc. At a certain point, the interests of consumers and producers merge. Therefore, not only the main indicators used in exploitation of goods and certain operations, but also other criteria that demonstrate the competitiveness of the product and are important for consumers of a particular market, are taken as a basis when assessing the competitiveness. It is important to take into consideration the potential opportunities of enterprise at the time of evaluation of its competitiveness. The enterprise's efficient activity is determined on the basis of experimental inspection, results of testing sale or experimental evaluation under special terms of consumption. The competitiveness of enterprise is determined in accordance with quality priorities of external and internal environment; market and products produced.

## **3. INFORMATION SUPPORT IN MARKETING MANAGEMENT**

There is a need to periodically conduct marketing research at the place where there is competition. To effectively plan marketing strategies in connection with competition, each company should collect as much information as possible about its competitors and try to clarify everything as much as possible. It must constantly compare its commodities, prices, sales channels and sales promotion system with similar indicators of alternative competitors. Today, firms have at their disposal a comprehensive marketing communications system. The effectiveness of the communication system, as well as the results of marketing activities in general largely depend on the creation and use of this system on which level. The marketing communication system plays a very important role in achieving the goals set in marketing activities, and winning the competition in the target markets. Thus, activities in the communication system include not only intercompany activities, but also intermediaries selling products of the firm, wholesalers and retailers. Firms teach their intermediaries and sales personnel how to communicate with consumers, disseminate information and receive the necessary information from them. Each firm creates a complex system of marketing ties and contacts with intermediaries, consumers and various consumer audiences. The process of developing effective relationships in the marketing communication system and creating an incentive complex is of great importance. Each marketing activity is based on knowledge of a specific situation formed in the market for the production of products.

The vast majority of marketing research and events are related to the information system and is carried out on its basis. For example, cases such as studying of demand for products, research of sales market, consumers' attitude for production characteristics of products and other are the necessary information for marketing activity. Considering the importance of information for marketing activity, it is advisable to consider in more detail the "information" scheme. The information system was developed by L.Deem and includes: interesting information (films, newspapers and magazines); ancillary services; information technology; related technologies; radio and television channels; communication channels; ideological services. Insufficient information in the marketing system of the enterprise and the use of inaccurate or non-actual information can lead to errors in economic calculations. Therefore, qualified and experienced marketing specialists consider the information as a basis and foundation of marketing, and also don't consider it correct to coordinate its learning in the business model with only a particular enterprise and to limit with the research of specific market parameters. They recommend keeping any information in the spotlight that helps to manage an enterprise effectively. It is possible to consider each enterprise, organization, or firm as a certain economic management object. On the other hand, it is possible to consider each separate management object as an integral part of any enterprise, or a group of enterprises combined by territorial or sectoral character. For the analysis, planning, implementation of effective marketing measures and control over them, many information are needed. Managers need information about consumers, clients, competitors, representatives (dealers) and other entities operating in the market. According to marketing specialists, the operational management of a company means to determine its future, and for this it is necessary to have information. Marketing specialists already consider information not only as a means of making the best decisions, but also as a resource ensuring the advantage over competitors, obtaining of the profit intending the increase of sales volume and achieving goals set. The volume of information is continuously increasing. Specialists consider that the modern world has begun to integrate from an industrial economy to an information economy. According to the recent calculations, approximately 65% of the manpower in the United States of America is currently engaged in information processing in this or other degree. However, this indicator is previously 17%. Using the modern computer systems and other information technologies, companies largely create an information block. In fact, modern managers are overloaded with information. At the same time, marketing specialists often complain about the lack of useful information, or the fact that they have to learn a lot of useless information. If we look at the dissemination of information within a company, even the search for the simplest facts is of great importance. Employees often hide information because they believe that this information may hinder their work. Sometimes, useful information is excessive late and it doesn't need to use it. Excessive inaccuracies are often observed in fresh information. However, the marketing manager needs more quality information. In recent years, the role and importance of communication systems have increased. It had led to the complexity of the market conditions and the aggravation of competition.

#### **4. CONCLUSION**

The determination of the dependence between the cost of production and consumer parameters for potential consumers, as well as the subsequent in-depth analysis of the results are conditioned to put a new product on the market. The unreliability of competitiveness assessment tools can lead to making false management decisions by an enterprise. The most important point in developing strategies for the future development of the enterprise is to properly determine the position and status between enterprise competitors. For this purpose, it is necessary not only to properly assess the competitiveness, but also to correctly identify specific directions to ensure its competitiveness.



**LITERATURE:**

1. Lazarenko A.A. (2014) Methods for assessing competitiveness, *Young Scientist*, 1, 374-377.
2. Porter M.E., (2001) *Competition*, Williams Publishing House.
3. Mammadova S.S. Conceptual marketing management basics. Modern trends in science and education: a collection of scientific papers based on the materials of the International Correspondence Scientific and Practical Conference. Lipetsk, October 8, 2012
4. Mammadova S.S. Strategic marketing in the competitive system of companies and firms. Collection of scientific reports. Theory and practice of relevant research. Part 2. Lublin Warsaw 2013.
5. Gryaznova AG, Yudanov A.Yu., (2011) *Microeconomics, Theory and Russian Practice*,
6. Porter M.E., (1993) *International Competition*, Moscow, International Relations.
7. Yudanov A.Yu., (1996) *Competition: Theory and Practice, Training and Practical Manual*, Moscow, Akalis, 272 p.
8. <https://www.buideconomic.ru>
9. <https://kayzen.az ›blog› marketing>

# INFLATION IN AZERBAIJAN AND THE ANTI-INFLATION POLICY OF THE GOVERNMENT

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## ABSTRACT

*The inflation in Azerbaijan and the anti-inflation policy of the state, as well as the general features for inflation processes in the post-soviet period have been revealed in the article. The price indexes of consumer goods and paid services to the population, non-food products, price indexes for total products and services have been analyzed. The importance of examining the reasons for inflation rise for effective anti-inflation measures is emphasized, the growth of money supply, which is one of the most important factors in the formation of inflation, the level of money provision of the Azerbaijani economy is analyzed. One of the main channels of impact of the growth of money supply on inflation is the high level of cash turnover, the condition in fiscal area which is one of the factors affecting the increase in inflation - the budget deficit (surplus) to GDP and the ratio of non-oil GDP, the main impact of the budget channels to inflation processes in the country, untransfer budget deficit from the State Oil Fond of Azerbaijan (SOFAZ), the issue of the non-oil sector growth have been pointed out. The high cost of credit, one of the main factors of expenditure for price increase in Azerbaijan economy, the higher wages and salaries of products and services, the real wage and labor productivity in the economy, and the specifics of recent wage increases have been analyzed in the article. Monopoly, which is one of the key factors for rising prices, has also been explored in terms of reducing its impact on inflationary processes and in most countries with transition economies and developing economies. One of the main factors of the price stability in Azerbaijan in modern condition was the increasing supply of inadequate demand level. One of the most important economic trial was the strengthening of global inflation which the Azerbaijani economy faced on at that time. The main factors that influence the impact of foreign economic processes on the economy and inflation processes in Azerbaijan are the ineffectiveness of the structure of foreign trade, the use of imported semifinished goods mainly in domestic production, the tendency for dollarization in the country, and the domination of imported goods, especially the consumption of the population. It should be noted that the underdevelopment of the financial markets in Azerbaijan, and the incomplete integration of the international financial markets, is unlikely to affect the domestic economic processes, especially inflation, unlike some other post-Soviet countries. When analyzing possible inflation factors, it is important to identify correlations between price indexes and relevant macroeconomic indicators. Influenced by all these factors, the increase in inflation in Azerbaijan has led to a number of problems, raising the need for government anti-inflation policies.*

**Keywords:** *inflation, government anti-inflation policy, price indexes, monopoly, monetary and fiscal policy*

## 1. INTRODUCTION

One of the most difficult economic problems faced by the Azerbaijani economy since gaining independence in the late 20th century has been the high inflation rate. It was not only an economic problem, it also caused social and psychological tensions. The highest inflation rate “hyperinflation” in an independent Azerbaijan economy is during this period of time. In addition to inflation, declining production, rising unemployment and other structural crises have

made the situation more difficult and resulted in stagnation. High rates of inflation are typical for each country, which has undergone transition from the administrative-command economic system to the market-based economic system [Alakbarov, 2007]. It should be noted that at this time not only consumer prices, but also manufacturers' price index was very high. This has had a negative impact on all parties in the economy. Domestic production has faced unfavorable prices on the world market. Hyperinflation, which began in 1992, continued until 1994. It reached its peak in 1994. In the same year the CPI increased by 1763.5 percent, the food price index increased by 1793.3 percent, and the wholesale price indexes of industrial sectors increased by 1158.4 percent. As can be seen from the figures, the consumer price index and wholesale price indexes for the industry showed rapid growth during this period. However, after 1995, the growth rate of inflation declined and inflation declined from a four-digit annual rate to a three-digit level. After that, it dropped to double digits in 1996. As a result of the economic measures and policies implemented during this period, high inflation rate was prevented. Since 1997, the inflation rate was reached which could be compared with the inflation rate of developed countries. The prevention of inflation became possible thanks to the implementation of stabilization programs based on the recommendations of international organizations. Generally, the post-Soviet territory has some features that are common for inflationary processes. The presence of these features is leading to long-term settlement of inflationary processes and should be taken into account in the implementation of anti-inflation policies. These include the following:

- after price liberalization, price changes are happening in product market. formation of prices on the basis of market laws, equalization of domestic prices with world prices results in the rise of prices for daily consumer goods and intermediate consumer goods;
- as the relative prices of products change, this results in changes in production across the country and redistribution of resources. In particular, raw material export-oriented areas are developing and consumer-oriented sectors lag behind technologically are backward consumer-oriented sectors are falling into decay;
- inertia of inflation is formed. This is due to inflation expectations as a result of uncertainty about economic development, the development of public and market institutions;
- As the income increases in economy, the price of goods and services increase in the non-commercial sector, not participating in international exchanges;
- Formation of infrastructure of market institutions, privatization and creation of competitive market takes long time and affects inflationary processes;
- prices in these countries are sensitive not only to macroeconomic shocks, but also to political processes. Political instability, uncoordinated activities in fiscal and monetary policies can quickly increase uncertainty;
- Tendency of availability of goods and services, which their prices are regulated by the state and bringing their prices to the world level in the long run.

## **2. MONETARY AND FISCAL MILESTONES OF INFLATION IN THE AZERBAIJANI ECONOMY**

The low inflation rate that lasted for a while in the economy of Azerbaijan has continued to rise since the end of 2003 and volatility has also increased. The sharp rise in prices for basic raw materials, especially Azerbaijan's main export product oil, resulted in carrying out a broader policy of increasing aggregate demand through revenues from the oil and gas sector, and, on the other hand, preventing sharp appreciation of the national caused the macroeconomic imbalance in the country. As a result, since 2004, the stability of inflation has been disrupted and has grown from year to year, reaching double digits. Internal costs and other structural factors, external factors also acted as catalysts for inflation growth. However, in 2009, as a result of the global financial and economic crisis, both domestic and foreign demand decreased

and it affected the inflation in the country. Although, this reduced its level by 1.5%, in later periods, there has been an increase in inflationary processes.

*Table 1: Consumer goods and paid services provided to the population (compared to the previous year, with percentage)*

Years	Total goods and services	From the moment:		
		Food products	Non-food products	Paid services
1993	1229,1	1385,6	874,7	1461,8
1994	1763,5	1793,3	1185,8	3353,7
1995	511,8	522,4	408,0	601,3
1996	119,9	117,6	117,0	166,3
1997	103,7	99,5	105,6	150,5
1998	99,2	98,7	98,9	106,3
1999	91,5	89,0	97,5	102,3
2000	101,8	102,3	101,9	99,5
2001	101,5	102,7	100,2	98,8
2002	102,8	103,7	102,3	99,8
2003	102,2	103,3	101,0	99,7
2004	106,7	110,0	101,5	100,8
2005	109,6	110,9	105,4	109,7
2006	108,3	111,9	105,3	102,6
2007	116,7	116,2	110,5	125,3
2008	120,8	128,6	111,5	111,4
2009	101,5	98,5	103,4	107,1
2010	105,7	107,2	102,3	104,3
2011	107,9	110,4	102,6	104,7
2012	101,1	100,8	101,0	101,2
2013	102,4	102,2	100,8	103,5
2014	101,4	101,0	103,2	100,3
2015	104,0	106,1	103,8	101,2
2016	112,4	114,7	116,7	105,8
2017	112,9	116,4	111,6	109,3
2018	102,3	101,7	102,6	102,7

One of the main characteristic features of inflationary processes observed during this period is the structural differences in price increases. In particular, food prices are growing more rapidly, which directly affects the low-income population and contributes to deepening social differences. Apparently, the increase in prices for foodstuffs has the advantage over the increase in the overall price index. It should be noted that, even though the current inflationary processes are not as high as in the early years of transition, it is comparably higher than other countries, especially their major trading partners, which is one of the factors that reduce the country's competitiveness. It is important to study the causes of inflation rise in order to take effective anti-inflation measures. There are usually two different approaches to inflationary processes in developing countries [Mohanty and Klau, 2000]. The first approach is that it is difficult to predict the inflation in these type of countries. Because it is influenced by many non-monetary supply factors. Because these factors are not easy to control, it is difficult for Central Banks to consider how these factors influence the overall price level and to take into account these factors in advance. Another approach is that the supply factors are only effective in the short term. In the long run, monetary factors determine inflation level. Therefore, the Central Banks should keep current and future state of aggregate demand in the economy in control. Other research has shown that in developing countries, higher economic activity than the trend, agrarian

shocks, and enhanced fiscal policy increase the likelihood of start of inflation [Article, 2008]. Generally, in transitional economies, the focus is given to the role of monetary or non-monetary factors or institutional factors as key factors of inflation [Kudrin, 2007; Glazyev, 2008; Yasin, 2005]. However, it is important to note that the implementing the experience of analysing inflation factors in countries with established economies and normal market laws, and the application of countermeasures, both in developing and post-socialist economies, will not be scientifically or practically right. Because, as we have mentioned above, the presence of characteristic traits in these countries must always be taken into account. An analysis of the growth of the money supply is interesting, which is one of the most important factors in the formation of inflation. Economists who claim that the impact of the money supply on inflation is playing main role, give great importance to its control. For example, Russian economist A. Kudrin's opinion is of interest: "In spite of the changing the prices of different products, without increasing the money supply in the situation of unchanging velocity of money circulation, supply of goods and services, the overall price level will remain unchanged. Therefore, it is necessary to distinguish between the local increase in prices and their overall increase in the country" [Kudrin, 2007]. According to the local economist Z.Mammadova, "if the amount of money in an economy increases, the level of prices will rise and consequently the value of money will depreciate. On the contrary, if the amount of money decreases in an economy, prices will fall and the value of money will appreciate." [Mammadov, 2008]. It can be seen from here that, economists give main role to the money supply in the price changes. However, it has been observed in recent years that there may be no direct link between increase of money supply and inflation. For example, while the M2 money supply in Russia increased by 4.1 times in 2004 compared to 2000, inflation fell to 11.7% in 2004 from 20.2% in 2000 [Malkina, 2006]. Although the level of monetization in China is 1.5 times higher than the GDP, there is a negative correlation between inflation and monetization. Similarly, there are similar negative correlations in Eastern European countries such as Poland, the Czech Republic and Slovenia [Glazyev, 2008]. In this case, the increase in money supply was in fact accompanied by an expansion of economic activity, an increase of the demand of the population and economic growth. According to the table data, in 2000 the level of the money supply to the economy was low. This can be linked to the tough monetary policy implemented in the economy of Azerbaijan since the mid-1990s in order to maintain macroeconomic stability. As a result, the national economy's money demand has not been met properly. As in other transitional economies, the problem of non-payment, the level of dollarization, and increase in the barter operations have resulted from a lack of money as a result of the policy of Azerbaijan in the 1990s. Monetization coefficient ( $M2 / GDP$ ), which is a key indicator characterizing the national economy's money supply, was 7% in 2000. It has increased since 2006, reaching 30 percent in 2014 by increasing up to 5 times between 2000 and 2014. However, the global economic crisis caused a sharp decrease in oil prices and as a result, the manat devaluated more than 2 times and because of this, monetization coefficient fell to 16% in 2015 and reached 19% during the 9 months of 2016-2018. Despite this, the money supply level of the economy is still low and in many countries this figure is 50-100% and more. [Yasin, 2005]. The increase in money supply, in turn, has influenced the velocity of money circulation. So that, in 2000 if this figure was 14.5%, in 2010 it decreased 2.9 times and became 5.0%, in 2014 3.38% and 5.36% during 9 months of 2018. It can be seen from here that the volume of money in circulation in Azerbaijan does not have the capacity to influence inflationary processes from an absolute point of view. On the contrary, the main channel for the influence of monetary factors on inflation is the unstable growth rate of the money supply. In general, the average annual growth rate of money supply on M2 money aggregate in Azerbaijan for the period of 2000-2018 was 28.9 percent and 31.5 percent for M0. The corresponding index of consumer price growth was 7.9%, and the average annual real growth rate of GDP was 18.3%.

If we limit the viewed period to 2004-2008, when the prices increased more, we can see that the average annual growth rate for M2 was 72.2 percent, 66.2 percent for M0, 12.4 percent for CPI, and 20.7 percent for GDP. It can be seen from here that the average annual growth rate of the M2 money supply exceeded the respective indicator of CPI by 3.7 times in 2000-2017 and 5.8 times in 2004-2008. All of these give us reason to say that, the sharp growth of the money supply in circulation since 2003 can act as one of the main channels feeding the inflation. Although the growth of the money supply influenced inflationary processes, this effect was not so severe, that is, the average growth rate of the CPI was lower than any time interval and on monetary aggregates. As can be seen from Table 2, the growth rate of the money supply during 2000-2001 lagged behind the nominal GDP growth rate, it was almost equal in 2002, and it dominated over the next two years. Although the growth rate of the money supply in 2005 was less than the nominal GDP growth rate by 30 percentage points, its growth rate was much higher in recent years, which is mainly due to the growth of the money supply during this period. There was a sharp rise in the money supply in 2006-2007, which could be linked as one of the key factors in double-digit inflation in 2007-2008. During stable inflation periods, the growth rate of the money supply was either lower or relatively higher than the nominal GDP growth rate. Specifically, significant change of the ratio between these two indicators in favor of the money supply and inflationary processes coincide. As you can see, the increase in the money supply at different rates in different time intervals, as well as the uneven growth rate compared to nominal GDP have had an impact on increasing inflation. Even though the share of monetary factors in inflation processes in Azerbaijan was 36.5% in 2005, it was 77.2% in 2006 and 47% in 2010 [CB, 2000-2010]. The growth of the money supply in terms of ensuring economic activity is actually a positive thing. Increasing the money supply in order to meet the needs of the real sector in accordance with its demands, creates conditions for non-inflationary growth. Increasing the money supply, regardless of the domestic economic activity, creates an inflationary effect that requires scientific justification in order to increase it in accordance with the requirements of economic development. In 2001-2008, the monetary base in Azerbaijan was increased entirely due to net foreign assets. This made the monetary authority dependent on the fiscal area in achieving the monetary objectives. As a result, the imbalance in the growth of money supply and money demand, which is determined by domestic economic activity, has led to inflationary processes. However, since 2009, as a result of measures taken to support the liquidity of local banks, the share of net domestic assets began to increase. The share of net domestic assets in the formation of the monetary base in 2010 was 15.8%. For Azerbaijan, which mainly generates its revenues from oil and gas sales, its analysis of non-oil GDP, instead of GDP as a macroeconomic indicator, is of interest to explore the impact of the money supply on the economy. One of the main channels of influence of the money supply growth on inflationary processes in Azerbaijan is the high level of cash turnover. Compared to many countries, the share of cash in circulation remains high. This is one of the main factors influencing the increase of demand in the commodity and service market. The large cash turnover can be explained by the existence of the shadow economy. The large share of this type of economy prevents accurate accounting in the whole economy and its separate sectors. In Azerbaijan, the scale of this type of economic activity is reported to be at the level of 20 percent of GDP [Safarov, 2008]. However, it is shown that its scale is greater by many experts [Ayna newspaper, 2008]. Free use of both national and foreign currency in cash transactions, doesn't allow to precisely determine the level of money supply. This affects all macroeconomic indicators, including inflation. The large share of cash is one of the factors, in increasing the inflation on one hand, but it is diminishing the effectiveness of attempts to prevent inflation using monetary methods on the other hand.

*Table 2: The level of money supply of Azerbaijani economy, mln. manat*

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP	4718.1	12522.5	42465,0	52082,0	54743,7	58182,0	59014,1	54380,0	60425,2	70135,1	72332,1	
Monetary aggregates, from it:												
M <sub>0</sub>	270.0	547.4	5455.8	7158,4	9256,8	10458,7	10152,5	4775,93	6376.9	7490.3	7601.4	9501.1
M <sub>2</sub>	325.8	796.7	8297.5	10997,3	13806,5	16434,8	17435,8	8678,3	11546.3	12466.4	14643.6	18238.6
Relative indicators:												
M <sub>2</sub> /Nominal GDP	0.07	0.06	0.2	0,21	0,25	0,28	0,30	0,16	0,19	0,18	0,19	
Nominal GDP/ M <sub>2</sub>	14.5	15.7	5.0	4,74	3,97	3,54	3,38	6,27	5,23	5,63	5,36	
M <sub>0</sub> / M <sub>2</sub>	0.83	0.69	0.66	0,65	0,67	0,64	0,58	0,55	0,55	0,60	0,51	0,52

*Source: Information from the State Statistics Committee of the Republic of Azerbaijan, CBAR and calculations of author*

*M<sub>0</sub>- the total amount of cash/coin outside of the private banking system*

*M<sub>2</sub>- cash+ demand deposits + time deposits (with manat)*

One of the factors contributing to inflation is the fiscal situation. The ratio of budget revenues and expenditures to GDP has been increasing in recent years. One of the main reasons for inflation in the economy during the first years of independence was the existence of a big budget deficit and its cover by money issuance. Therefore, the goal of minimizing the budget deficit and its financing without money issuance was set to prevent inflation. However, the inflation observed in the modern era, unlike to the previous ones, coincided with either the low deficit or the surplus of the budget. The volume of the budget deficit has increased significantly since 2009, largely due to the financial crisis. Even the ratio of budget deficit to non-oil GDP was stable. The following can be shown as main channels of influence of the budget on inflation processes in the country:

- As the “Contract of the Century” passed to the main stage, the revenues were accumulated by starting the sale of profit oil in the State Oil Fund (SOFAZ). However, since 2003, transfers from this fund have been used in the formation of state budget revenues and began to be used since 2003 in the formation of state budget revenues. At the same time, with the rise in oil prices, the income tax paid by oil companies to the budget has increased. This, on the one hand, weakens the long-term balance of the state budget, making it dependent on foreign economic conjuncture, and on the other hand, increases the risk of appreciation of the national currency by increasing the supply of currency in the domestic market. This results in an unpredictable growth rate for the money supply. Let's look at the following table to determine the impact of these transfers on the budget deficit.

The main inflation-boosting effect of the budget was the unstable increase in budget spending. As the oil revenues increased, the increase in payments to the budget from oil and oil related fields has allowed the state to implement many socio-economic programs and infrastructure projects. This was reflected in the increase of the state budget. The impact of these increases on inflation is mainly due to increased demand in the short term. Growth rates of the budget expenditures began to rise more rapidly since 2003. In addition to the budget, other demand factors also showed high growth rates. During this period, these growth rates exceeded the non-oil GDP growth rate.

### **3. INFLATIONARY EXPENDITURE FACTORS AND ANTI-INFLATION MEASURES**

As in most post-socialist countries, one of the major problems in anti-inflation policies in Azerbaijan is the existence of a group of goods and services whose prices are regulated by the

state. The existence of this group is always in the spotlight of economic policy, acting as one of the main cost factors of inflation. It should be noted that this does not include only the prices of goods and services of natural monopolies. For some time the government of Azerbaijan did not allow sharp price increases. However, by the recommendation of many international organizations, price increases have been allowed to organize the activities of entities operating in the relevant field on the basis of market principles. For this reason, in recent years, the rise in prices of goods and services of this group has played a crucial role in the formation of inflation in the Azerbaijani economy. In some cases, in the economic literature, the positive aspects of the rise of administrative prices are mainly discussed. This is appreciated for the recovery of infrastructure areas and fixed assets, and increasing investment. Otherwise, their poor performance could lead to higher inflation tensions in the future [Savchenko, 2005]. These price increases, which are mainly cost inflation, have an uneven impact on the national economy because of the difference in the level of profitability between the economic sectors and cause changes in relative prices. At the same time, the increase in prices causes increase of inflation expectations in all economic areas, regardless of the sphere of influence, and leads to an increase in overall prices. Generally, price increases in Azerbaijan can be linked to the following:

- the need for equalization of local prices with such prices in the world;
- provision of improvement of the financial condition and sustainability of economic entities producing such products and providing such services;
- reduction of subsidies given to these areas in order to increase efficiency of public expenditure;
- reducing cost oriented activities in the economy and encouraging efficient, cost-effective use of resources;
- Encouragement of attracting and restructuring the local and foreign capital by ensuring the profitability of the relevant sectors.

Based on our opinion, even though the price increases are necessary, the mechanism for their implementation is not properly built. There is almost no forecast for price increases, especially for the next few years. And, as a result, a sudden sharp rise in prices causes agitation in the short term, increases inflation expectations, and in the medium-term causes cost inflation. For example, on January 7, 2007, prices of energy carriers were increased by 2-3 times. Though not immediately, it has had its impact on the country's economy after a while. Increase in prices of products of fuel and energy sector is of particular interest. The price of diesel fuel increased 3.1 times per ton, price of engine oil increased 1.7 times per ton, price of electricity increased 2.5 times per thousand kWh, price of natural gas increased 3.1 times per thousand cubic meters, price of AI-92 petrol increased 2.1 times per ton during 2005-2010. The increase in regulated prices has also led to increased production costs in other sectors of the economy. For example, the value of diesel fuel in the cost of agricultural products varies between 14 and 18 percent depending on the type of product. The ratio of the average annual producer price of wheat, the most essential crop, to the average annual producer price of diesel fuel, was 1.24 in 2004 and it significantly decreased starting from 2005. In 2006 and 2007 it was 0.55 and 0.69 respectively. In 2008, this figure decreased compared to 2004. As a result, the cost of agricultural products is increasing, which has led to cost inflation. This type of price increases affect inflationary processes in two ways. First, local producers, whose products and services have elastic demand adds the increase of expenditure directly to the cost, and carries the burden of the price increase to the end consumers. Second, producers whose products have elastic demand, either stop operating or operate at a loss, which ultimately reduces the potential for supply in the local market in the future. As you know, one of the factors affecting the price level in the economy is the level of indirect tax rates (VAT and excise tax).



The absence of indirect tax increases in Azerbaijan can be regarded as result of the fight against the tax avoidance issues in the relevant areas. Therefore, the weight of the indirect tax burden was not significant enough to affect the level of prices. One of the main cost factors for price increases in the Azerbaijani economy is the high cost of credit. According to this indicator, Azerbaijan is in the leading position not only among the countries of the world, also it is ahead of many CIS countries. The average interest rate on loans provided by commercial banks is 26%, which is one of the main obstacles to the development for the local production. Faizlərin yüksək olması ilə bərabər kreditin daha çox qısamüddətə verilməsi kredit resurslarının daha çox rentabelli olan ticarət, ev təsərrüfatları sektoruna yönəlməsinə səbəb olur. Along with high interest rates, more short-term lending is resulting in more credit resources to be directed to more profitable trade and household sectors. An analysis of wage increases, which are playing important role in the cost of products and services is important to determine to what extent they have caused price increases. In nominal terms, wages of the overall economy and separate activity types in Azerbaijan have been rising in recent years, However, it is not right to point out any wage increase as a factor of price increase. The key issue here is whether wage increases are provided by increased labor productivity or not. Note that wage growth has been relatively high in 2003 and 2007, but in other years it has increased either at the same pace or less with labor productivity. In the agricultural and processing industries, wages increased significantly. However, in the mining and construction industry the growth rate of labor productivity was higher. Although the ratio between wage growth and labor productivity growth in the non-oil sector has wavered in recent years, wage growth had a advantage. In our opinion, it can not be considered right that the salary increases are shown as the main cost factor of the price increase in the official sources in Azerbaijan. Despite the increase in wages, for many population groups, especially budget organizations, its current level does not allow maintaining adequate living standards. Under these conditions, wage increases are actually taken to the market as a demand factor of inflation rather than a cost factor, resulting in higher prices for many food products. In this regard, low level of labor productivity acts as an important cost factor. Salaries in education, health, agriculture, and public administration, where the majority of the population work, were below the national standard. The manufacturing industry's indicator is lagging behind the country average. However, in recent years in the field of public administration there has been a convergence of indicators. As a whole, the specific characteristics of wage increases observed over the past few years, and their diminishing effects on inflationary processes, can be summarized as follows:

- Trade unions play a key role in the creation of a "wage-price" spiral in many countries around the world. In Azerbaijan, however, unlike the developed countries, trade unions have little or no impact on the formation of wages;
- In some cases, the increase in wages is not the cause of inflation but, in fact, its consequence. That is, salaries are being raised "compulsorily" so that the purchasing power of the employee does not fall too low;
- sharp differences in wages between different sectors of the economy. Thus, in favorable conjunction conditions, in connection with profitable activities, wages are increasing at a higher rate in oil and gas and related fields, finance field in comparison with other sectors. The high wage gap causes intersectoral flow of production resources, which cannot be considered efficient for the sustainable development of the national economy;
- One of the factors that diminishes the impact of wages on price increases in Azerbaijan is the presence of non-registered economic activity in the country's economy. As a result, the wages of employees are determined by the employer freely, without being based on any legislative act. In these circumstances, it is not possible for wages to have a significant impact on the cost of products.

#### **4. MONOPOLY, GLOBAL ECONOMY AND INFLATION IN AZERBAIJAN**

Monopoly is one of the key factors for rising prices in countries with a transition to a market economy and in most developing countries. Instead of lowering market prices, it is most common that, by restricting the production of any range of products here and putting pressure on the import by subjective effects, big monopolies are not letting those products to get into the market [Alirzayev, 2005]. However, monopoly in the market of goods and services occurs even without large participants. Noting the impact of monopoly on inflation, S. Glazev commented: “In the conditions of constant money supply, the rate of inflation is directly proportional to the monopolistic price increase and is inversely proportional to price fluctuations due to the use of cutting edge technology. The rest of the economy repeats the result of the activities of monopoly and innovative sectors. Obviously, these effects will be observed even when the condition of constant money supply and constant velocity of circulation is eliminated.” [Glazyev, 2008]. In a civilized market economy, the main criteria for an enterprise to remain in the market and to work with profit, are to produce its products at the lowest possible cost and to improve its quality. However, in Azerbaijan, where market relations are still developing, the tendency to make a profit by capturing the large portion of the market and putting high prices is higher. The main spheres of monopoly activity in Azerbaijan are production, import and trade mediation. Unlike developed countries, the fight against monopoly in Azerbaijan is accompanied by the formation of market relations, which does not allow the complete elimination of monopoly among the factors of inflation. Almost, the main factor that makes it difficult to determine the impact of monopoly on price increases around the world is the inability to accurately track and quantify these activities. The existence of monopoly leads to a rise in prices, which results in the distribution of income for the benefit of certain groups. In particular, there is a big difference between the producers prices of agricultural products and the retail prices of those products. This increases social tension by reducing the competitiveness of national producers, on the one hand, and the purchasing power of end consumers on the other hand. Existing monopoly on imports affects domestic prices at different levels. This is directly related to how much domestic demand depends on imported goods. Existing monopoly on imports does not allow flexible regulation of the domestic market through imports. Researches has revealed that there is a sharp, multiple difference between the customs value of goods and their retail trade prices. The main characteristic that contributes to the strengthening of monopoly and increasing its influence on prices in Azerbaijan is the concentration of bureaucratic and economic power in the same hands in many areas, which prevents the equilibrium of demand and supply by suppressing competition in these areas. At the local producer level, monopoly often occurs when certain types of products are concentrated in the hands of one group. This allows them to manipulate either the quantity or prices of goods marketed or services offered. This type of monopoly has a direct impact on price increase by freely determining commodity supply in the market without considering the volume of demand. One of the most important economic challenges faced by the Azerbaijani economy in the modern world was the strengthening of global inflation. Under the influence of globalization for many years, stable prices have been formed in the world economy. However, under the influence of many factors, the stability of global inflation has been disrupted and deviations have occurred in the supply and demand around the world. Thus, regardless of the region, the level of development and the structure of the economy, there were price increases in all countries of the world. In Russia, for example, prices rose by 15 percent between September 2007 and September 2008, and by 9.4 percent between September 2006 and September 2007. The corresponding figures were 4.9 and 2.8 percent in the US, 5.2 and 1.7 percent in the UK, 3 and 1.5 percent in France, 2.1 and -0.2 percent in Japan. [Yershov, 2008]. The impact of global inflation on the country's economy can be both softened or exacerbated by domestic financial and economic policies. Generally, in foreign economic literature the degree of openness of the economy is shown as an important structural factor in

terms of its impact on inflationary processes [Malkina, 2005]. The higher this figure is, the higher the inflation in the country will be dependent on the inflation in foreign countries. In other words, liberalization of foreign trade, increasing the share of "trade goods" in domestic consumption in countries with unstable economies is one of the main channels that align domestic inflation with the world inflation. Taking into account that, the oil sector has specific share in the GDP and import is mainly dominated by non-oil products, this openness level have greater impact on the domestic economy and inflationary processes. The main factors that increase the impact of foreign economic processes on the economy and inflationary processes in Azerbaijan are the ineffectiveness of the structure of foreign trade, mainly the use of imported semi-finished goods in local production, the tendency for dollarization in the country, and the domination of imported goods, mainly the foodstuffs in the consumption of the population. domestic inflation was influenced by external factors mainly through the following channels:

- rising prices for important foodstuffs which are imported;
- rise in prices for imported finished and semi-finished products through the rise in prices for oil and other raw materials;
- through the currency channel.

As the incurred expenses for the consumption and foodstuffs constitutes the large part of the income of the population in Azerbaijan, these types of increases have an immediate effect. Unlike in the early years of independence, almost there were no increasing effect of the exchange rate of the manat on inflation. In fact, in manat terms, this would have led to a cheapening of imports. However, the impact of foreign currency on inflation is mainly asymmetric. That is, during the time of devaluation of the national currency, prices will not decrease at the same level or decrease at all as a result of its appreciation at the same level with the increase in prices. It can be associated with monopoly, as mentioned above. However, preventing its appreciation has indirectly affected inflation. Another way to influence inflation through the currency channel is the exchange rate fluctuations of foreign currencies, although the manat is more stable than the foreign currency. Mainly due to the fluctuations in the dollar-euro exchange rate, prices of most of the goods imported from the eurozone to Azerbaijan have risen in dollar terms, even if their prices were stable. It should be noted that the increasing effect of import inflation on prices in the national economy is manifested in several stages. In the first phase, such growth is immediately followed by an increase in the Consumer Price Index, and in the following stage, overall price increases are creating condition for wages and prices to increase again by raising inflation expectations. Import goods lead to an increase in the overall price level after a period of acting as an intermediate consumption in the production process in the country. In Azerbaijan, however, insufficient development of the financial markets and inadequate integration into the international financial markets, unlike other developing and post-Soviet countries, the impact of external financial flows on domestic economic processes, especially on inflation, is weak.

## 5. CONCLUSION

When analyzing possible inflation factors, it is important to identify correlation dependencies between price indexes and relevant macroeconomic indicators. Although the correlation indexes do not allow to determine cause-and-effect relationships between indicators, it is theoretically possible to confirm how close the relationship between indicators is by using it. In the current period, the relationship between monetary aggregates, salaries, regulated prices and CPI is relatively low. On the contrary, there is a close correlation between CPI and nominal money income, consumption expenditures, budget expenditures, which are the main demand channels. This can be explained by the high inflation expectations and by the result of the effects of monopoly and other factors in the reviewed period.

In general, the main factors of inflation observed in Azerbaijan in recent years are the sharp increase in aggregate demand in comparison with the non-oil sector, the change of money supply growth rates by leaps and bounds, the rapid rise in administrative prices, global inflation, the domination of food in consumption of population, the presence of monopoly and the inertia of inflation. Influenced by all these factors, taking into consideration that the increase in inflation in Azerbaijan can lead to a number of problems, it increased the need for anti-inflation policies of the state.

#### **LITERATURE:**

1. Alakbarov A.A. Regulation of financial and budget parameters of socio-economic development. Baku: Science, 2007, 446 p.
2. Mohanty M.S., Klau M. What determines inflation in emerging market economies? BIS Papers №8, 2000
3. 2008 Article IV Consultation Preliminary Conclusions of the IMF Mission, Azerbaijan
4. Glazyev S. The practicality of the quantitative theory of money, or how much the dogmatism of monetary authorities costs // *Voprosy Ekonomiki*, №7, p. 31-45
5. Kudrin A. Inflation: Russian and World Trends // *Voprosy Ekonomiki*, 2007, № 10, p. 5-26
6. Kudrin A. Inflation: Russian and World Trends // *Voprosy Ekonomiki*, 2007, № 10, p. 4-26
7. Mammadov Z. F. Money, credit, banks. Baku: Azernashr, 2008, 400 p.
8. Malkina M.Yu. The inflationary process, structural changes in the Russian economy and the “natural rate of inflation”// *Finance and Credit*, 2006 – 12 (246), p. 2-13
9. Glazyev S. On practical validity of the quantity theory of money, or how much the dogmatism of monetary authorities costs // *Voprosy Ekonomiki*, №7, p. 31-45
10. Yasin E. Oil, Rates and Inflation // *Voprosy Ekonomiki*, 2005, № 8, p.4-20
11. Annual reports of the Central Bank of the Republic of Azerbaijan 2000-2010
12. Safarov S. Ilham Aliyev, guarantor of dynamic development and a successful future. Baku: Azernashr, 2008, 680 p.
13. The secret economy is one of the factors that accelerates inflation. Ayna newspaper, Baku, 2008, 24 January.
14. National economy: Tutorial / Ed. P.V. Savchenko. M: THE ECONOMIST, 2005, 813 p.
15. Alirzayev A.G. Socio-economic development problems of Azerbaijan in the context of reforms and acceleration strategies: Practice, trends, perspectives, directions. Baku: Adiloghlu, 2005, 537 p.
16. Glazyev S. On practical validity of the quantity theory of money, or how much the dogmatism of monetary authorities costs // *Voprosy Ekonomiki*, №7, p. 31-45
17. Ershov M. The 2008 Crisis: “Moment of truth” for the global economy and new opportunities for Russia // *Voprosy Ekonomiki*, 2008, № 12, p. 3-12
18. Malkina M.Yu. The inflationary process, structural changes in the Russian economy and the “natural rate of inflation”// *Finance and Credit*, 2006 – 12 (246), p. 2-13

# THE UNITY AND DIFFERENCE OF METHODS OF POLITICAL ECONOMY AND ECONOMICS

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## **ABSTRACT**

*Significant differences between political economy and economics are reflected in the use of various methods in the study of economic phenomena and processes, in the inconsistency of their methodological approaches. The first one. Political economy, studying the original, internal cause-and-effect relationships in production, reveals its essential features. While economics studies superficial, visible relationships and describes functional links based on the principles of rationalizing consumer choice. Political economy uses dialectical and historical methods to identify the main essence of production relations and demonstrate cause-and-effect relationships in their logical structure, and the economy is based on positivism and serves to search for functional dependencies. The second one. In the sciences under consideration, the objects of research also differ. The object of economic research is not production and supply, and not even their relationship with consumption and demand, but directly the sphere of exchange, consumption and demand, more precisely, the demand curve. Political economy, in contrast to economics, assigns a leading role not to consumption and demand in social reproduction, but to production and supply. The third. In political economic studies, the movement of the gross national product is based on the principles of integrity of social reproduction, reflecting the stages of production, distribution, exchange and consumption. In economics textbooks, the object of study is considered mainly at two levels - macro- and microeconomics. Fourth. In political economy, as a logical starting point of analysis, social production as a whole, the national economy or society as a whole, consisting of economic entities, is accepted. While in economics, the logical starting point of research is a single, private economic entity that independently carries out activities in society and in social production.*

**Keywords:** *economic theory, political economy, economics, methods*

## **1. INTRODUCTION**

Significant differences between political economy and economics are reflected in the use of various methods in the study of economic phenomena and processes, in the inconsistency of their methodological approaches. Methods of studying economic activity can be divided into two parts - general philosophical and special. General philosophical methods, based on the principles of dialectical materialism, perceive all economic phenomena and processes in their contradictory and constant development. This method implies the identification of the essence of the studied economic processes. Special methods of scientific knowledge include: observation, synthesis and analysis, induction and deduction, conducting experiments, widespread use of graphs and mathematical models. The task of special methods is not to penetrate into the essence of economic categories and laws, but to describe, analyze and explain economic life.

## **2. THE DIFFERENCES BETWEEN THE MAIN STRUCTURAL PARTS OF MODERN ECONOMIC THEORY**

While political economy is characterized by the use of both general and special methods, economics gives its preference to the use of special methods. In the knowledge of the world by

a human, political economy sets the task of revealing the universal essence and is not at all limited to the analysis of external manifestations. Economics, however, moving away from the approach, in fact, does not explain, but quantifies the economy with the help of complex mathematical calculations, graphs, formulas, statistical models and observations, final limit values and other forms. While the method of political economy is, to a greater extent, philosophical and fundamental, economics based mainly on mathematical and statistical methods. Along with what was said, we note right away that although economic thought considered from a modern point of view, due to its wide coverage, is the "branches" of a huge "tree" called "single economic science", and comes from it, one cannot categorically state that they are all equally and fully comply with the "trunk" of this "tree." This idea can be, to a greater extent, attributed to neoclassical direction of economic theory, since this direction has never relied in its judgments on serious philosophical thought and did not even address it. His stock of philosophical (methodological) knowledge and a fulcrum do not go beyond some provisions of the philosophy of neopositivism and Cartesianism (R. Descartes's philosophy of dualism) of the first half of the 20th century. Such ancient ideas as "what is not in feelings and in practice, that is not in thinking" and "what is not in sensations, that is not in intellect", originating from Aristotle, began to be alien, incomprehensible and unknown to the Galaxy and at the time of classical philosophy borrowed and developed by Hegel. These ideas can be understood and accepted, perceiving the world not from a position of passive contemplation, but from a practical position, in the direction of active changes. Such a position was characteristic of Hegel and Marx's theoretical views, as well as of the founders and representatives of American pragmatism, W. James, J. Pearce, and J. Dyunin. An "economic person", which is a priori the initial condition (basis) of the neoclassical trend (current), is no different from the ordinary, real person who is in the activity of a person, who is actually involved in the process of buying and selling (exchange). Neoclassicists analyzed a certain part of economic reality, however, the limitations and disadvantages of their approach to this process consisted in the fact that, approaching the exchange situation as the only possible characteristic phenomenon in human activity, they turn the actual market exchange into universal, a decisive factor determining the entire economic life of society. Thus, neoclassical analysis with all its judgments and provisions acts as a theory of a market economy, limiting itself to an analysis of the exchange and motivation for buying and selling. Summarizing the differences between political economy and economics, as areas of economic theory, we can draw the following conclusions. The first one. Political economy, studying the original, internal cause-and-effect relationships in production, reveals its essential features. While economics studies superficial, visible relationships and describes functional links based on the principles of rationalizing consumer choice. Political economy uses dialectical and historical methods to identify the main essence of production relations and demonstrate cause-and-effect relationships in their logical structure, and the economy is based on positivism and serves to search for functional dependencies. Thus, the methodology of political economy studies economic laws at the level of the essence of phenomena and intersubstantial relations, as a whole separating essence from a phenomenon, while the economics in its methodology is satisfied the study of visible economic forms and functional relationships between them, not getting to the essence of economic laws. Therefore, in all textbooks of economics, due to the fact that the essence of such categories of market economy as money, price, capital, production costs, profit, rent and others is not disclosed, there are no formulations of their scientific definitions. The second one. In the sciences under consideration, the objects of research also differ. The object of economic research is not production and supply, and not even their relationship with consumption and demand, but directly the sphere of exchange, consumption and demand, more precisely, the demand curve. Political economy, in contrast to economics, assigns a leading role not to consumption and demand in social reproduction, but to production and supply: 1) a product

must be produced before distribution, exchange and consumption; therefore, we can say that the process of reproduction is directly related to production; 2) it is the method of production and, above all, its equipment and technology that make up the material basis of distribution, exchange and consumption; 3) the nature of distribution, exchange and consumption is determined, first of all, by the socio-economic form of production. The third. In political economic studies, the movement of the gross national product is based on the principles of integrity of social reproduction, reflecting the stages of production, distribution, exchange and consumption. In economics textbooks, the object of study is considered mainly at two levels - macro- and microeconomics. Fourth. In political economy, as a logical starting point of analysis, social production as a whole, the national economy or society as a whole, consisting of economic entities, is accepted. While in economics, the logical starting point of research is a single, private economic entity that independently carries out activities in society and in social production. The same object is considered from two positions - from the point of view of society and from the position of the individual. Therefore, in the analysis of economic problems between the two directions of modern economic theory, there are certain differences. In contrast to political economy, which has a more general, theoretical nature, economics is more applied in nature. Having a single subject, political economy and economics study economic systems, based on fundamentally different methodologies, set different goals and objectives. Political economy as a theory of capitalism is based on the labor theory of value, and economics is based on the theory of marginal utility. A comparative analysis of the classical and neoclassical directions of economic theory shows that there are not only differences between them, but also similarities. What is common to them, first of all, is both the object of research - analysis of the sphere of economic activity of people, and the subject of research - economic relations. Political economists and proponents of the economics recognize the real forms of expression of commodity-money relations and the fact that these real forms are the result of the relationship of a human with nature. Both directions of economic theory aim to reflect in their own way the general theoretical foundations of a really functioning and developing market economy. There are no particular disagreements regarding the main factors of production either. The discrepancy is mainly in terms of sources of factor income. Both directions accept the existence of contradictions between the unlimited needs and limited resources. Political economy sees a solution to this contradiction in technological progress. While in economics, the solution to this problem in the short term is seen through the rational allocation of resources and lowering replacement rates, and technology updates in accordance with the requirements of technological progress only in the long term.

### **3. THE PROBLEM OF THE SYNTHESIS OF THE LABOR THEORY OF VALUE AND THE THEORY OF MARGINAL UTILITY**

Theorists are currently discussing the problem of the possibility or impossibility of synthesizing the labor theory of value and the theory of marginal utility, bringing them to the form of a single theory. As it is known, in the past a number of economists, including A. Marshall, M.I. Tugan-Baranovsky, made attempts in the direction of combining the two mainstreams of economic theory. But attempts to achieve synthesis in this area have still not produced the desired effect. In economic theory, dualism cannot be considered satisfying both from a scientific point of view and from the point of view of teaching. The continuing parallel functioning of classical political economy and economics shows that theoretical analysis of a market economic system does not have an unambiguous result, and their parallel or sequential teaching creates confusion and misunderstanding among students. The synthesis of classical and neoclassical economic theories has both proponents and opponents. In the economic literature, proponents of synthesis put forward a number of arguments. The root cause is that both the subject of research and the research method of political economy and economics, in their opinion, are identical, the both,

in particular, use average and limit values, in both theoretical systems sufficient attention is paid to solving social problems, "socialization" of the economy [4, p. 81-82; 108-109]. The second argument is that not only producers, but also consumers participate in the process of forming the social value of goods. In the labor theory of value, sufficient attention has not been paid to the role of buyers (consumers) in the formation of socially necessary labor, which forms the value of the goods. If we consider the competition between sellers and buyers, we will see that the picture of the formation of parameters of socially necessary labor is enriched. The joint participation of producers of goods and consumers in the process of forming the social value of goods can be seen in two directions. Firstly, without competition from buyers, individual prices (cost) of the same product are differentiated and do not turn into a single market price expressing the social value of such goods. Secondly, the ratio of supply and demand establishes what kind of labor costs of producers of goods act as socially necessary costs (the total cost of goods). Thus, the process of formation of socially necessary labor has a dual character. This means that the labor theory of value and the theory of marginal utility, competing with each other not only from an ideological, but also from a theoretical point of view, in fact complement each other and can only together, with compatible interpretations, give a fairly complete picture of the mechanism of the law of value, as well as the process of market pricing [1, p.104-111]. The third argument is that the classics emphasized the important role of utility as a condition for the formation of value and as a factor in pricing, while neoclassicists in the same process recognize the important role of labor costs. The synthesis of classical and neoclassical trends is reflected in the penetration of the category of labor into various theories of marginal orientation and in the use of marginal methods in classical theory. As a result of the interpenetration of methods and some elements of both theories, one can achieve the main goal, i.e. the creation of a new economic theory of a higher level. For example, for classical political economy, consumer value (utility) is a tangible carrier of value. If there is no first, then there can be no second. The price form provides for its discrepancy with the cost, deviation from it. And this deviation occurs precisely under the influence of a utility factor. In turn, neoclassical theory does not accept pricing only on demand (utility). In the long term, the pricing function will pass to labor and production costs. According to neoclassical theory, price equilibrium is possible when supply and demand match. However, a change in supply, influencing the price, reduces or raises it. This theory, providing a wide place for the analysis of constant, variable, general, average, marginal cost of production, links the effective conduct of economic activity at the micro level with the value of production costs. In order to weaken the one-sided position of both neoclassical and marginalists in the process of pricing, A. Marshall cites an example of a pair of scissors. According to this example, the price is simultaneously set by both demand (utility) and supply (labor costs) [3, p.86-88]. The fourth argument is to look for a kind of compromise between the methodology and theory of classical (Marxist) economic analysis and economics. As a result of the synthesis of the methods of Marxism and economics, i.e. by going over in economics to a dynamic approach, and in Marxism to a marginally static approach, supplementing the missing methods of one direction with a methodological reserve of the other, it is possible to achieve a common unified method and, identifying the theory on the basis of this, to achieve monism. Unlike classical political economy, which directs its research to the study of fundamental economic laws (the law of value, the law of surplus value, the law of the norm of average profit, etc.), neoclassicists directed their research to the study of external functional economic quantitative dependencies, in other words, laws of an economic form (law of demand, law of supply). However, the fundamental economic laws and laws of the economic form are different slices, a kind of levels of the mechanism of activity of objective economic laws. As a result, these levels were artificially separated from each other in the classical and neoclassical directions of economic theory, which did not allow us to study them in a complete, systematic form.



For this reason, some economists put forward thoughts about covering the consideration of economic categories on the basis of Marxist theory, and the functional dependence between external forms of economic relations - the methodology of economics. However, there are arguments confirming the impossibility of synthesizing both branches of economic theory. The impossibility of synthesizing political economy and economics is based, first of all, on their initial categories. An important category of political economy is cost. In political economy, which has set itself the goal of searching for truth, the cost, as a result of the socially necessary labor expended, is primary, and the price, as the cost of goods expressed in money, is secondary. For economics, the only category is price. Not being a science of truth, economics is not interested in value. In the center of the economics logical system is precisely price, not value. In economics, the price in the starting point is established precisely by the usefulness of the goods, and not by labor costs. That is, if political economy notices not only price, but a cost behind it, then economics, being satisfied only with price, considers it as the final result determined by subjective actions of buyers and sellers. The labor theory of value perceives utility and demand as a factor in goods and prices, neoclassicists consider production costs and supply as one of the factors influencing price, however, they deny value as an internal substance of price. From this point of view, it is impossible to synthesize the labor theory of value (political economy) with the theory of marginal utility (economics). It is proved that a direct synthesis of political economy and economics, implying an organic combination in a unified theory of the main results of various theories, is impossible [5, p.70]. The inconsistency, alternativeness of these directions can be found in the works of other authors. The labor theory of value and the theory of marginal utility contradict each other both in terms of their theoretical foundations and methodologies, and for this reason they cannot be synthesized. Despite this, both teachings should be used to explain the full diversity of economic processes in real life. If we turn to the process of price formation in real life, we will see that prices can be explained from the standpoint of both directions of economic theory. In modern conditions, we constantly encounter subjective prices of goods. For example, at the box office there are no tickets for the final meeting with the participation of your favorite football team, but they are sold from the hands. However, the desire to see the final meeting will force the subject to purchase a ticket at a price that is many times higher than its nominal value. This means that the subjective price on multiply fronts will set the price of a product or service in advance. If the product is in sufficient quantity, then its subjective price is not related to setting the price of the goods. In the absence of a shortage of goods, restrictions on real products, the subjective price has nothing to do with the price of the products. In the conditions of free mass production and the market, the labor theory of value in a rather convincing and consistent form explains the basis of price. But in conditions of limited resources and a shortage of goods, the labor theory of value is not capable of fulfilling its function; therefore, pricing can be better explained from the standpoint of marginal utility theory [2].

#### **4. CONCLUSION**

Thus, on the basis of the impossibility of synthesis of the labor theory of value and the theory of marginal utility, as theories competing with each other, most economists representing both directions come to the conclusion that it is impossible to synthesize classical political economy and economics. In this case, the formulation of the synthesis problem, in general, its putting forward at any level is considered impossible. At the same time, the impossibility of synthesis of both directions of economic theory does not mean that their results cannot be used in modern economic theory. If we take it as a whole, the goal is to harmonize and coordinate, with the help of political analysis, the solution of actual problems of theory and practice.

**LITERATURE:**

1. Afanasyev V.S. The contribution of the Austrian school to the development of the labor theory of value // Issues of Economics. 2002. No. 2. P. 104-111.
2. Dunaev E.P. On the synthesis of the labor theory of value and the theory of marginal utility//Vestnik of Moscow University. Part 6.The economy. 2002.No. 4.
3. Radaev V.V. Classics and neoclassics in political economy // Capital and economics. Questions of methodology, theory, teaching / Ed.V.N. Cherkovets. M.: TEIS, 1998.P. 86-88.
4. Khubiev K.A. Economics: On the methodological and theoretical content and the possibility of synthesis of the political and economic tradition // Russian Economic Journal. 1999. No. 7. P. 81-82; Once again about the "economy": do not make yourself an idol! // Russian economic journal. 2000. No. 5-6. P. 108-109.
5. Cherkovets V.N. Political economy as a science: historical trend and social demand // Russian Economic Journal. 1996. No. 3. P.70.

# EFFECT ON THE ENVIRONMENTAL AND ENERGY-SAVING OF WHITE LEDS APPLIED IN THE LIGHTING AND FUTURE BENEFITS IN TERM OF ECONOMICS

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## **ABSTRACT**

*This study is dedicated to the study of application perspectives of white light emitting diodes (white LEDs) in lighting, and its environmental and economic benefits in the world have been discussed. White LEDs becoming more and more popular due to the several advantages compared with traditional lighting systems. The main advantages of these systems are stability, adjustable, long lifetime, good thermal stability and environmentally friendly. Moreover, here in term energy-saving problem should be noted as the most important feature. Because, 20% of produced energy is spent on lighting and this value can be significantly reduced by the application of white LEDs in the lighting as well as other systems in modern technologies. Therefore, the perspectives of white LEDs production to application in lighting systems have been investigated in this study. The main object for light emitting diodes to create white LEDs is phosphor materials which is detailed discussed in this work. Because, the phosphors selecting is one of the most problem in this direction to producing high-efficiency and stable systems. It's known that rare-earth elements are the main materials of various compounds and the right choice of these elements in the host matrixes give high quality consequences. In this regard, a detailed discussion was held on materials suitable for rare earth elements and other elements activated white light emitting diodes. The perspectives of white light emitting diodes in various fields of industry and technology, in particular, in lighting and the ecological and economic benefits of such systems have been studied.*

**Keywords:** *White LEDs, rare-earth doping, thiogallates, environment, economical benefit, lighting, phosphors*

## **1. INTRODUCTION**

The energy is most important problem in the world. Its production and exploitation is very important to meet the demand for energy. However, environmental safety is more important than energy producing in terms of protecting the next generations in the world. Unfortunately, nowadays most used energy producing methods cause serious damage to environment. The development of industry and modern technologies, as well as other direct factors are sharply increasing the world's demand for energy, and it is almost impossible to prevent it. Of course, recently, more environmentally friendly methods called renewable energy source (solar and wind) for energy producing were suggested and currently applied to demand energy consumption. However, these methods also some affects to the environment. Moreover, renewable energy source can't fully provide world energy demand. Because, these types of energy sources strongly depends on the climate, therefore can use only limited places in the earth. Considering all these, we can say that the energy producing and saving is most important problem to preserve the future of the world. It should be note that the energy saving is at least is important as energy production. In this regard, the study of lighting and development of lighting technologies have a particular place in the energy saving. It is known that 20% of produced electricity is spent on lighting. This amount of energy is almost equivalent to the electricity produced by nuclear power. Recent calculations of International Energy Agency (IEA) shown that total energy savings potential in the lighting at about more than 2.4 EJ per

year by 2030 [Zeb, A. et al, 2016]. The lighting of buildings is massive in the energy saving potential. It is possible to yield annual savings in building final energy use in the range of 53 EJ by 2050 with using energy efficient systems. It is equivalent to the total energy use of buildings in China, France, Germany, Russia, the United Kingdom, and the United States in 2012 (IEA, 2015a). In almost every working area appropriate lighting is the key to higher efficiency. In order to achieve this goal it is recommended to replace the traditional light bulbs by LEDs [...]. In this direction, some investigations were conducted individually for countries, cities and agro-industrial fields. D. Campisi and others were study of technical-energy-economic feasibility of systems based on LEDs technology and tried to evaluate the effect of energy consumption and CO<sub>2</sub> emissions in the atmosphere on an investment project for the redevelopment of public lighting of the Municipality of Rome [Campisi, D. et al, 2017]. They were reported annual energy consumption and annual total cost of energy of the current lighting system of the municipality of Rome and compared with LED lighting. It was determined that the annual valued cost that would support the municipality of Rome with a LED system of public lighting amounts to €11,025,772.37, equal to €/lamp 57.12. The cost and benefits of LED lighting and electricity saving were estimated for Japan in 2011 [Suehiro, S. & Shibata, Y., 2011]. It was determined that if all traditional incandescent and fluorescent lamps were replaced with LED lamps, 92.2 TWh could be saved which means 9% of produced electricity and 61% of the annual electricity saving in the Japan. This amount of energy is equal to electricity generated by 13 nuclear power plant and 88 GW of photovoltaic power. In 2016, the performance of incandescent lamps and LED lamps were compared, regarding the consumption of electricity and the economic viability of these lighting systems in broiler houses in western Paraná State, Brazil [Rovaris, S.A., 2016]. The investigation was carried out to compare the power consumption in two broiler houses of the dark house type Brazil. It was determined that throughout the period of broiler chickens housing, in the aviary with incandescent lamps 1,768 kWh in lighting was consumed, while the aviary with LED lamps consumed 221 kWh. The economic feasibility analysis showed that the use of LED lamps presented greater economy, and has a return on investment within a period of 21 months. This LED lamps system obtained a saving of about 440 USD and analysis shows that an average of 6 lots per year can be achieved with savings of about 2600 USD yearly. In this study we tried to study effect on the environmental and energy-saving of white LEDs applied in the lighting and future benefits in term of economics.

## 2. LIGHTING TECHNOLOGIES AND MARKETS

The lighting technologies mainly are classified as follow: incandescent lighting, fluorescent lighting, high-intensity discharge lighting and LED lighting [United Nations Environment Programme, 2017]. Incandescent lamp was originally developed in the late 1800s. These lamps produce light by passing an electric current through a tungsten metal wire suspended in an inert atmosphere inside a glass bulb. Electric current causes the thread to heat up so much that it glows and produces visible light and a lot of heat. Only 10% of the energy is spent on lighting, and the remaining 90% is spent on heating in incandescent lamps. Halogen lamps are an improvement over incandescent lamps (they offer better efficiency and a slightly longer lamp life). These lamps contain a small amount of halogen (iodine or bromine) inside the filament capsule, which redeposits the vaporized tungsten back onto the filament, preventing the filament capsule from blackening and increasing the lamp life. Fluorescent lamps are direct modifications of incandescent lamps, which include electronic ballast and a glass tube with a luminescent coating. An electric arc arises at the electrodes of the tube, as a result of which the mercury atoms emit ultraviolet (UV) light, excite the phosphor coating and emit visible light. Fluorescent tubes were developed in the 1970s. Compared to incandescent lamps, these types of lamps consume about 75% less electricity, produce the same amount of light and last about

ten times longer. High Intensity Discharge (HID) lighting produces light from an electric arc contained in a gas capsule that is hermetically sealed inside the bulb. To start and operate HID lamps, a ballast is required that regulates the voltage supplied to the gas capsule. Light is created by an electric arc passing through pairs of metals; however, HID lamps emit only 5% of the light at first start-up and take several minutes to achieve full brightness. If the HID lamp is off, it must cool before a new arc can be reignited in the capsule and light is generated. LED bulbs and luminaries are rapidly spreading to general lighting around the world. As LED technology improves and becomes less expensive, this market expansion will accelerate, replacing traditional light sources with more efficient and more efficient LED technologies. Unlike incandescent and fluorescent lamps, LEDs are not sources of white light. Instead, the LEDs emit almost monochromatic light, making them highly effective for colored lighting such as traffic lights and traffic signs. For use as a common light source, white light is required by combining various LEDs or using a phosphor. Figure 2 shows various ways to achieve white light using LEDs. The main characteristics as well as the main advantages and disadvantages of the mentioned lighting systems are shown in Table 1 and Table 2, respectively.

Characteristic	Incandescent lighting	Fluorescent lighting	HID (mercury)	LED lighting
<b>Luminous efficacy range</b>	8 – 21 lm/W	50 – 70 lm/W	45 – 55 lm/W	60 – 130 lm/W
<b>Lamp lifetime</b>	up to 1500 h	up to 15000 h	20000 h	15000 – 30000 h
<b>Color Rendering Index</b>	100	70 – 85	15 – 25	70 – 95
<b>Correlated color temperature</b>	2600 – 3200 K	2500 – 6500 K	3900 – 5700 K	2700 – 6500 K
<b>Dimmable</b>	Yes	If dimmable ballast	If dimmable ballast	If dimmable driver

*Table 1: Main characteristics of lighting systems [United Nations Environment Programme, 2017]*

### 3. LED TECHNOLOGY

Light emitting diodes (LEDs) use semiconductors to convert electricity to light. The technology has been around for over 50 years. This was part of the solid-state transistor revolution. Moreover, the vitality of LEDs as a practical light source to replace traditional lighting was only a recent innovation. In the early stages of development, LEDs could only emit light at a low level and were widely used in digital displays. Over time, LEDs have evolved, creating higher levels of light, but at significant cost. Then, in the 1990s, LED technology became economically viable for niche commercial use, such as traffic signals. Over the past two years, significant breakthroughs in technology and lower costs have made LED technology an extremely attractive replacement for traditional lighting.

*Table following on the next page*

Incandescent lamps		Fluorescent lamps	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Low purchase price</li> <li>• Highest colour rendering</li> <li>• No control gear needed</li> <li>• Easily dimmed</li> <li>• Universal operating position</li> </ul>	<ul style="list-style-type: none"> <li>• Low efficacy</li> <li>• Short lifetime (1000 h for incandescent and 3000 h for halogen)</li> <li>• High operating costs</li> <li>• High operating temperature</li> </ul>	<ul style="list-style-type: none"> <li>• Low running costs</li> <li>• High efficacy</li> <li>• Long operating life</li> <li>• Good colour rendering</li> </ul>	<ul style="list-style-type: none"> <li>• Control gear required for operation</li> <li>• Frequent switching can shorten life</li> <li>• Dimming requires special ballast</li> <li>• Contains mercury</li> </ul>
HID		LED	
Advantages	Disadvantages	Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• Low running costs</li> <li>• High efficacy</li> <li>• Long operating life (up to 20000 h)</li> <li>• High flux in a small package;</li> <li>• Range of colour rendering</li> </ul>	<ul style="list-style-type: none"> <li>• Control gear (ballast) required for operation</li> <li>• Re-strike after operation can take time</li> <li>• Long time to get full brightness</li> <li>• Shorter life when frequent switching</li> <li>• Dimming requires special ballast</li> <li>• Contains mercury</li> </ul>	<ul style="list-style-type: none"> <li>• Highest efficacy</li> <li>• Lowest running costs</li> <li>• Very long operating life (more than 20000 h)</li> <li>• High flux in a small package, good for optical control</li> <li>• Excellent colour rendering;</li> <li>• Instant on, instant re-strike, dimmable</li> <li>• Contains no mercury</li> </ul>	<ul style="list-style-type: none"> <li>• Control gear required for operation</li> <li>• Higher relative first costs</li> <li>• Needs good thermal design</li> </ul>

Table 2: Advantages and disadvantages of the lighting systems [United Nations Environment Programme, 2017]

How can we justify the LEDs more useful for use in lighting? The following benefits (or innovations) provide a complete description of the prospects for their use. 1) Brighter - a significant increase in lumens (light intensity) per watt, which LEDs can give, means that LEDs can replace almost any traditional lighting that we use today. 2) Longer service life - the service life of LEDs exceeds 10 years, which significantly exceeds the service life of traditional light sources. 3) Less expensive - costs are significantly reduced due to the introduction of technology. 4) Directional lighting. One important advantage is the directional component of LED lighting. Traditional light sources, such as incandescent, fluorescent and HID lighting, use round lamps that emit light at an angle of 360 °. Usually this means that more than half of the light emitted by the lamp goes somewhere, except where the light is needed. An LED requires less lumens to illuminate the area. In many cases, half a lumen is required to provide an equivalent amount of light. This is a major factor in saving energy. 5) Uniformity of light - uniformity of light - is the ability to uniformly project light over a large area. 6) Increased safety and security. LED lighting not only makes the area brighter and safer, but also works in conjunction with the HD camera system, greatly improving the quality of recorded images. 7) Economical dimming - this can be very expensive for dimming HIDs and fluorescent tubes. On the other hand, the LEDs can be automatically turned off at any time of the day using a timer, which further reduces energy consumption and increases savings. 8) Advantages of the refrigerator - consider the following: energy-saving LED lighting not only emits less heat, but also works better at extreme temperatures. This makes it ideal for cold stores such as freezers and cold stores. 9) Environmental friendliness - in addition to saving energy, LED technology reduces the number of lamps disposed of in landfills and does not contain harmful mercury, such as fluorescent. It's important to note that the main objects of the LEDs are phosphors which doing light converting process.

Usually UV (375 nm) and blue (460 nm) LEDs are using to produce white LEDs. It's known that the white light can be generated from three color of light: blue, green and red. These three colors of the light are enough to get white light which is optimal parameters for human eyes. The blue light is emitted from LED. However, red and green lights are required to combine blue LEDs to get white LEDs. Here, phosphor materials are used for this purpose. It should be note that the selecting of the phosphors is key process to create high efficiency white LEDs. Because, it very important to consider not only physical parameters, but also economic efficiency. If we examine the literature, we can see numerous suggested materials to use for white LEDs. Indeed, a lot of materials are known which really very good physical parameters for LED lighting. However, most of them can't use in this area due to the economic inefficiency. Because sufficiently expensive chemical materials are used to obtain these phosphors. Recently, rare-earth doped materials are widely used in this area due to perfect electronic structure of rare-earth elements. These elements create new emission centers when involving to the host matrixes. Depending on the host matrixes, rare-earth elements can be emits green or red light. In this regard, alkaline earth oxides [Leanenia, M.S. et al 2016; Khan, D.T. et al, 2019] and sulfides [Tagiyev, B.G. et al, 2015; Leanenia, M.S. et al, 2015; Leanenia, M.S. et al, 2017; Tagiyev, B.G. et al, 2015] should be particularly note. Because recent investigation of these materials shown that the phosphors based of them are completely suitable to white LEDs in terms of both physical parameters and economic benefits.

#### 4. CURRENT SITUATION OF LIGHTING IN THE BUILDINGS IN BAKU

Let's consider the nine floors buildings in Baku. There are two apartments in every floor and in total 18 apartments in the building. Each apartment consists of two bedrooms, kitchen, toilet and a bathroom. The current total power consumption of the apartment is presented in table 3. The daily electricity consumption and monthly apartment bill are calculated on the assumption that the bulbs are on for the following time periods:

- Bedrooms: 6 h/day;
- Living room: 15 h/day;
- Kitchen: 15 h/day;
- Toilet & bathroom: 3 h/day.

Current electricity consumption and monthly and annual bill of an apartment:

- Electricity consumption per day: 8.640 KW/h;
- Total consumption per month: 259.2 KW/h;
- Monthly electricity bill: 18.144 AZN (1 KW/h = 7 cent);
- Annual electricity bill: 217.73 AZN.

Apartment	Number of lamps		Watt		Total wattage (W)	
	Traditional	LED	Traditional	LED	Traditional	LED
Bedroom 1	4	4	60	10	240	40
Living room	4	4	60	10	240	40
Kitchen	4	4	50	6	200	24
Toilet & Shower	2+2	2+2	50	6	200	24
Total energy consumption for lighting in apartment					580	128

Table 3: Total energy consumption for lighting in the apartment (Traditional and LED compare)

Now, let's compare average costs for electricity if we use LEDs for lighting. With the usage of these lamps, the total power consumption of an apartment would be as under as shown in Table 3. After retrofitting, electricity consumption and monthly bill of an apartment:

- Electricity consumption per day: 1.272 KW/h;
- Total consumption per month: 38.16 KW/h;
- Monthly electricity bill: 2.67 AZN (1 KW/h = 7 cent);
- Annual electricity bill: 32.05 AZN.

Here clearly seen that the LEDs in the lighting are extremely economically efficient. We are calculated minimum electricity consumption. If we consider larger profile to use of LEDs, the cost difference between traditional and LEDs lighting will increase several times.

## 5. CONCLUSION

The idea of energy saving in the buildings has been presented in this study. Current electricity consumption in the buildings with traditional lights is averagely calculated. LED lamps are used to replace traditional lamps, and energy consumption is recalculated. The total amount of energy savings is calculated with comparing both lighting technologies. It concluded that the substitution of existing traditional LED lamps in our buildings will lead not only to lower energy costs, but also to energy saving. In addition, this process is fully feasible and economically efficient. Furthermore, detailed information is provided about lighting technologies and key products to create LED lamps.

## LITERATURE:

1. Zeb, A., Romero, M.A. and Strelets, K. (2016). LED Lightbulbs as a Source of Electricity Saving in Buildings. *MATEC Web of Conferences*.
2. Campisi, D., Gitto, S. and Morea, D. (2017). Light Emitting Diodes Technology in Public Light System of the Municipality of Rome: An Economic and Financial Analysis. *International Journal of Energy Economics and Policy*, 7(1), 201-208.
3. Suehiro, S. and Shibata Y. (2011). Electricity saving potential and cost & benefit of LED lighting in Japan. *IEEEJ*.
4. Rovaris, S.A., Siqueira, J.A.C., Nogueira, C.E.C., et al. (2016). Electric energy consumption and economic feasibility of led lighting system in broiler house. *African journal of agricultural research*, 11(46), 4768-4773.
5. Accelerating the Global Adoption of Energy-Efficient Lighting. (2017). United Nations Environment Programme.
6. Leanenia, M.S., Lutsenko, E.V., Rzhetski, M.V., et al. (2016). High photoluminescence stability of  $\text{CaGa}_4\text{O}_7:\text{Eu}^{3+}$  red phosphor in wide excitation intensity interval. *Optical Materials*, 54, 45-49.
7. Khan, D.T., Dang, N.T., Jabarov, .S.H., et al. (2019). Study on luminescent properties of  $\text{Tb}^{3+}$  and  $\text{Sm}^{3+}$  co-doped  $\text{CaSiO}_3$  phosphors for white light emitting diodes. *Materials Research Express*, 7(1), 016507.
8. Tagiyev, B.G., Tagiyev, O.B., Mammadov, A.I., et al. (2015). Structural and luminescence properties of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4:\text{Eu}^{2+}$  chalcogenide semiconductor solid solutions. *Physica B: Condensed Matter*, 478, 58-62.
9. Leanenia, M.S., Lutsenko, E.V., Rzhetski, N.V., et al. (2015). Photoluminescence of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4$  Solid Solutions Activated by  $\text{Eu}^{2+}$  Ions. *Journal of Applied Spectroscopy*, 82 (2), 248-253.
10. Leanenia, M.S., Lutsenko, E.V., Rzhetski, N.V., et al. (2017) Photoluminescence of  $\text{Ca}_x\text{Ba}_{1-x}\text{Ga}_2\text{S}_4:\text{Eu}^{2+}$  solid solutions in wide excitation intensity and temperature intervals. *Journal of Luminescence*, 181, 121-127.



11. Tagiyev, B.G., Tagiyev, O.B., Nahiye T.G., et al. (2015). Luminescence of  $\text{Ca}_{0.5}\text{Ba}_{0.5}\text{Ga}_2\text{S}_4$  crystals activated by  $\text{Eu}^{2+}$  and  $\text{Er}^{3+}$  ions. *Optics and Spectroscopy*, 118 (3), 389-392.

# INVESTIGATION OF INNOVATION PROCESSES IN AZERBAIJAN AND ITS FORMATION FEATURES

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## **ABSTRACT**

*Modernization of globalization processes occurring in the world economy, the rapid development of scientific and technical progress creates conditions for the formation of new economy, the process of consolidation of the economy in the hands of large companies increases, the role of financial institutions in the implementation of innovation processes grows, enterprises operate under the influence of the mentioned processes and they try to improve the marketing behavior, to participate closely in innovation processes. There are specific peculiarities and problems of the formation and implementation of innovation processes in Azerbaijan. Their consideration allows to identify correctly the role and place of innovation processes in the socio-economic development of the country.*

**Keywords:** *Innovation, enterprise, competitiveness, strategy*

## **1. INTRODUCTION**

The globalization of the global economy and the increasing of aggravating competition in the commodity markets, the need of companies to be competitive and secure, their protection ability requirement encourage them to apply the innovative development strategies. The creation and implementation of innovation is primarily based on the development of public production, the progressive changes in people's needs, are explained with the existence of competition in commodity markets, and, in general, become one of the key factors for the development of microeconomics. Innovative processes occurring in microeconomics form the innovation activity of enterprises, direct them to apply the innovative effective strategies, form the basis for upgrading and perfection of products, as well as enhancing the competitiveness of enterprises and strengthening market positions, become a key tool for business development and a creative attack strategy. Enterprises innovation activities are mainly focused on the products, the creation and adoption of technological and organizational-economic innovations. The implementation of innovation activities in these areas bases on the diversity of innovation development strategies of the enterprise. In this regard, the planning and management of the innovation process at the enterprise becomes one of the key issues. Such processes also mean scientific research of markets, improvement of consumption characteristics of products, finding and adopting the new sales markets, introduction of new methods of management, the information and communication technologies application. In response to the changes in the environment, the enterprises improve their market behavior, the science of production rises, the production processes become complicated, and the consumers' product quality and

management are growing. Innovation processes are part of the general development process as one of the key factors that contribute the future, perspective development of the economy, which involves the purposeful realization of the activity in this direction, resulting in a new qualitative formation of production and management. All this is also relevant for the Azerbaijani economy and it is very important for its further development. Innovations in Azerbaijan are shaped in the innovation activity of various economic entities and become one of the key factors that make them competitive. At the root of everything is the existence of competition in the commodity markets. Competitive environment is formed depending on the level, type and nature of the competition. This environment creates the level and nature of the innovation processes in microeconomics. The competitive environment in the commodity markets of Azerbaijan is characterized by a weak competition among the producer enterprises in concrete product markets. This is explained by the fact that local production enterprises often have a monopoly position, and in other cases they determine restrictions on the imports of their products or their rates of import duties are raised. Such measures protect the manufacturer from the effects and competitiveness of imported goods. This, as noted, weakens competition in the product market. From this point of view, the issue of the state's affiliation to the local enterprises becomes urgent and at the same time becomes a controversial issue. Rapid development of information and communication technologies in the modern world, and the strengthening of globalization processes have a serious impact on the socio-economic development of the countries. The global character of international factors penetrates in the life of all countries, including Azerbaijan, and all its spheres. Today, one of the key directions of the world economy's development is the formation and development of innovation activity in the new context of globalization. In this regard, the change of socio-economic processes at the international level and the pace of development, the creation of innovations and their application to the production area are more rapid. This essentially characterizes the positive impact of globalization on the economic processes and creates enormous opportunities for the countries, their leading companies, firms, businesses and organizations create new possibilities to benefit from innovations, progressive technologies and new management methods.

## **2. RESEARCH**

The future development of the world economy will be mostly based on the innovation factor. In global trade, there are serious changes in the competitive environment of the commodity markets, the intellectual property, the environment of entrepreneurial activity, and these changes shape the development trends and strategies of the enterprises. Intensification of tendencies in the international markets, improvement of production and technological processes, and expansion of the countries' innovation potential will increase their competitiveness. As in the developed countries, there is already a need for transition from the traditional economy to the "knowledge economy" in Azerbaijan too. This requires proper policies and measures to ensure the development of human capital. Globalization, with a wide range of opportunities for economic development, also creates great risks, threats, and expands the migration of production, financial and labor resources. New countries try to join the ranks of developed countries, which result the redistribution of financial and labor resources and strength the international competitiveness. The modern period is characterized by the disruption of balance between the major centers of power in the world economy and the structural changes associated with it. Changes in the world economy also create new opportunities for Azerbaijan in terms of integration into the global economic system and in the direction of adaptation to global trends in social and economic development create new opportunities, although such opportunities are accompanied by risks and problems. As a result of measures taken by the state and occurred economic reforms in recent years, positive results have been achieved in Azerbaijan in improving entrepreneurship environment and its development.

It is no coincidence that the Strategic Roadmap for Economic Perspective was approved by the Presidential Decree of December 6, 2016, the implementation of measures will promote the development of entrepreneurship, especially small and medium-sized businesses. In 2000-2016, the number of medium and large enterprises in Azerbaijan increased 2.2 times and the volume of their production by 7.1 times. It shows structural and qualitative changes in business activity. In the recent period, a number of large enterprises, companies, holdings have emerged in Azerbaijan, and they operate successfully with market principles. Such companies as Gilan Holding, Ata Holding, Azersun, Pasha Holding, SOCAR, Azerkimya Production Association, Processing Industry and Agrarian Industry Complex and other institutions can be mentioned. Thanks to the quality and competitiveness of their products, its position is strengthened not only in the domestic market, but also its access to the foreign markets is expanded. Nevertheless, it should be noted that the innovation activity of these enterprises and companies is low. They are working to produce quality products based on existing technology rather than on creating innovative products. This should be regarded as a natural phenomenon, because it is a very difficult and complicated process to implement innovation activities. Only an enterprise with high scientific and technical potential and financial resources will be able to carry out innovation activities. Fundamental science centers and organizations existing in the country during their transition to market economy and transformation in Azerbaijan have lost their application areas. As a result, large state-owned enterprises were virtually entirely deprived of access to the market economy and the possibility of implementing research works on the privatization process and applying their results to the production. They are more interested in building their business on the basis of market principles and implementing strategies that keep them on the market. At that time, the issue of implementing scientific studies and applying them to the production was totally out of focus. Only beginning from the 2010 year, special attention has been paid to the application of innovative development strategies by the state and businesses that are newly created or upgraded, establishing their activities based on the market principles and facing serious competition in the commodity markets. In the current period of stable development of the country, such deficit of funds, budget and extra-budgetary financing restriction, difficulties in attracting foreign capital and so on. due, the serious decline of innovation activity of the local enterprises took place. The low level of innovation activity of local enterprises has also had a serious impact on the technological exchange process. In 2010-2016 years, let's consider the innovation activity of Azerbaijan industrial enterprises in table 1.

*Table 1: On the innovation level and types of economic activity volume of the innovative production (in thousand manat)*

	Undergone major changes and renovated product				
	2010	2011	2012	2013	2016
All industry including:	4384	13163	23052	11634	35747
Mining industry	-	2073	396	326	130
Processing industry:	4384	11090	22656	11308	35617
Beverage production	-	3500	18200	-	-
Weaving	-	-	-	8933	12844
Chemical industry	-	-	3049	465	522
Building materials	-	-	-	1159	6586
Computers and other electronic equipment production	-	5681	20	-	-
Manufacture of machinery and equipment	1262		820	238	175
Machinery and equipment installation and repair	1311	1295	497	512	-

*Source: Azerbaijan Industry. Statistical bulletin, 2010, 2017.*

As it is seen from the table, the volume of production, which has undergone considerable changes in the Azerbaijani industrial sector, and the innovative product has increased significantly over the last six years. The volume of this type of production for the whole industry increased 8.2 times from 4384,000 manats to 35,747,000 manats in 2010-2016. This increase was mainly due to the processing industry. The product, which was exposed to new or substantial changes, was 100% in 2010, 84.3% in 2011, and 99.6% in 2016 due to processing industry. Despite the mentioned high pace of growth, the total volume of innovation products in the country is very low, to a certain extent, this indicator characterizes the outcome of innovation processes, indicates a low level of innovation activity of enterprises. The existing problems in the creation and implementation of innovation in Azerbaijan have been transformed into the problem of non-acceptance of innovation in the economy. Under the weak market relations conditions in the country, the innovation and new technology are inadmissible by the economy of the country, and this is due to:

- 1) The majority of Azerbaijani enterprises are not trying to solve the problems of development, but try to remain in the market and maintain market positions problems. For this, they pay much more attention to the application of new technologies, financial and legal issues and the application of existing technologies.
- 2) Republican enterprises prefer to operate with cheap labor and material resources, leisurely production capacities, a sustainable market of machinery and equipment to ensure the efficient business activities.
- 3) Developing the processing and recycling industry with the country's economy oriented on raw material exports has become an important state policy. However, the development of these areas is not based on innovations, on new technologies, but on the application of existing technologies used in the developed countries. This also affects the competitiveness of enterprises in these areas at a high level and strengthens their position in the international markets.
- 4) Innovation creation is a complicated process requiring huge costs. Failure of the finance venture and lack of adequate funding for innovation facilities and the lack of funding mechanisms for their funding sources at the level make it impossible to carry out and complete the innovative scientific researches and other works development.
- 5) Existence of monopoly on the country's commodity markets and its formation in the high level conditions weakens the competition and leads to the weakening of enterprises innovative activity.
- 6) The complexity and complex nature of the innovation process management by enterprises, the existence of different risks at this moment does not allow enterprises to innovate effectively their business without creating a high level of innovation activity infrastructure.

Some of the mentioned problems, including the elimination of monopoly in the commodity markets and the formation of an efficient innovation infrastructure, are possible thanks to the implementation of special government measures. Innovative infrastructure is essential in realization of innovation activities in the enterprises. Innovation infrastructure in any country is based on the general development strategy of the economy, innovation relations and policy of the state, as well as on the basis of independent economic entities that are effective in market principles and affect innovation processes. Innovative infrastructure is a large-scale, complex, technical-organizational system that combines a large number of enterprises and organizations as part of the national innovation system, and performs many different activities, functions, and many functional directions (legal, financial, socio-economic, information assurance, technoparks, consulting, venture organizations, etc.) and, according to these areas, are divided into several basic elements. Through this, enterprises have the opportunity to carry out effectively the innovation activities.

Technoparks occupy a special place among the mentioned directions. In practice, they distinguish three types of technoparks: - incubators, technoparks and technopolis. Each of these forms has different features and action mechanisms. Incubators and technopolis in Azerbaijan don't almost function. Only certain work has been done to establish and operate technoparks. Technopark is a scientific-production and territorial complex that provides maximum affordability for the development of small and medium-sized innovative enterprises. Although the activity of technoparks are similar to incubators, their specific characteristics and distinctive features exist. The main difference is that the innovation enterprise, which utilizes technology parks services, has a great potential for the development of science-intensive technologies, know-how, and scientific knowledge, which is at the mature stage of development. Considering that the country's innovation system, including the innovation infrastructure, has a low level of flexibility and quality of work in large scale, it is possible to understand that enterprises have been upgrading their existing technology through the realization and acquisition of foreign technologies. Innovation infrastructure in Azerbaijan is mainly organized in the different ministries and agencies as follows:

- 1) There is a following innovation infrastructure in the State Agency for Alternative and Renewable Energy Sources:
  - Sumgait technological park (covers 17 plants)
  - Arguntex plant (Solar module and LED lamp production) Sumgait city;
  - waste recycling enterprise - Sumgayit city;
  - Gobustan training center and experimental landfill - Gobustan settlement;
  - Hydropower complex (Neftchala, Gobustan settlement, Samukh village);
  - Hovsan bioenergetics center - Baku;
  - New type power plants - (Baku and its districts);
- 2) In the system of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan;
  - Sea water purification center - Salyan district;
  - High mountain ecology and hydrometrological research center - Baku and its regions;
  - Center of innovative system of metrological observations - Baku;
- 3) Baku State University: - "Nano Investigations" and "Immunology" Scientific Technical Laboratories (STL) operate. At the same time, the work is underway to establish the Technology Park "Biotechnology" Scientific Technical Center (STC) and the Gobu Experience-Test Base in the University.

All these are individual trends and do not affect seriously innovation in commodity markets. At the same time it should be noted. technoparks, technopolis and business incubators especially are used widely in the developed countries, and this is precisely the result that these countries have a leading position in the specific product markets. The current situation in Azerbaijan innovation infrastructure is characterized by a number of specific features and problems. Azerbaijan has managed to preserve the potential of fundamental researches existing in the Academy of Sciences, scientific research institutes and universities during the transition to a market economy and then transformation period. However, the level of Scientific Technical Project Design Works (STPDW) implemented in those organizations was low, and their application mechanisms were not perfect enough. The results of the researches have not played a special role in making innovation decisions and applying new technologies. In order to ensure the development of innovation infrastructure in Azerbaijan it is more appropriate to implement innovation processes in two stages. At the first start-up phase, creation of innovation is supported. At the second and final stage, the supported innovation management company creation is intended and it is designed to help to the development of innovation process. State support for the creation and development of innovation infrastructure can be more effective

when it is implemented taking into account these stages. Considered that the country's innovation system is of a low level of flexibility, large scale use and quality of work, it is possible to understand that enterprises have to upgrade their existing technology through the acquisition of foreign technologies. Enterprises produce quality products based on existing technologies and prefer to organize its efficient sales rather than creating new products. In recent years, despite the adoption of a number of legislative acts and state programs regulating innovation function in the country, substantial changes have not been made in this area. Therefore, there is a need to adopt the Law on Innovation and Venture Activities in Azerbaijan, and creation of the National Innovation Fund and the Innovation Entrepreneurship Association. Thus, it should be noted that the innovation processes taking place in Azerbaijan have not seriously affected the socio-economic development of the country. This is primarily due to the low level of financial capabilities, the scientific and technical potential and innovative activity of enterprises.

### **3. CONCLUSION**

The results of the research works show that most of the innovations implemented by enterprises are imitating character. Novelty character oriented innovations are limited. This is mainly explained by the weak competition in the commodity markets and the monopolistic position of many republican enterprises. Additionally, the strong relationships of local businesses, especially large companies, with high-ranking officials, and administrative government agencies, allow them to gain a market-oriented advantage over their competitors. The experience of industry-developed countries shows that only the market mechanisms are not enough to activate innovative activity of enterprises. The state has a purposeful regulatory function in the field of Scientific Technical Project Design Works in Azerbaijan, and the responsibility for assisting the implementation of science-based technologies and fundamental research works in general technological development should be increased. At the same time, the limited financial resources of the state require the priority areas that the country can integrate into the world economy, and the products of local enterprises are competitive in the world markets. Businesses are not always fully free in realization of the innovation activities. Innovative processes cover many factors, including previous experience in the innovation activity, manners and methods for choosing a strategy, methods for the preparation of the individual innovation projects, professionalism of decision makers managers in innovation, enterprise resources, overall development strategy objectives, globalization of world economy, rapid development of scientific and technical progress, etc. Impact in this process. Businesses are forced not only to take into consideration these factors, but also to act under their influence and make decisions. The innovation policy implemented by the state in Azerbaijan and the National Innovation System based on it, including the innovation infrastructure, the creation and improvement of their working mechanisms create conditions for raising the competitiveness of businesses and the economy as a whole, affecting the behavior of economic entities that depend on the social and economic development directions of society. The steps taken by the state to improve the economic reforms, the regulatory framework for innovation activities and the effectiveness of such measures play a very important role in the formation of innovative activity of enterprises.

### **LITERATURE:**

1. Aliyev T., Babayev L. Organization and management of Regional Innovation System. "Science and education" Baku - 2013. 269 p.
2. Azerbaijan 2020: "Look into the future" development concept. Baku, 29 December 2012.
3. Azerbaijan Industry. Statistical bulletin, 2010, 2017.

4. Azerbaijan's Strategic Roadmap for the National Economy perspective, was approved by the Decree of the President of Azerbaijan Republic of December 6, 2016.
5. Balabanov I.T. Innovation management. SP. Peter 2001.304 p
6. Decree of the President of Azerbaijan Republic on establishment of the High Technological Park. Baku, 5 November 2012.
7. Eminov N. Innovation oriented economy: formation and development problems. Baku "Science" 2012, 328 p.
8. Filosofova T.Q, Bykov V. Competition, innovation, competitiveness. Unity – Dana, 2012. 295 p.
9. Kazakova O.B. Institutional aspects of innovative development of economy. Monograph. Paleotyne 2012.
10. Kotler F. Marketing management, ekspress - course, translation from Russian, second edition, Baku, 2008. 468 p.
11. Lamben J.J. Strategic marketing. ekspress – course, translation from Russian, second edition, Baku, 2008. 887 p.
12. Levshina O.N. Modern methods of obtaining a competitiveness in entrepreneurship. Jurisprudencia, 2011. 326 p.
13. Statistical indices of Azerbaijan, Baku, 2010, 2017.
14. Trifilova A.A. Management with innovative development of the company. Finance and Statistics, 2003. 173p.
15. Valinurova L.S., Akhmadov A.M., Conditions and mechanisms of innovation development of enterprises. Monograph, Paleotyne 2012.
16. Verxovets O.A. Innovation and its role in economic growth of Russia. Monograph. OMSC 2011. 135 p.



# ECONOMICS IS A SCIENCE FIELD ABOUT EFFECTIVE USE OF LIMITED RESOURCES

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## **ABSTRACT**

*The article discusses three stages divided in the development of the subject of economic theory: the research about long-term historical development related to economy, political economy and economics and justification of typical features of their emergence. The methodology of the research - systematic approach and comparative analysis methods. The results of the research – Setting forth offers that fit in the background of innovative scientific-theoretical justifications based on the works and the researches by classical political economists. Limitations of the research – more extensive investigations are required in terms of scientific-theoretical grounds. Practical significance of the research – public production process must stand in the focal point of political economy, not wealth. Then price theory won't drive out value theory, theory of production won't drive out labor theory, and analysis of specific situations won't drive out abstraction theory. Originality and scientific innovation of the research – presented as one of the initial scientific-research justifications varied with its specificity for the investigation of classical political economists' ideas.*

**Keywords:** *political economy, chremastics, mercantilist, value theory, labor theory, orthodox Marxist political economy*

## **1. INTRODUCTION**

Grounds were formed in the alteration of general paradigm of economic science in the second half of the XIX century. Capitalism rigorously proved itself in the developed countries. The development of general principles of political economy is substituted with the investigation of various problems of economic practice, quantity analysis is forced with quality analysis. The authors try to optimize limited resources, widely apply ultimate theory, differential and integral calculus for this. The pages of economic articles are filled with mathematical coefficient and graphs that describe various market situations. New tendencies are embodied in changing of the science's name. "Political economy" is forced with the concept "economics" (When political economy was mentioned in the West in the XX century, the analysis of economic policy as an independent field of economic science was understood, not economic theory on a whole). When economics is mentioned, analytical science about the use of limited resources for production of different commodities and services by people, their distribution and exchange among members of society for the consumption purpose is considered. Coining of the new term is connected with the name of Alfred Marshall, (1842-1924), English economist, one of the founders of neoclassical direction. His book "Principles of Economics" was published in 1890, and here the key subject of the analysis is price theory, not value theory. Price mechanism was viewed as the ratio of supply and demand. A. Marshall set forth marginalism – the idea about marginal physical productivity to the foundation of demand theory, and this has been developed in the works by W. Jevons, K. Menger, E. Bem-Baverk, F. Vizer, L. Walras and others; and he set forth factors of production theory to the foundation of supply theory, and later this has been completed with theory of ultimate productivity by C. B. Clarke.

While classical political economists tried to reveal objective methods above all things, A. Marshall touched upon subjective assessment of entities (“freedom of choice”).

## 2. KEYNESIANISM

A. Marshall’s theory factually became abstract from the activity of monopolies. It was impossible not to feel the influence of monopolies on pricing after economic crises in the 20-30s of the XX century, especially after the Great Depression in 1929-33. In the years 1933 the work “Theory of Monopolistic Competition” by E. Chamberlin and “The Economics of Imperfect Competition” by C. Robinson were published where monopolistic price mechanism was investigated. But the real revolution in economic theory was the work “The General Theory of Employment, Interest and Money” by John Maynard Keynes (1883-1946) published in 1936. Emergence of a new direction – Keynesianism that brings the problems of macroanalysis to the center of attention in Western economic thinking is connected with his name. This kind of approach not only caused more detailed reflection of objective reality in economic theory, but also brought normative aspect to dependence on positive aspect to a great extent. Keynes rejects some main postulates of neoclassical system, especially viewing market as an ideal mechanism that regulates itself. In Keynes’s point of view, market can’t provide effective demand, therefore the state has to stimulate it by means of credit-monetary and budget policies. This policy has to inspire special investments and increase in consumption expenses in such a way that it can lead to faster growth of national income. Practical directing of Keynes theory brought him great fame in the post-war years. “The Keynesian Recipe” turned into ideological program of mixed economy and “Welfare State Theory”. In the early 50s of the XX century new Keynesians (R. Harrod, E. Domar, E. Hansen etc.) were actively developing problems of economic dynamics and first and foremost, growth paces and factors and trying to find out optimal ratio between employment and inflation. Accordingly, P. A. Samuelson’s “neoclassical synthesis” conception that made an attempt to combine methods of market and state regulations was directed at it as well. Post Keynesians (J. Robinson, P. Sraffa, N. Kaldor etc.) made an attempt to add D. Ricardo’s ideas to Keynesianism in the 60-70s of the XX century. New Ricardians support for more equal distribution of income, limitations on market competition, realization of events system for reasonable combat against inflation. But in the 70s of the XX century despair period began in Keynesianism. The offered “recipes” weren’t enough for strengthening of inflation, decrease in production and putting an end to growing unemployment rate. Keynesian paradigm couldn’t completely oppress neoclassical theory. The attempt to combine both the paradigms in neoclassical synthesis form was unsuccessful, that is to say, it wasn’t distinct with its completeness; it rejected microeconomics during the analysis of macroeconomic processes. Furthermore, new directions of neoclassics (Monetarism, new classical economy, social choice theory) significantly oppressed Keynesianism in the 70-80s of the XX century.

## 3. MONETARISM

Monetarists began the first “attack”. As classical liberalism on the whole, Monetarism views market as self-regulating system and resists to extreme intervention of the state to economy. The main feature of this direction was extreme attention to money in circulation which Monetarists consider decisive factor of the economy’s progress. The prior clauses of the judgement became the top issues of economic policy (problems such as inflation, employment policy etc.). Initial grounds of this judgement were specified in the works “Essays in Positive Economics” (1953), “Capitalism and Freedom” (1962) by Milton Friedman (1912-2006) and in the work “Free to Choose” (1979) later written together with Rose Friedman. His methodology was neopositivism that tried to reconcile rationalism (thinking) with empiricism (practice). Friedman thinks that abstract hypothesis stands in the center of the theory and empirically checked results are established from that.

If these are proved with practice, then theory is considered real, if not, vice versa. As Keynesians' practical offers were collapsed, their theory should have been removed too. But such consequence can happen for Monetarism as well, for this theory is dependent on numerous confirmations and facts that are against it can be found anytime. It is not that difficult to do this, because, several grounds of Monetarists are of unrealistic character (perfect competition, price elasticity, completeness of economic information, dependence of national income growth on money growth dynamics etc.).

#### **4. NEW CLASSICAL ECONOMY**

While reasonable demand stands in the focal point of Keynesians, their critics direct their key attention to offers of commodity and services. In the 70s of the XX century even specific direction – supply economics was formed (A. Laffer, G. Gilder, M. Evans, M. Feldstein etc.). They think it is essential to reduce taxes and to make compromise to corporations in order to stabilize economy. In such condition, being decreased of state budget deficit will lead to stabilization of economy. The members of leading directions of new classical economy or neoclassical economy (J. Muth, R. Lucas, T. Sargent, N. Wallace, R. Barro etc.) tried to set more complete theory by means of summarizing single microeconomic fundamentals based on the analysis of macro problems. Economic agents that can quickly adjust to changable economic conjuncture thanks to the effective use of the received data were in their center of attention. (rational expectations theory). As every individual is able to well adapt to the changing world, necessity for the state's intervention to economy is eliminated. However, new classical economists don't assess the time factor correctly which is essential for data collecting and processing as well as various opportunities of getting information different subjects have. As a result, a housewife is more prompt in processing of economic data and elimination of uncertainty factor compared to professional economists and specialized state enterprises.

#### **5. SOCIAL CHOICE THEORY**

The followers of social choice theory J. Buchanan, G. Talloek, M. Olson, D. Muller, R. Tollison, U. Niskanen and others that was formed in the 50-60s of the XX century tried to remove this shortage. The followers of this theory put the effectiveness of state intervention to economy under question criticising Keynesians. They gradually interfered actively to the field which is traditionally considered the activity field of political scientists, lawyers and sociologists by using classical liberalism principles and marginal analysis methods, and this was called economic imperialism. Criticising state regulation, the supporters of social choice theory made the passing process of government decisions their object of analysis, not the influence of credit-monetary and financial events to economy. The main grounds of them consist of the idea that people function in political sphere due to their personal interests and there is no impassable boundary between business and policy. That's why members of this school reveal the legend about the state whose care is only public interests. So social choice theory made an attempt to implement individualism principle more continuously, ascribed that not only to commerce activity, but also to the state. But social choice theory couldn't overcome certain abstractness of neoclassical paradigm on a whole, and first and foremost, its out of history character. Interest towards institutional researches has recently increased. This is partially related with attempts to overcome the limitations put on some conditions (total efficiency, the axioms of perfect competition, balance creation by means of only price mechanism etc.) referred to economics and to overall consider modern economic, social and political processes, and partially related with effort to analyze the cases happened in the STP period, thus, applying traditional investigation methods to these doesn't yield in desired results. Therefore, let's first take a look at how the conditions of neoclassic theory develop inside it.

There are the following terms that are common for non-institutionalists: first, social institutions are of importance and secondly, they are analyzed with the help of standard means of microeconomics. In the 1960-70s American economist G. Becker's (1930) «economic imperialism» appeared. In this very period economic conceptions such as maximalization, balance, efficiency, education, family relationship, healthcare, criminality, politics began to be actively applied in areas that were complicated for economy. This led to the case that neoclassic ground economic categories found more detailed interpretation and its apply in more extensive sphere. When institute is mentioned in contemporary theory, «rules of the game» or limited frames «established by humans» in society are understood, and these form mutual relations between people and events system that provide the fulfillment of them. They create structure that obliges people to mutual activity, they form daily life and decrease uncertainty. Schematic description of mutual relations among society, institutes and economy has been given below.



*Figure 1: Schematic description of mutual relations among society, institutes and economy*

Institutes are classified as formal (for instance, The US Constitution) and informal (for instance, Soviet «telephone law»). When informal institutions are mentioned, generally accepted conditionality and ethical rules of human behaviour are understood. These are customs, «laws», habits or normative rules that are the result of people's dense co-existence. Thanks to them people easily learn what the people around them want and understand one another better. Culture forms these behaviour codex. When formal institutions are mentioned, the rules created and supported by people who were especially appointed to this (state officers) are understood. As the society develops, changes in both formal and informal rules and in method and efficiency of obligation to carry out rules and limitations are possible. Changes in formal rules (or in mechanisms that provide their apply) usually require resource costs that are important enough. Economic subjects can direct their talent and knowledge to the search for reasonable opportunities by means of establishment of both main and intermediate organizations, and this can function in economic and political areas. The main thing is their providing required changes in formal rules. Economic changes can happen fast enough (as in revolution or achievement periods). And informal rules happen gradually. The pace of changes is completely different here, culture, coincidence and natural choice play the key role. Emergence of institutes as a consequence of clash of new and old, formal and informal rules has different possible variants. In institutionalist changes organizations play an important role. Organizations are groups of people that get together for achieving a goal, in the broad sense. Organizations and their leaders form the direction of institutional changes to maximalize the income. Changes have two main strategies: one is conducted in the frame of existing limitation, and the other requires the change in the limitations themselves. Reasonable rules are certainly the ones that isolate unsuccessful actions and support the successful ones, they cause the very economic growth. Here naturally comes the question: why are unreasonable forms kept? Which factors provide the existence of economies with continuous low parameters of activity? What is the reason behind the isolation of new economy forms? How much is the role of trajectory of previous progress? Do unreasonable technologies and thrift forms find enough followers only with occasional events? As institutional system creates both productive and non-productive stimuli for organizations in any economy, national economy reflects the combination of several development tendencies. If counter connection is incomplete, transaction costs are big, then the direction of the improvement will be formed with the subjective models of players. Different institutional limitations and distinct institutional tricks are defined here. Douglass North, American economist (1920) sets forth all these questions in his work «Institutions, Institutional Change

and Economic Performance». Thus while analyzing scientific justifications of upgrading of the strategy related with institutionalism, there appears such a conclusion that institutes act as events system providing mutual relations between people and also their fulfillment. They establish structure that lead people to mutual activity, and reduce uncertainty constituting daily life.

## **6. CONCLUSION**

In the period of the development of economic theory its subject was determined for many times. As its subject, Mercantilists considered activity that was related with foreign trade and money flow to the country. Classical political economists viewed it as a science about wealth. Members of historical school defined it as a science about the people's daily activities. Marxists have concluded in such a result that political economic studies laws that run production, distribution, exchange and consumption of life welfare and economic methods of this development in different stages of human society's improvement by investigating social reproduction, dialectics of production forces and production relations. Marginalists and neoclassic economists related this activity with the use of unique (limited) resources in market economy atmosphere. Keynesians added the importance of studying and formation of the state's economic policy to this, institutionalists paid attention to social aspects of this policy. However, economic theory enables us to reveal historical characteristics of systems, to understand development methods of world civilization.

## **LITERATURE:**

1. R. M. Nureyev. The Subject of Political Economy and the Main Features of its Method. M. MGY press.1986. 121 pages.
2. T. Y. Matveeva, I. N. Nikulina. Basics of Economic Theory. M. Дрофа press. 2013. 243 pages.
3. V. S. Avtonomov. Economic Theory: the Man in the Mirror. M. Hayka press. 1993. 80 pages.

# KEY FEATURES OF THE LEGAL REGULATION OF SUSTAINABLE DEVELOPMENT IN AZERBAIJAN

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## ABSTRACT

*The creation of the law to sustainable development and the beginning of development has already begun with the idea of the rule of law, which emerged on the philosophical and conceptual basis of Europe in the political and legal thought of a new civilizational model. The idea of the rule of law was one of the most important principles of the organization of state power, spreading along with the political ideas of democracy, and an extremely useful factor in the development of forms of social integration in the interactions of countries and peoples, as well as an important legal form of regionalization and globalization processes. The globalization of the rule of law, that is, recognition at the international level, is important for the triumph of new international legal principles arising from the principles and objectives of the strategy and policy of sustainable development. Given the global scale of the transition to a new civilizational paradigm, the norms adopted by the United Nations should be given priority over the UN. However, this does not mean that, firstly, it is necessary to develop international aspects of sustainable development law and to adopt regulatory legal acts at different levels. These processes of development of the right to continuous development should simultaneously feed each other with their ideas. It is necessary to form a common position of stakeholders on the fundamental concepts and principles of the right to sustainable development, which will be formed at the present stage of globalization and, at least, at the national level for the adoption of legislative acts.*

**Keywords:** *Sustainable Development, Legal Regulations, Republic of Azerbaijan*

## 1. INTRODUCTION

Sustainable development consists of a number of components. At least, this is social sustainable development, demographic sustainable development, economic sustainable development, ecological sustainable development. All these constituent parts of the united community development exactly then become sustainable development types that, they are exposed to certain restrictions and all of them form a single sustainable system that, such a system is characterized mainly by economic efficiency, striking with environmental hazard and instability which it differs from the same economic growth. Nevertheless, let's not only focus on economic security but also other forms and types of safe development, certain limits and safety norms can be observed in this or that relationship. This applies to all types of economic development, social, information, technological and other types of development as well as their security. If the development of the system occurs within the relevant "normative security corridor", in other words, if it is influenced by one or another of the anthropogenic activity this can be considered as a sustainable.

## 2. ANALYSIS OF NATIONAL LEGISLATION

In this meaning, although environmental safety does not differ from other types of security, the concept of sustainable development that is important for the first time is just a reference to the

ecology. Until the understanding of the concept of "development and the environment" was also studied, along with environmental safety, other types of security, but at the sustainable development concept, the ecological awareness of socio-economic development, it was created as a result of studying its relationship with the environmental problems. From this point of view, for the sake of the development of the Republic of Azerbaijan as an independent, sovereign, democratic state with National Security Law aimed at establishing legal basis for national security policy National interests of the Republic of Azerbaijan and threats were identified (National Security Concept of the Republic of Azerbaijan, Baku, 23.05.2007.pp 5). National interests of the Republic of Azerbaijan - Is a set of political, economic, social and other needs that provide the development and progress of the people, the fundamental values and goals of the people, as well as the human, society and the state. Amongst many areas of activity national interests in political, economic, social, military and environmental spheres have been identified. By law on national security It is understood that the main national interests of the Republic of Azerbaijan in the field of ecology - the creation of safe ecological and technological conditions for the survival of society - are met with sympathy (Decree of the President of the Republic of Azerbaijan on May 23,2007 on Approving National Security, Baku, 2007. Pp 5). It comes from the importance of the state to the area mentioned. Is determined by law, Threats to the national security of the Republic of Azerbaijan are factors impeding the implementation of the national interests of the Republic of Azerbaijan or situation, processes and factors that threaten them. Depending on the possibility of threats to the national security of the Republic of Azerbaijan, the potential and real, consist of external and internal threats, depending on the sources. The main threats to national security have been identified in all areas. The main threats in the field of ecology are:

- violation of ecological balance and sharp deterioration of the ecological situation;
- application of ecologically hazardous technologies on scales that create danger, the possibility of exposure of economic facilities to natural disasters, technogenic emergencies and provocations, epidemic and epizootic dissemination;
- hazardous pollution of water sources, atmospheric and marine environment;
- low level of environmental culture.

According to Article 10.1 of the Law, National security forces and state agencies of the Republic of Azerbaijan - are state-created bodies operating within the legislation and capable of ensuring the national security of the Republic of Azerbaijan (Law of the Republic of Azerbaijan on National Security, Baku: 29.06.2004. pp.3-4). One of such institutions is in the law of the state agencies that ensure the protection of the environment and health of the population. It is determined that, The forces and authorities of the national security of the Republic of Azerbaijan in within their authority:

- plan and implement activities related to national security of the Republic of Azerbaijan;
- they make suggestions on improving the national security system of the Republic of Azerbaijan;
- they ensure observance of laws and other normative-legal acts in the field of national security of the Republic of Azerbaijan;
- they take appropriate measures to prevent activity that threatens the national security of the Republic of Azerbaijan and that can damage the national interests.

The law defines the concept of ensuring the national security of the Republic of Azerbaijan in the field of environmental protection as the protection of the environment from the harm caused by its harmful effects. At the same time, the main measures taken to ensure the national security in the environmental sphere are also stipulated by law in the following sequence:

- development and application of conceptual bases of environmental safety policy;

- obtaining information on the intentions and measures of foreign states and organizations that contravene international agreements prohibiting foreign security threats to the national security of the Republic of Azerbaijan in the field of environmental protection, the prohibition of military or other hostile use of the means of the environment;
- with radioactive, bacteriological and chemical substances prevention of activities directed to the environment to harm the population and economy of the country
- detection and prevention of criminal offenses that constitute intentional attacks on highly environmentally-friendly sites
- to enhance the efficient use of natural resources and the protection of the environment through the application of modern technologies
- implementation of complex measures against the creation and exploitation of infrastructure for the production and transportation of energy resources and the possibility of exposure to natural disasters, emergencies, and provocations
- taking measures to reduce the harmful effects of human activity on the nature, timely awareness of the dangers of citizens' health and elimination of these threats
- to educate people about ecology;
- timely prediction of natural disasters, preventive and preventive measures;
- combating environmental crime.

Apparently, the order of the law is broad enough and it is the basis of the legal basis for sustainable development. As with any legal framework, these components are constantly being updated and adapted to changing social relationships as an important precondition. Noteworthy is that, There are In the first sentence of the Presidential Decree of 23 May 2007 on the adoption of the National Security Concept of the Republic of Azerbaijan as one of the crucial factors underlying this decree, terrorism and ethnic separatism in the face of the threats faced by individual states and humanity in the face of rapid changes in the world and threats such as conflicts, transnational organized crime, the spread of weapons of mass destruction and depletion of natural resources and environmental pollution (National Security Concept of the Republic of Azerbaijan, Baku, 23.05.2007. pp.6-7) It is particularly noted that the historical, cultural and archeological monuments belonging to the Azerbaijanis in the occupied territories of Azerbaijan were massively destroyed, natural resources were plundered, and the environment was seriously damaged. In this important normative act, one of the main challenges of ensuring national security is the use of natural resources, sustainable economic development, environmental protection, as one of the main threats to national security. Based on extensive scientific analysis and actual materials, it is shown that environmental problems in the Republic of Azerbaijan are related to the oil production that has been carried out for decades in unseen methods, with no regard to environmental consequences in the Absheron Peninsula and the Caspian Sea, in order to meet the Soviet Union's energy needs. In addition, the mass destruction of flora and fauna in the occupied territories of the Republic of Azerbaijan, including large-scale fires in these territories, is one of the biggest environmental problems for the country. It is established that the large amount of fresh water resources of the Republic of Azerbaijan formed in neighboring countries and exposed to intensive pollution by chemical, radioactive and other harmful substances in these countries creates problems in providing drinking water to the population. Additionally, the technically outdated Metsamor Nuclear Power Plant in the seismic zone in Armenia is a threat to the region as a whole. Pollution of the environment, degradation of fertile lands, non-natural resource use, non-processing of industrial and domestic wastes at the required level is a serious problem source. Ecological problems have a negative impact on economic and social life, create serious obstacles to public health, the material wealth of society and the activities of relevant government agencies. Ecological problems have a negative impact on economic and social life, create serious obstacles to public



health, the material wealth of society and the activities of relevant government agencies. The National Security Concept notes that the Republic of Azerbaijan is seriously concerned with environmental problems and is therefore aware of the dangers, risks and threats that may or may have caused it. Ready to be prepared for and prevent natural and man-made disasters and crisis situations is one of the key issues for the state. The Concept emphasizes that under the leadership of the national leader of the people of Azerbaijan Heydar Aliyev, the Republic of Azerbaijan is becoming a modern, dynamic country of development, from the economic, political and other perspectives, which are successfully developing and strengthening their positions in the region and in the world by defining the right path of strategic development. Thus, Azerbaijan is a crucial and important country for regional cooperation in the Caspian-Caucasus region, in particular, plays an indispensable role in the implementation of energy and transport projects. The main purpose of this general strategy is to contribute to the prosperity, sustainable development and prosperity of the Republic of Azerbaijan, as well as to ensuring security and stability in the region. One of the most important documents of the modern democratic state is a document that defines the bases of the rights and freedoms of the state, its territorial integrity and independence, the material and moral values of society, the rights and freedoms of individuals and citizens, linking with the welfare of the population constitutes the essence of the concept, its philosophy. President Ilham Aliyev signed a decree to draft the "Azerbaijan 2020: Vision of the Future" Development Concept to preserve and further develop its historical achievements and respond to global and regional challenges and strengthen our country's position in the world (Decree of the President of the Republic of Azerbaijan of December 29, 2012 on "Azerbaijan 2020: Look into the future" development concept, Baku: 2012). The document envisages increasing the competitiveness of the Azerbaijani economy by 2020, improving transport, transit and logistics infrastructure, balanced regional development, transition to information society, human capital development, effective social protection system, continuation of institutional reforms and cultural heritage and environmental protection. The concept presented differs slightly from similar documents prepared in international practice, depending on the nature and scope of coverage. As a rule, long-term strategic documents prepared in international practice have more socio-economic objectives. The present document contains the vast majority of issues facing our society. The strategic task of the Azerbaijani state is to create and develop a knowledge-based economy. But the development will not be one-sided, but will also include economic, social and environmental issues. This will increase the gross domestic product per capita by more than two times during the period covered by the concept and will increase to \$ 13,000. The Azerbaijani state is also interested in improving the welfare of the population, as well as in the development of human capital and the strengthening of the middle class. This will require the introduction of a new level of quality and quantity of education and health care services, the broader use of youth potential, employment growth and gender balance. The Conceptual Framework notes that strengthening the institutional capacity in terms of achieving the targets will include three main areas: human resources development in the public sector, strengthening e-government activities and continuation of institutional reforms. The Azerbaijani state will further create favorable conditions for the sustainable development of civil society. The legal basis of sustainable development has also not been overlooked by the Concept. In the section entitled "Improving the Legislation and Strengthening the Institutional Capacity" of this important document, concrete tasks have been identified to improve the regulatory framework for sustainable development and to strengthen the institutional capacity during the implementation period. According to the concept, improvement of the legislation will be based on the principle of effective state regulation that will ensure healthy competition in the conditions of the market economy, improving the business environment, prioritizing the national legal framework with the requirements of the international trade system, and the enforcement discipline and control

system will be strengthened to ensure rule of law. Legislation will be improved, effective measures will be taken against infringement of intellectual property, including piracy and counterfeiting. The functioning of law enforcement agencies to meet modern requirements, transparency and transparency in their activities will be ensured. The judicial infrastructure will be improved, electronic services will be institutionalized and access to justice will be increased. Increasing the legal knowledge of citizens (and especially those living in the regions) will always be in the spotlight. Strengthening institutional capacity in terms of reaching the targets set out in the Concept will include three main areas: human resources development in the public sector, the expansion of "electronic government" activities and the continuation of institutional reforms. Measures will be taken to strengthen the social protection and social security system of civil servants, expand the anti-corruption measures, strengthen the capacity of municipalities and prepare qualified personnel for municipal governance, and support activities of non-governmental organizations, especially in the regions. Particular attention is paid to the sharing, rational and cost-effective use of public resources among state services. Equality as an important part of the democratic and transparent governance, in line with the principles of impartiality and openness, will increase citizens' access to information which released by state and some services in the public sector will be transmitted to specialized private sector enterprises. According to the conception, complex proceedings will be continued to improve governance methods and mechanisms in public bodies, also, providing easy, simple and free utilization of services by citizens and organizations, the number of government services which provided by electron channels will be increased. The necessary proceedings will be continued according to protection of market from hazardous products, eliminating technical barriers to trade and harmonize, improve and developing standardized system which have a great place at the developing of entrepreneurship. Based on international experience, it is envisaged that each state agency and institution should develop and implement a strategic plan in order to identify priorities for the development of public institutions and enterprises, to harmonize these objectives with the relevant state programs and to effectively implement them. One of the main goals of concept is to achieve the ecologically sustainable socio-economic development. Necessary measures will continue in future in the direction of biodiversity conservation, neutralization of the negative impact of the fuel and energy complex on the environment, elimination and protection of the marine and its aquifer pollution, the restoration of green areas and the effective protection of existing resources. During conception period, practical steps will be taken to the direction for improve protection of environment legislation with accordance of the advanced international practice, creating effectively monitoring and controlling mechanism. At the same time, Measures will be taken to support scientific research activities in the field of ecology and nature protection, and necessary infrastructure will be created. Particular attention will be paid to the expansion of international cooperation in the field of environmental protection and informing the public in order to promote the environment protection culture. The above-mentioned law and conceptual analysis suggests that the development and security, and the emergence of a "security-development" system in the future leads to the development of security - the most reliable means of ensuring security. If we clarify the expression, we can understand that conversation has gone from steady development. We must noted that the such research firstly was developed in 1995. In the period of the transition to sustainable development, more security environment of human and whole sivilization means that, a significant part of the function of security can be achieved not by defending, but by the way of providing a better standard of living for the present and future of human. In other word, may be imply that with sustainable development we can decrease the amount, scale and intensity of the negative and harmful effects. In this case, the defense mechanism for safeguarding is not more relevant and becomes an additional tool for ensuring security and its regulatory and regulatory systems through sustainable development.

For the first time, such a normative-legal understanding of the role of sustainable development took place with the adoption of the above-mentioned National Security Concept. The accepting of this conception is very important event in the direction of the providing national security and also combining public and government efforts for long – term perspectives and social – economical development. Based on the national security concept, there is a fundamental methodological provision for the continuous development of the state (and society) as well as the relationships between national security and interdependence. This interconnection and dependency was largely continued in the "Azerbaijan 2020: Look into the Future" Development Concept. Counterwise of the National Security Conception, which approved in 2007 and defined legal status of object and subject with giving national security concept, the "Azerbaijan 2020: Look into the Future" Development Concept, which approved 5 years later, was the product of the new approach of sustainable development problem. (Decree of the President of the Republic of Azerbaijan of December 29, 2012 on "Azerbaijan 2020: Look into the future" development concept, Baku: 2012). The basis of such approach was laid in National security conception, more accurate, with the president decree for approving of it. With this decree, the Working Group on the national security policy of the Republic of Azerbaijan was instructed to prepare the draft military concept of the Republic of Azerbaijan, the foreign policy strategy of the Republic of Azerbaijan, defense review, economic concept, culture, science, education, healthcare, transportation concepts, to the President of the Republic of Azerbaijan for approval. Apparently, each of the above-mentioned projects are very fundamental documents and was calculated for ten years future. After creating such a fundamental base, it would be possible to think about the preparation of the "Azerbaijan 2020: Look into the Future" Development Concept. This document sets out a new approach to sustainable development issues, and implies that all subsequent development of the country is primarily of national security. Conceptual-theoretical basics of sustainable development in the country have been developed in terms of security and national security while adopting the "Azerbaijan 2020: Look into the Future" Development Concept. This position can be concretely called get national security with sustainable development. The "Azerbaijan 2020: Look into the Future" Development Concept will lead to the formation of other national security strategies, the emergence of a new perspective on the concept and national programs currently being implemented, as well as the progress of the "global sustainable development" through the country's public safety net. In recent years, the intercultural dialogue and other relevant forums in Baku have repeatedly featured this idea in most different forms and brought together a number of persistent followers. It should be taking account that the concept of sustainable development expressed in the above-mentioned UN documents has not yet become a universal concept. Preparation of such a document can only be achieved by adopting relevant concepts and other relevant acts in different areas of activity in different countries. The conception of universal sustainable development should be the logical outcome of the development of human civilization do far. Therefore, the sustainable development of a separate state can only be regarded as an integral part of the continuous development of all humanity. Nevertheless, the transition to sustainable development is not only a matter of universalism, but also the task of a concrete state and the independent state of Azerbaijan. The objective of the development of a qualitatively new economic development strategy, covering a long period of success of the Azerbaijani state, which has mainstreaming economic development, economic security, successes achieved in socio-economic development over the past decade, created economic, social, scientific and technical and financial potential the new strategic targets were defined by the Decree "On Approval of Strategic Roadmap for National Economy and Major Sectors of Economy", (Decree of the President of the Republic of Azerbaijan dated December 6, 2016 "On Approval of Strategic Road Maps on Major Sectors of Economy and National Economy", Baku: 2012) signed by President Ilham Aliyev in December 2016 as a necessity.

Generally, the preparation of the Strategic Roadmap, in turn, requires a substantial modernization of the systematic and comprehensive analysis of the current state of socio-economic development of our country, its valuation and implementation mechanisms. New priority trends once again confirm that the Strategic Roadmap exposes a new approach to the development of the economy and identifies strategic targets that will enable the economy to diversify and eliminate oil dependence. The Strategic Roadmap will incorporate the national economic perspective as well as identify the strategy for each of the leading sectors. Therefore, this document is a fundamental development program that covers a long period of time and should be regarded as the concept of transition from the practical point of view to the sustainable development model in recent years. The development and adoption of the economic development strategy is a prerequisite and necessary prerequisite for the sustainable development of the national economy. Finally, the roadmap for their improvement will be reflected in the fact that the success of the measures to be implemented is largely dependent on the degree of investment, innovation, and the degree of improvement of the entrepreneurial environment in the country. One of the most important conditions for timely and quality implementation of all measures envisaged in the Strategic Roadmap is largely dependent on the fact that the regulatory system of socio-economic processes in the country is adequate and flexible to the existing reality and changing environment. Taking this into account, the Strategic Roadmap has identified specific areas for improving the overall management and regulation of the national economy and its key sectors. It is not important that the legal expression of sustainable development should only be realized through environmental norms. This type of development can also be expressed by other norms and limitations learned in the security norms, the system of its development and security, previously relative independent human activity. The idea of ensuring security in our country through development (in particular, through sustainable development) requires a new stage of legislative activity. This may even indicate itself in the development and adoption of the new Security Code. This code should reflect basic concepts that are essential for the application of both the application and security of all aspects of science. Putting the issue in question would give rise to talking about the creation of a security law. It would also be a valuable contribution to international stability and security.

### **3. CONCLUSION**

Today, the two main functions of the state are clear to all. The conversation is about ensuring security and socio-economic development. This is presented in the Constitution of the Republic of Azerbaijan as a supreme goal of the state: The highest goal of the state is to ensure the human and civil rights and freedoms, and the decent living standards for the citizens of the Republic of Azerbaijan ( The Constitution of the Republic of Azerbaijan, Baku, 2018. pp.4) If it envisages security of rights and freedoms, it means sustainable development for citizens to ensure decent living standards. Taking into account the intensity of mutual relations between security issues and sustainable development, the adoption of a relevant law or code that would reflect that relationship would not be bad at all. If we did not lose the sense of reality until the end, it would be naive to expect such an event in the near future. First of all, public opinion should develop (must be in demand for the adoption of the law and the state should begin procedures for the adoption of the law), sustainable development problems should be well understood by the public and coordinated with the provision of security.

### **LITERATURE:**

1. Decree of the President of the Republic of Azerbaijan dated December 6, 2016 “On Approval of Strategic Road Maps on Major Sectors of Economy and National Economy”, Baku: 2012.

2. Decree of the President of the Republic of Azerbaijan on May 23,2007 on Approving National Security, Baku, 2007.
3. Decree of the President of the Republic of Azerbaijan of December 29, 2012 on "Azerbaijan 2020: Look into the future" development concept, Baku: 2012.
4. Law of the Republic of Azerbaijan on National Security, Baku: 29.06.2004.
5. National Security Concept of the Republic of Azerbaijan, Baku, 23.05.2007.
6. The Constitution of the Republic of Azerbaijan, Baku, 2018.

## THE PROBLEMS OF MAXIMIZING HUMAN POTENTIAL AND ATTRACTING TALENT IN THE CIVIL SERVICE

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### ABSTRACT

*The article presents a theoretical interpretation of reforms in the model of public administration, increasing the potential of people as a result of changes in the economic system and attracting talents to civil service. Defined the objectives of regulating the activities of people in the modern model of public administration and the modern concept of human resources management in the civil service. Revealed the significance and legal foundations of additional education and training, as well as the requirements for education to increase the potential of people in the civil service system. Defined the requirements of the administrative management apparatus, the role of the human factor in evaluating the implementation of solutions, and the existing problems in attracting talents. It emphasizes different approaches to the selection criteria for talents, different approaches to the selection of talents, measures to identify and expand competencies and gain international experience. The article, using the methods of observation, analysis and comparison, identifies (describes) the difficulties associated with the use of talents in the civil service system, as well as the problems that in practice are faced by the leaders of talented staff. The results of the recruitment to the civil service system of Azerbaijan were analyzed by age groups and classifications, and was identified the need for special measures to attract talent. The article includes findings and practical recommendations, made during the study.*

**Keywords:** *education, professional, talent, public service system, employment of civil servants, criteria*

### 1. INTRODUCTION

In recent decades, the world economic system has taken on a new look due to virtual, intangible factors, i.e. the rapid development of information technology and globalization processes. The object of the new economic system is more information, investment, technology, labor, intellectual and financial resources, management systems, political and, in some cases, even religious processes. This makes it necessary to re-evaluate scientific theories and approaches, to make changes that cover all areas, from economic organization to management. In the period of reforms in Azerbaijan, while transitioning to new management methods and adapting to

changing conditions it is important to maintain and develop such elements as, professionalism in the civil service, legal competence, organization and discipline, sustainability and reliability, care for citizens and attention to their needs, legitimacy, efficiency, programmatic approach to civil service problems. Based on the experience of management models of developed countries, a new democratic system of government is being formed in our country. The reforms lead to the formation of more demanded elements in the existing public administration and civil service, especially the civil service as an institution, i.e. education, ethical behavior, job classifications, and qualifications of civil servants. Indeed, the purpose of the reforms is to increase the efficiency of public administration and strengthen statehood, taking into account national, historical, cultural and other features in the interests of the development of civil society. Today, global competition is based on the attraction and use of talent, and this process is becoming increasingly global. In many countries (Singapore, South Korea, etc.) talented employees raised the public service (and not only) to a high level in which relations between the population and government bodies are based on mutual trust. Therefore, the demand for talent is growing every year [Asylbekova L.U., Belesova N.A. (2015)]. Although the issue of attracting and retaining talent in business structures is widely discussed in the works of employees of large companies and scientists, the role and behavioral processes of talent in the civil service are poorly analyzed. Information in this area can be found in the works of Harris and Foster, Kock and Burke, Macfarlane, Nankervis, Poocharoen and Lee, Barber and Levy, Buttiens and Hondegehem [Klimova A.V. (2016)]. Based on vast scientific research on the attraction of talent, criteria for selecting talents for civil service proposed by Asylbekova L.U. and Belesova N.A. are of interest. Thus, according to their proposal, these criteria should be physical intelligence, logical intelligence, behavioral intelligence, emotional intelligence, efficiency, and performance [Asylbekova L.U., Belesova N.A. (2015)]. Research shows that the approach to identifying and using talent is ambiguous. According to the inclusive approach, everyone is talented and the talent just needs to be revealed. Although such an approach has been put forward by Gallardo Gallardo E., Dries N., González-Cruz T.F. [Gallardo-Gallardo E., Dries N., González-Cruz T.F. (2013)] and others, in practice different countries (USA, Singapore, etc.) have an exclusive approach, i.e. "talent is observed in a small number of people because it is a rare gift" and such approach is widely found in the works of Lewis R.E., Heckman R.J. [Lewis R.E., Heckman R.J. (2006)]; Becker B.E., Huselid M.A., Beatty R.W. [Becker B.E., Huselid M.A., Beatty R.W. (2009)]; Collings D., Mellahi K. [Collings D., Mellahi K. (2009)]; Whelan E. [Whelan E., Carcary M. (2011)], Thunnissen M., Boselie P., Fruytier B. [Thunnissen M., Boselie P., Fruytier B. (2013)]. Optimizing the number of public authorities and civil servants (increasing or decreasing depending on the functions performed by the state) and purposeful regulation based on account management norms and principles, achieving stability of middle and junior staff, staff renewal based on the principle of transfer of work experience, positive case studies and tradition, the priority in problem-solving given to creativity and innovation should create the basis for the effective, reliable and professional functioning of the civil service system. In this article, we will focus on these issues.

## **2. MAXIMIZING THE EMPLOYEE POTENTIAL IN THE CIVIL SERVICE SYSTEM**

The leading force of the new management systems, mainly based on increasing productivity, is highly qualified personnel who are the bearers of innovation potential. It should be noted that in the context of globalization of capital and major production networks, most of the world's workforce is local and out of the process. This, in turn, requires the formation of new theoretical approaches in the field of management. The differences between post-industrial economic development and industrial are mainly characterized by the mission and position of the state and the form of activity in the economy. While the task of the state in industrial economic development was to determine the direction of institutional change while maintaining the

supremacy of decisions on market liberalization, in post-industrial economic development these tasks are replaced by not interfering with market priorities, instead, trying to optimize the economic environment, and act as the state's equal partner. In this case, the form of activity in the economy shifts from vertical-horizontal relations to horizontal-network relations. Thus, the new economic system formed in the world today must be able to cope with a number of tasks. Therefore, "Knowledge, skills, abilities and attitudes of future leaders are essential to the development of public policies. Their implementation and the development of administration must be in line with contemporary problems. Training and professionalism of future leaders is at the heart of our reflection... There is no single model for the future leaders because each country has its own values which guide the public sector, and the management systems are different from one country to another" [Rolet Loretan. (2013), p.30]. Having developed the basic principles that can be used in all countries, the representatives of the "classical theory" of public administration F. Taylor, H. Emerson, G. Ford suggested that the mechanisms used in the field of scientific management (especially with the application of operational management) or factor theory in the organization of business management are taken into account in public administration. They approached management as a mechanism that emerged as a result of a combination of several factors, noting the possibility of achieving certain goals with maximum efficiency with minimal resource costs. [Vasilenko I.A. (2001), p.13] In the "classical theory" of administrative public administration, the system implies a hierarchical structure of the linear-functional type, whose tasks and functions are regulated from top to bottom. This model is effective in solving repetitive management issues during a stable social situation. However, this model is no longer considered effective when management decisions are influenced by the human factor, and in many cases, the increasing role of the human factor indicates the need for a new approach. In particular, the study of the impact of various psychological factors on the productivity of service activities, the impact of the behavior of individuals or groups on administrative state decisions were carried out by representatives of the "school of human relations" or neoclassical theory. The disadvantage of this theory is that its use in a narrow field of public administration, especially in personnel management, especially in the regulation of interpersonal relations, is more effective, and its role in operational and strategic public administration is weak. The analysis shows that the current approach to human resource development (HRD) and vocational education and training (VET) is based on a number of factors:

- along with demographic changes, the speed of technological innovation in products and processes increases the importance of training for people to adapt and study the production process; - the traditional education system is being renewed;
- implementation of lifelong learning policy, Personal Skills Card and European Skills Accreditation System, emphasizing the importance of non-formal and non-formal education (especially in Europe), which indicates the level of special competencies. In many EU countries, the education and training system has begun to test "informal" skills;
- the application of the "Social Europe" model, ie the analysis of the results obtained regardless of the method, to pay less attention to the time spent in educational institutions. Development of "career ladders" for those who have fewer opportunities for systematic education and training, but have developed competencies based on their own experience;
- The European Employment Strategy is to continuously develop the skills and qualities of the workforce, to ensure the mobility of labor resources by forming general control over occupational skills [Josh Bersin (2011)].

The strategic nature of the civil service system requires the adaptation of the number, functions, and number of civil servants to modern requirements and conditions. Necessary measures are being taken towards the improvement in the structure and technology of civil service



management, gradual progress from quantitative to qualitative indicators, the definition of the functions and powers of public bodies in accordance with international best practices, the gradual transfer of a number of civil service functions to smaller scale but of more strategically important nature. To do this, it is important to consider the following:

- It is necessary to improve the existing methods of the management of the personnel who meet the ethical behavior and performance requirements of the bodies they work with and are considered as the main source in the implementation of the goals and objectives of government agencies. Therefore, the new methods of personnel management should help to increase the capacity of personnel and the formation of talents in accordance with the requirements of the state body.
- The personnel management system reflecting both vertical and horizontal functional interactions of senior and executive civil servants in the preparation, adoption, and implementation of decisions of the state body should be improved. Mid-level managers should encourage executives to participate in decision-making. Thus, the quality level of the results will increase and the moral and psychological climate in the group will improve. Motivation mechanisms and elements of the social security system are the main stimuli for improving the management system.
- There is a growing need for new personnel management technologies in the fields of career planning and career management, work organization and productivity, conflict and stress resolution, social and professional development, and security. Therefore, it is necessary to analyze the service activities, working conditions, and quality of life of civil servants. [Huseyn A.J., Aliyev R.K. (2015), p. 26].

The analysis shows that if we pay attention to the dynamics of civil servants in 2005-2018, against the background of a 1.13-fold increase in their total number in 2018, there is a further increase in the number of employees in higher-3 classification positions. Compared to 2005, this increase was 1.7 times. This indicates an increase in the need for workers in the higher echelons of government. The analysis of the age groups of employees in the higher-3 classification of the civil service shows that in 2005-2018, the number of people under 30 increased 1.7 times, those aged 30-34 increased 4 times and employees aged 35-44 increased 2.3 times. Among those aged 45-54, an increase of 0.7 times was observed. Thus, the increase appears to be in the 30-34 age group, which is considered the most productive age group. The modern concept of human resource management in the civil service, on the one hand, is reflected in practice in the proper selection, training and retraining of personnel and other measures, on the other hand, provides for the most effective use of human resources. At present, competitions, interviews, tests, certifications, human resources, etc. are held in the formation and optimal use of human resources in government agencies. procedures, technologies, and mechanisms are used. Personnel policy in the civil service must be flexible and meet the changing requirements of the world. On the other hand, the promotion of civil servants should depend on their educational specialties and professionalism. In modern conditions, the use of new forms and mechanisms of self-government and inspection of the activities of the relevant civil servant is considered relevant. The professionalism of a civil servant reflecting theoretical and practical knowledge, their application in the performance of duties, in-depth knowledge in the field of legislation and clerical work, attitude to official positions, ie civil servant's responsibility to perform orders, instructions, tasks, analyze, solve problems and the ability to make creative decisions, approach to work by applying their own initiative and creativity, impeccable performance, discipline, desire and ability to share experiences, participation in teamwork, mutual good communication are the main requirements of modern times. The problem of optimizing the human resources of government agencies requires a new approach to the training, retraining, and development of civil servants.

The formal approach to education in the civil service, regardless of specialization, career planning and career prospects, should be replaced by targeted training of personnel in accordance with the requirements of the public body for the strategic line of development. When improving curricula, teachers are primarily required to ensure that the content of work programs and subjects is in line with the existing needs and long-term expectations of the public administration system and public authorities. In this regard, interactive, innovative teaching methods are widely used in education in order to develop the necessary skills of civil servants. Experience-oriented knowledge, skills, and abilities are needed to analyze, plan and forecast the structure of public administration and its activities, to develop management decision-making technologies, and to evaluate the effectiveness of public administration. [Abdrasilov B.S. (2013), p. 45.] At present, training based on the use of interactive and innovative teaching methods is used in many countries, and the use of teaching methods based on the discussion and teaching of different business, case-studies and their solutions for students enable the improvements in decision-making, analysis, foresight, stress and conflict resolution, teamwork organization and assignment of roles, proper allocation of time and work, and other special skills and competencies. Observations also show that the obligation of each employee to upgrade their skills, i.e. to replace the statutory retraining procedure at least once every five years with short-term and regular training, can lead to higher quality results. This directly serves to increase professionalism not only through the study of specialties and competencies but also through various technological innovations. Thus, the optimization of human resources, the involvement, and retention of high-level specialists with modern management technologies is possible only as a result of the complex use of legal organizational, management, material and financial-economic, educational, control, moral and other mechanisms [Pitsik N.I. (2001)]. The Articles 19.0.4, 19.0.5, 19.0.13 of the Law of the Republic of Azerbaijan “On Civil Service” view being promoted or increase the amount of civil salary, to engage in scientific and creative activities at the expense of state funds, taking additional education and relevant training, as well as to take leave for educational purposes show as the rights of the civil servants. [1]. It is stated that every civil servant (including interns and persons admitted for a probationary period) who has a state document on continuing additional education and completing any stage of vocational education is provided the right for uninterrupted education. As guarantees, it is noted that additional education in the relevant field (Article 21.1.5.), And in general, the period of additional education is included in his length of service (Article 22-1.2.). Clause 7.2 of the “National Action Plan on Combating Corruption for 2012-2015” approved by the Decree of the President of the Republic of Azerbaijan No. 2421 dated September 5, 2012 envisages the establishment of a specialized Training Center under the Commission. The establishment of the Training Center is also included in the 3rd Institutional Reform Plan (IIP3) “On Strengthening Civil Service Training in Azerbaijan” under the Comprehensive Institutional Building Program between the Republic of Azerbaijan and the European Union. The project to implement IIP3 was launched on December 1, 2013. The development of the training center's internal procedures and training modules was carried out within the framework of projects implemented by Civil Service Commission under the President of Azerbaijan Republic (now State Examination Center), UNDP and GIZ. However, no decision has been made to establish a Training Center. This led to the incomplete implementation of paragraph 7.2 of the National Action Plan to Combat Corruption for 2012-2015 [3]. However, in accordance with the law, civil servants of a certain executive body of a particular type of civil service are regularly involved in vocational training and professional development in an educational and scientific institution (Articles 22-1.9). The right to be promoted in the civil service shall be exercised taking into account the successful and conscientious performance of their duties by civil servants, availability of a vacant position, as well as the results of additional education in accordance with the requirements of the vacant position (Article 32.2).

As can be seen, the role of education in capacity building has a special place in the legislation. However, the lack of legislation to identify, attract and retain talent in the civil service requires intensification of work in this direction. Within the framework of the “State Program on Education of Azerbaijani Youth Abroad in 2007-2015”, recruitment of persons who have studied abroad to the civil service is carried out of competition (Article 28.13.) [1]. Out of 102 young people who studied under the program and applied for employment in the civil service, 34 were appointed to civil service positions in various government agencies. [3]. This is due to the fact that talented young people with higher education are brought to the civil service. In reality, it is necessary to take into account that quite talented young people are educated in the country. Therefore, there is a need to change the approach to talent and improve the ways to involve them in public administration.

### 3. THE PROBLEMS IN ATTRACTING TALENT

In practice, maximizing capacity can also be challenging. In particular, employers do not pay enough attention to the rational use of the competition system, modern methods of evaluation, professional and personal qualities of employees. For many civil servants, the formal, lawful, assessment based on performance evaluation criteria is not enough to reveal their talents and develop their potential. Against the background of long-term structural changes in the executive branch, staff instability and "team" change, the failure to take into account the personal qualities, professionalism and skills of employees increases job uncertainty and reduces their interest in maximizing their potential. Yet, the quality of any function of a public body is possible only with the involvement of specialists with the necessary skills and motivation to achieve a positive result. In this regard, the protection and development of talents is the main goal in the application of all mechanisms of public service. It is necessary to find, select, develop and retain competent personnel in the public administration system [Basnak D. (2015)]. Research shows that talent selection technology is improving year by year, regardless of the system (public or private). These are the ones applied around the world:

- as a result of biographical questionnaires, interviews with experts and special tests (psychological, professional, logic) information on the knowledge and experience of a talented person is collected;
- a talented person demonstrates his / her skills and competencies to experts based on a short presentation (sometimes audio and video);
- demonstrates talent based on a business game (under the supervision of an observer, a group of employees or candidates play a working situation according to a pre-prepared scenario);
- individual case study (participant demonstrates competence by choosing a specific strategy and tactics in the proposed situation);
- recommendations based on the results of the expert's observation are taken into account.

Recruitment of talents to the civil service is possible by selecting from abroad (private partners, universities, through competition, etc.) and from internal resources (by cultivating through special programs, revealing talent). The research of the recent years found that recruiters today have shifted upwards of 30-40% of their sourcing to social media [Josh Bersin (2011)]. Another mechanism for attracting talent in Azerbaijan is the selection of volunteers. The experience of the ASAN Service Centers of the State Agency for Citizen Services and Social Innovations is interesting in this area. Assigning young people from among the volunteers to government agencies at various levels, giving them work experience in government agencies, collecting suggestions and ideas of talented young people gives positive results in the overall system of public administration. It has also served to increase citizens' confidence in the civil service. However, mechanisms for identifying high-potential employees, especially talents, should be improved in public bodies with a hierarchically functional structure. The analysis shows that in

the past, only a leader could determine whether a person was talented or not, but now (at the time of hiring) it can be done by others, such as an independent appraiser-expert [Shakhbazov A. (2018)]. The human resources management department (formerly the personnel department) is responsible for recruiting, developing and promoting employees, while the criteria and selection methods are defined by law, limiting the recruitment of talent and noting that they can only be recruited through competition. For this reason, there is a need to adopt special government programs to identify and attract talent. There is a hypothesis that the success of the talent management system depends on the presence of leaders who see the need for changes in the personnel management system and create the conditions for these changes. That is, it is directly related to the employer's ability to see talent. But let's take into account that the state can show successful results in revealing talents in the labor market. For example, in Singapore, which has good public administration, when the system of public personnel management was created from scratch, the staff was more closely linked to the strategic needs of the state than to the short-term interests of the public body. The purpose of the system is to select, develop and maintain the best to work in the public sector. Today, Singapore makes extensive use of modern talent selection, rotation and development programs. Kazakhstan's experience in this area is also commendable, as they make use of the SAP ERP HCM (human resource management) program. At present, software companies offer SAP Talent Management software to large companies to identify and develop talents [20]. The attraction of talents in Kazakhstan will be carried out through the "talent pool" [Akhmetjanov S. (2015)]. The effective use of the potential of talents will be ensured by their appointment to civil service positions, including management positions in accordance with their professional and personal qualities. This approach will allow the candidate's personal development to be linked to the organization's development goals. This will be possible through rotation or dispatch mechanisms [Berdibekova A., Maidirova A.B. (2018)]. The French Agency for Business (Business France), subordinated to the Ministry of EU and Foreign Affairs, the Ministry of Economy, Industry, and Employment and the Ministry of Territorial Development, was established on January 1, 2015, based on a merger of Ubifrans and AFI. The Agency is intended for non-EU citizens who are sent to France as heads of branches of enterprises, implementing the "Competence and Talents" program, which promotes the recruitment and recruitment of talents. It is a temporary residence permit that can be extended for three years and allows you to work or start a business in France [22]. At present, the "Yukselish" (translation: rising) program has been launched in Azerbaijan to identify talents and attract them to public administration, and preliminary selection work is underway in this direction. The struggle for talent must be waged not only by attracting them but also by ensuring that they remain in the system. The obstacle is related not only to the limited opportunities of employers in this regard, but also to the economic situation, the unique advantages in the market, not only human capital, but also the identification of administrative resources. When efficiency is not possible through technology and other factors, employers understand that people are the main, inexhaustible source of development [Litvina M. I. (2011)]. The main problem is that salaries (salaries and allowances) are clearly defined by law in many government agencies. As a result, government agencies whose financial resources are only related to the state budget and do not have a special fund to provide additional payments (bonuses) are unable to provide talent with adequate salaries, which results in the influx of talented staff to other jobs.

#### 4. RESULTS

In our opinion, talent managers face several issues that need to be addressed in the current context, including:

- to achieve the ability of mid-level managers to present themselves not only as leaders but also as consultants and teachers;

- to ensure not only the improvement of technology and strategy for success but also the increase of the team's competitive professionalism;
- Exploring the use of various programs that are considered an active way to attract talent, including branding programs, social networking, job fairs, online video interviews and direct sources (personnel record sheet or CV), new forms of recruitment of talented people to the civil service ( selection conditions, competence, and other criteria, etc.).

The main goals include three main mechanisms of human management: talent assessment, management, and career planning. These goals will strengthen not only the arrival of new staff in the civil service but also the introduction of new innovative ideas and the existing mechanism of "social elevator" [Ward Howell. (2001)]. Experience has shown that due to time constraints and savings, it is often preferable to attract talent from outside rather than cultivate it. In this case, involving them from outside is only one side of the problem. The key is to develop specific career plans that reflect their use as important tasks. The new work in this area in government agencies shows that there are still many measures to be taken. In particular, the methodology for assessing the performance of talents, determining the requirements for the curator when appointing a curator, the coordination of career development with the strategy of government agencies, etc. such issues need to be addressed.

#### **LITERATURE:**

1. Law of the Republic of Azerbaijan "On Public Service". <http://eqanun.az>
2. Statistical data of the State Statistics Committee of the Republic of Azerbaijan. <http://stat.gov.az>
3. Report for the 2015th year of the Commission on Public Service under the President of the Republic of Azerbaijan. <http://csc.gov.az> (for January 2017)
4. Becker B.E., Huselid M.A., Beatty R.W. (2009) The differentiated workforce: Transforming talent into strategic Impact / Hardcover. 2009.
5. Collings D., Mellahi K. (2009) Strategic talent management: A review and research agenda//Human Resource Management Review. 2009. № 19: 4. P. 304–313.
6. Francoise Delamare Le Deist, Jonathan Winterton. (2005) What is competency? Human Resource Development International, Vol. 8, No. 1, 27 – 46, March 2005 Toulouse Business School, France. See What are competencies? <http://hrportal.ru/blog/chto-takoe-kompetencii>
7. Gallardo-Gallardo E., Dries N., González-Cruz T.F. (2013) What is the meaning of 'talent' in the world of work? // Human Resource Management Review. № 12/2013. P. 290– 300.
8. Josh Bersin. (2011) Talent Management Revisited: Where are we now? // Bersin & Associates. Electronic resource: <http://joshbersin.com/2011/01/24/talent-managemen-trevisited-where-are-we-now/>
9. Lewis R.E., Heckman R.J. (2006) Talent management: A critical review// Human Resource Management Review. 2006. № 16. P. 139–154.
10. Rolet Loretan. (2013) International Institute of Administrative Sciences: A worldwide platform for administration. Regional Hub of civil service's e-journal/ Modernisation of civil service: increasing the efficiency for sustainable development/ #1 oct.2013, p.30,32. Website: regionalhub.org
11. Thunnissen M., Boselie P., Fruytier B. (2013) Talent management and the relevance of context: Towards a pluralistic approach // Human Resource Management Review. V. 23. Issue 4. December 2013. P. 326–336.

12. Ward Howell. (2001) Talent Equity Institute. //Career Patterns Guide. Callum. International Records Management Trust, May 2001. Electronic resource - Access mode: Talent management: business and state experience.  
[http://www.opm.gov/hcaaf\\_resource\\_center/careerPatterns/index.asp](http://www.opm.gov/hcaaf_resource_center/careerPatterns/index.asp)
13. Whelan E., Carcary M. (2011) Integrating talent and knowledge management: where are the benefits? // Journal of Knowledge Management. 2011. № 15(4). P. 675–687.
14. Abdrasilov B.S. (2013) Professional development of Kazakhstan public service personnel. Regional Hub of civil service's e-journal/ Modernization of civil service: increasing the efficiency for sustainable development/ #1 oct.2013, p.45, Website: regionalhub.org
15. Asylbekova L.U., Belesova N.A. (2015) Talent management: criteria for selecting talent in the public service. p.2 Information resource <http://esaconference.ru/wp-content/uploads/files/pdf/Belesova-Nursulu-Abdigapparovna.pdf>
16. Akhmetjanov S. (2015) A talent pool will be created in Kazakhstan. Information resource <http://www.zakon.kz/4696830-v-kazahstane-budet-sozdan-pultalantov.html>. March 15, 2015 .
17. Basnak D. (2015) Purpose - attraction and development of talents // Public Service, 2015, № 1 (93)
18. Berdibekova A., Maidirova A.B. (2018) Talent management in state bodiesx. Information resource: <http://izron.ru/articles/aktualnye-problemy-menedzhmenta-i-ekonomiki-v-rossii-i-za-rubezhom-sbornik-nauchnykh-trudov-poitoga/sektsiya-8-innovatsionnye-podkhody-v-sovremennom-menedzhmente/upravlenietalantami-v-gosudarstvennykh-organakh/>
19. Vasilenko I.A. (2001) Administrative and Public Administration in Western Countries: USA, UK, France, Germany: Textbook. Ed. 2nd, rev. and add. - M: Logos Publishing Corporation, 2001, 200 p.
20. Vostrotin K. Human, his potential, talent - as a tool for the development of the company and the state in the era of Human Age. Information resource <http://expertonline.kz/a10896/>
21. Huseyn A.J., Aliyev R.K. (2015) Modernization of public service: conditions and directions for the development of human resources in public service in the Republic of Azerbaijan. Management Problems, Scientific and Practical Journal, No. 4 October-December, Series A, Academy of Management under the President of the Republic of Belarus, Minsk, 2015 p. 25-29. <https://elibrary.ru/item.asp?id=25408485>
22. Activities of the Ministry of Europe and Foreign Affairs aimed at attracting investors and talents. Information resource: <https://www.diplomatie.gouv.fr/ru/politique-etrangere/ekonomicheskaya-diplomatiya-ivneshnyaya-torgovlya/povyshenie-privlekatel-nosti-francii/article/l-action-du-meae-pourattirer-davantage-d-investisseurs-et-de-talents>
23. Klimova A.V. (2016) Talent management: current trends and approaches to application in the public sector. Bulletin of the Nizhny Novgorod University named after N.I. Lobachevsky. Series: Social Sciences, 2016, No. 3 (43), p. 27
24. Litvina M. I. (2011) Talent management: early conclusions, more questions than answers [Text] // Actual problems of economics and management: proceedings of the Intern. scientific conf. (Moscow, April 2011) V. II. - M.: RIOR, 2011 .-- p. 59-62. — URL <https://moluch.ru/conf/econ/archive/9/324/>
25. Pitsik N.I.(2001) Personnel potential as a condition for increasing the efficiency of government and management. Humanities Theses - <http://cheloveknauka.com/kadrovyy-potentsialkak-uslovie-povysheniya-effektivnosti-deyatelnosti-organov-vlasti-iupravleniya#ixzz5TpXGIrJo>
26. Shakhbazov A. (2018) Talent Management. Western whim or the future of Russian business. Source:" E-xecutive. <https://ubo.ru/articles/?cat=132&pub=1112>

# INTERNATIONAL EXPERIENCE ON INSURANCE OF FARMS FROM EXPORT RISKS: EXISTING PROBLEMS AND PERSPECTIVES IN AZERBAIJAN

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## ABSTRACT

*The agricultural sector plays an important role in the economy and people's lives. One of the areas of material production is agriculture and first of all its features are caused by natural and biological factors. Agricultural producers in the country face numerous risks that jeopardize their products, income and sometimes their consumption. Various preventive measures are taken against the risks affecting agrarian production, using risk management tools at the farm level. A number of countries also use state support for the development of agricultural insurance. This support is determined by the role and functions of the state, the level of agricultural production risk, the degree of government intervention in the economy, the effectiveness of government agencies and other factors. In our opinion, comparative analysis of state support and insurance mechanisms, risk management of exporter farmers for Azerbaijan and can contribute to the improvement of the optimal agrarian production and export insurance systems as a whole. Trend analysis of export dynamics around the world shows that Azerbaijan's share in world exports of agricultural and food products varies by 0.04-0.05% over the years [4],[8]. However, export insurance is an important mechanism that stimulates the export of goods and services used by a number of countries for a long time. The practice of carrying out export insurance transactions is rarely found in our country. The fact that all these mentioned nuances have led to positive trends around the world and study of international experience in export insurance has also become an actual issue.*

**Keywords:** *farm, export, risk, finance, credit, insurance*

## 1. INTRODUCTION

The establishment and formation of an insurance institution are explained by the result of natural initiatives and efforts aimed at minimizing the losses and damages that occur as a result of accidental events occurring in the human's process of farming activity or simply in the process of living [11]. Management of agricultural production risks in farms is based on the optimal combination of material technical means and available financial resources. Agricultural producers can retain small and recurring risks in their own farms using risk mitigation methods (e.g: irrigation, management of products and prevention of pests, as agro and measures of zootechnics), self-insured tools such as savings to resources and conventional loan.

At the same time, farmers have difficulty managing the less likely risks that impact on agricultural activities and the risks that cause more serious damage. In this case, farmers transfer these risks to other parties (usually agrarian insurance companies) through insurance mechanisms. Insurance of agricultural crops- is one of the main means of protecting the income of agricultural producers due to adverse weather conditions and lower productivity as a result of impact of other natural risks. Therefore, insurance is one of the traditional and most effective methods of managing production risks in agriculture and, since recent times, managing price risks. Historically, the first types of risk that have been targeted for agricultural insurance have been the risks of losing product as a result of hail, heavy rains and fire. The impact of these types of risks is more local, for example, they are not so common in geographical areas as floods, frost, or droughts. That is why the private companies, which existing in the insurance services market in Europe at the time, were able to concentrate a sufficient number of different insurance contracts in their portfolios. These contracts which concluded with agricultural crop producers have different profiles in accordance with various directional risks, thus it was enabling to optimization the overall risk of the portfolio and the implementation of profitable operating activity. Private insurance system created for agricultural crop producers at that time are still operating in some European countries, such as Germany, Great Britain and Ireland [2]. The first real experience of creating a multi-risk insurance system (multi-risk product insurance) that enabling to insurance against a wide variety and different character of risks (drought, fire, excessive moisture of the soil, hail, plant pests) to agricultural crops producers was the adaption of the law of US Congress on "Federal Insurance for Agricultural Plants" in 1938. This law provided for subsidies by the state for insurance premiums. Previously, there have been attempts to organize high-risk(different character and multiple risks) insurance for agricultural crops producers by private companies. However, all of these attempts were facing the existing problem called as systemic risk. This problem was stemming due to a correlation among the productivity indicators of geographically distant areas (within a single province or several provinces). Thus, climate risks were affecting productivity in certain parts due to climate risks cover a large area [2]. Systematic risk leads to the simultaneous occurrence of an insurance event for a large number of insureds in the agricultural sector, which requires that insurance payments be made at the same time as the majority of contracts in the insurer's portfolio. As a result of this, insurers can go bankrupt. This case, emphasizes the importance of fulfilling many conditions such as presence of high insurance premiums and creation of sufficient capital reserves by insurance companies. Only in this case, the existence and operation of the private insurance market in agriculture may be possible [10]. The reasons for participation of state sector in markets of agricultural insurance are various. Intervention of government in the insurance markets of agriculture is caused by the following reasons:

- a) lack of insurance infrastructure in rural areas and lack of insurance services in the field of agriculture;
- b) inability of start-up costs for the development of agricultural insurance products to the private sector;
- c) availability of restrictions of systematic risks on reinsurance potential in agricultural production;
- d) availability of high administrative and management costs that providing insurance of agriculture;
- e) The importance of a comprehensive approach to the understanding of an insurance event in agriculture [9].

There are models of government support for agrarian insurance in international practice.



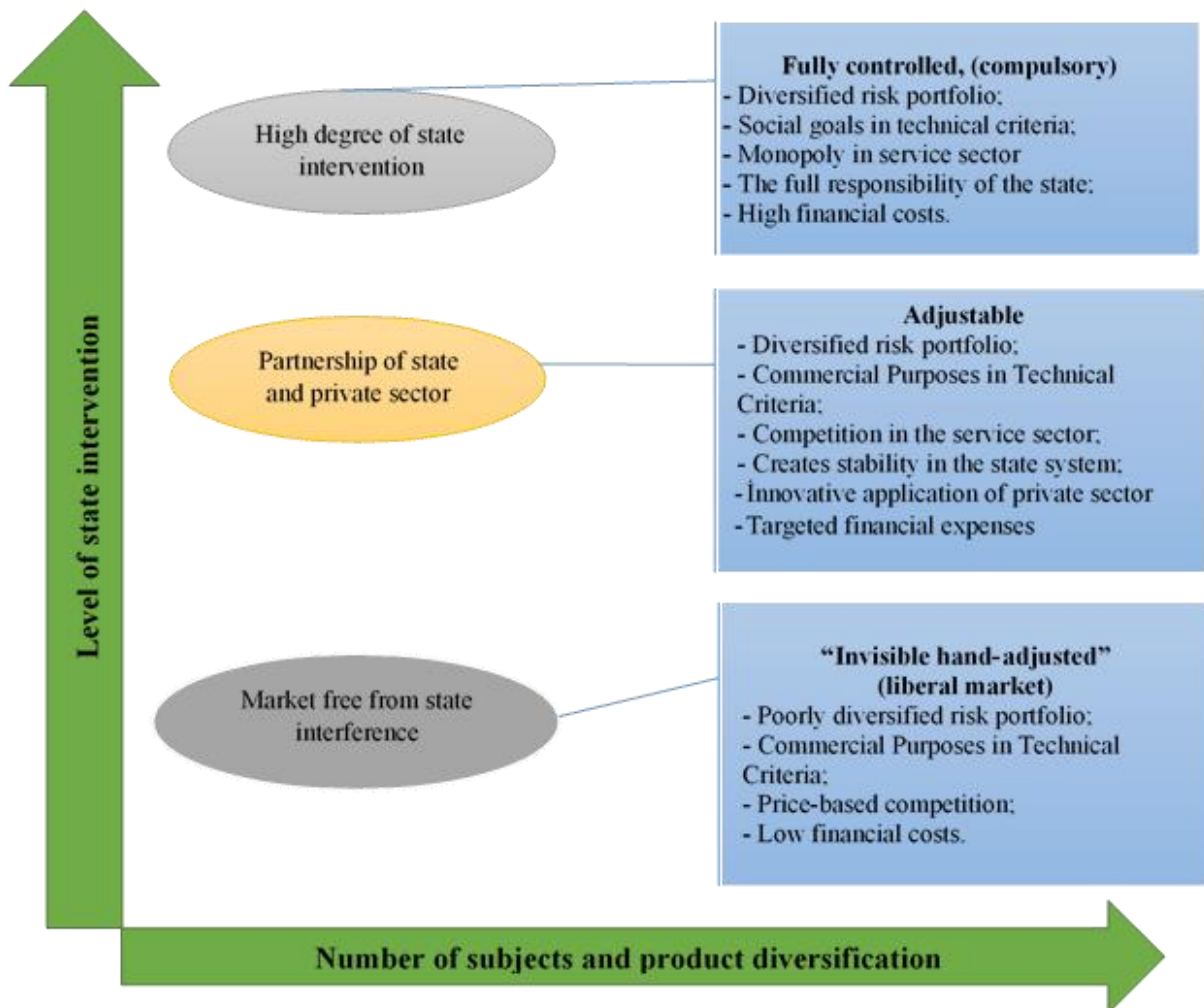


Figure 1: Models of state support for agrarian insurance in world practice [9]

## 2. CLASSIFICATION OF RISKS ASSOCIATED WITH EXPORT ACTIVITIES OF FARMS

The development of agrarian insurance requires an appropriate institutional framework. In addition to a sufficient legal and regulatory framework, it requires merging of capabilities of utilizing of technical and financial assistance for the development of agricultural security with other financial instruments used in agrarian insurance and technical services provided by farmers. Following the identification of risk-sharing schemes in the development of agrarian insurance programs for the country's regions, the following measures should be taken into account:

- to stimulate insurance companies that operating in the region to accept agricultural risks;
- to encourage the state's participation in risk financing for the most dangerous risk groups to increase the competitiveness of the reinsurance markets;
- considering premium subsidies in agrarian insurance [5].

There are the following main advantages for exporter farmers:

- it is an effective tool for development of agriculture;
- increase in sales due to access to new markets;
- reduction of product cost;
- regulation of seasonal changes in the internal market;
- to increase the profitability of the agriculture and foreign exchange reserves.

Factors which stimulated exports the following may be:

- unstable prices in conjuncture of internal market;
- instability and conversion problems in the national currency exchange rate.

Additional costs may arise at the beginning of export activities: The importance of increasing production capacity; costs of adapting the product to the requirements of the intended market; training, research and development costs of staff; insurance risks and so on. The amount of financial resources must be calculated and reflected in the financial plan to cover future expenses in the internal and external markets, before being exported. Thus, the parties must first agree on the currency of payment of the settlements. Settlements can be determined in the currency of the exporting country, in the currency of the importer or third country. US dollars as this currency in the example of Azerbaijan or at exchange rate equivalent that is determined by the Central Bank on national currency to the settlement date are chosen. The risks faced by firms in foreign economic relations also have certain different features. They are grouped in economic literature, as follows:

- unstable economic processes in countries around the world;
- incomplete information, availability of commercial secrets about the activities of companies engaged in foreign economic relations;
- application of the principle of comparative advantage;
- compliance of exchange of goods and services with the volume of demand and suggestion existing in the world market;
- influence of the principles of liberalization in foreign economic relations;
- more efficient positioning of resources around the world is achieved as a result of the free trade;
- trade restrictions. Despite the development of free trade, protectionist policies are still used in many countries to protect the internal market. Duties, excise taxes and import taxes occupy major place among such restrictive measures;
- import quotas. Restricting the volume of goods imported during a certain period also creates a risk to companies in import activities;
- application of licensing for some import or export operations, restrictions on the quality of imports or exports, as well as bureaucratic obstacles in customs activity can perform as the cause of the risks;
- exchange rates, devaluation of national currencies;
- change of demand and suggestion for other various reasons;
- the international exchange rate system also creates certain risks [7].

Risks in export transactions are:

- currency and financial risks;
- international marketing;
- production;
- international political;
- international legal framework;
- force majeure risks.

The current situation in the industry, the intensity of the exchange rate fluctuations, the condition of performance of creditor's obligations and other factors should be evaluated in order to calculate currency and financial risks. International marketing risks arise result of wrong choice of sales market of products, inaccurate calculation of market capacity and realization potential, misidentification of production capacity.

Factors that influencing the likelihood of risky situations in accordance with these hazards are necessary to analyze in advance, in order to minimize this type of risks (both for production and international political risks). Fors-majeure risks are considered one of the most difficult to assess. These risks are defined as a specific case in contracts and responsibilities are determined by the contracting partners in most cases. It is necessary to identify determination of probability of international risks, to assess their losses in advance and also to identify opportunities for prevention during the process of preparation of an export project. Export Risk Insurance - is insurance of material interests in international trade through special insurance organizations that provide insurance for export projects against political and entrepreneurial risks. The amount of insurance fee paid by exporters is determined by the following factors:

- exporter's financial status;
- the level of risk associated with the foreign state to be exported;
- amount and duration of export credit;
- to keep own share of risk by the insured;
- insurance amount(limit of insurance liability), insurance cost and their proportion;
- other factors specified in the insurance contract for products to be exported [11].

In addition, export credit insurance is an important mechanism to stimulate exports of goods and services used by many countries for a long time. The practice of export credit insurance operations is very low in our country. Therefore, the study of international experience in export credit insurance has become an actual issue. Insurance of export credits is a special specific type of credit insurance that provides insurance against the risks of participants in foreign economic activity. Its object is property interest about the failure of the exporters (or banks that finance such operations) of goods or services to meet the obligations of their importers. This type of insurance was created after World War I, when special government agencies began to operate in Europe to support national exports. The development of export credit insurance is due to the increased foreign trade turnover of many countries and during the attraction of new markets, significant increase in the risks, especially when crediting to foreign customers. Delays (due to increased competition in the world market) in payments during the period shortly after from the date of delivery of goods date have also shown the importance of insurance in export credits. Currently, up to 80% of international trade operations are carried out through export credit [11]. As a result, receivables of debtor formed during export began to constitute a significant portion of working capital on the balance of many businesses and farms. In this case, there is a risk of payment for previously imported goods. Many companies have begun to create their own insurance reserves using this method of self-insurance to manage this risk. However, exporters were forced to look for alternative types of risk insurance when the amount of losses began to exceed the value of these reserves. One of these types of insurance is export credit insurance. Another important issue that will contribute to the development of export credit insurance is increasing the confidence and opportunities of exporters among their partners in the world market through the availability of insurance contracts. Beləliklə, bu sığorta polisi həm də kredit verən banklar üçün girov rolunu oynaya bilər. In short, the Export Credit Insurance Instrument is one of the main tools to facilitate financial access for exporter farmers. Export credit insurance can be divided into three groups depending on the nature of the relationship between the parties that involved in operations of foreign trade:

- 1) non-payment risk insurance for shipped products;
- 2) non-shipping risk insurance (importer's advance payment insurance);
- 3) production risks occurring existing in the event of the insured party refusing to purchase the pre-ordered product.

In international practice, there are also tools for farms of exporter farmers' financial risk insurance, which can be implemented if the insured party is insolvent. In this case, the following circumstances may be considered as insolvency, that is an insurance event:

- a) long-term delay in debt repayment due to lack of funds (An insurance event is considered to have occurred if the delay is longer than the payment period specified in the contract 'concession');
  - b) to reach a compromise agreement between creditors and debtors to prevent bankruptcy;
  - c) impossibility of full satisfaction of the exporter's interests as a result of the execution of court decision on the debtor's property;
  - d) in the case of bankruptcy, initiation of legal proceedings against the debtor.
- *Restrictions of Risk Centralization* - maximum export volumes, creation of reserves in warehouse, attraction of borrowed funds and selection of other restrictions. Limiting risk centralization is one of the most common defense mechanisms from general risks through internal management. By this method, the company identifies losses that can occur without significant damage to its operations.
  - *Distribution of risks* - are minimizing export risks to partners who involved in export operations based on their partial transfer. These are the risks associated with the loss (damage) in the transportation or sale of products than the method. These risks such as force majeure cases should be meant directly in the contract.
  - *Hedging* is used to provide defense against export risks, usually associated with the hazards of fluctuations in currency and commodity prices. That is, pre-determination of the course in the contract to be executed later. The commission must also be paid, because this is paid a paid process. The hedging method is used in international practice because of (e.g. agricultural products) late and long-term payments for commodities or when commodity prices are unstable [7].

The causes of creation of export risks may vary. Therefore, factors which create these risks should be comprehensive investigated, weighed and selected appropriate defense and insurance tools. More than one defense tool can be selected for each type of risk, it is important to analyze the likelihood of risks at each stage of the export transaction. The appropriate protection and insurance tools for the types of risk are shown in the below table:

*Table 1: Introduction of defense mechanisms from export risks in world practice [7]*

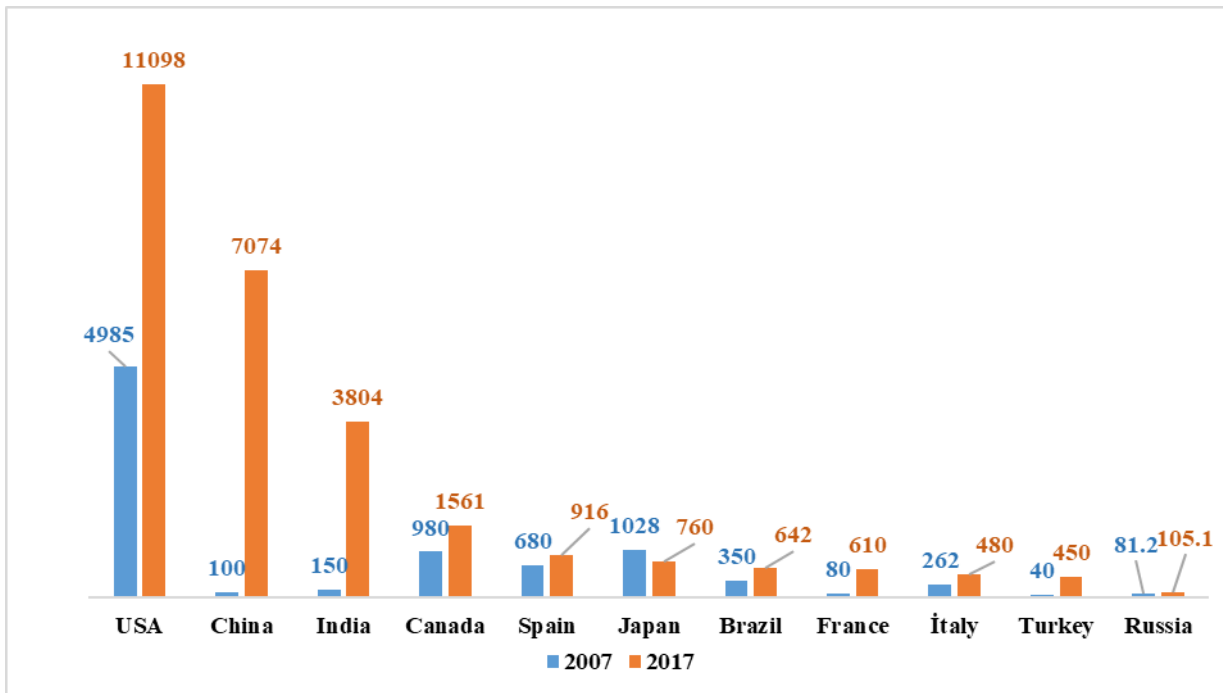
	Restriction	Distribution	Insurance	Hedging
Currency and Finance	-	+	+	+
Marketing	-	+	+	-
Production	+	-	+	-
International political	+	+	-	+
International legal	+	+	-	-
Fors-majeure	+	+	-	-

### 3. CURRENT STATE OF THE GLOBAL AGRICULTURAL INSURANCE MARKET

The volumes of collection of agrarian insurance premiums have shown through out countries of the world for 2017 in the graphic below:

*Figure following on the next page*

Figure 2: The volume of collections of agrarian insurance fee, million USD dollar on countries around the world (2007- 2017) [12]



Thus, the USA (\$ 11.1 billion), China (\$ 7.1 billion) and India (\$ 3.8 billion) are the leading countries in the field of collection of agricultural insurance. This also means that the agrarian insurance mechanism is accessible to all farms in those countries. In 2014, the distribution of agrarian insurance premiums on the branches of agriculture in the world have shown in below diagram in percentage.

Figure 3: Share of agrarian insurance premiums on fields that collected globally in 2014, % [12]

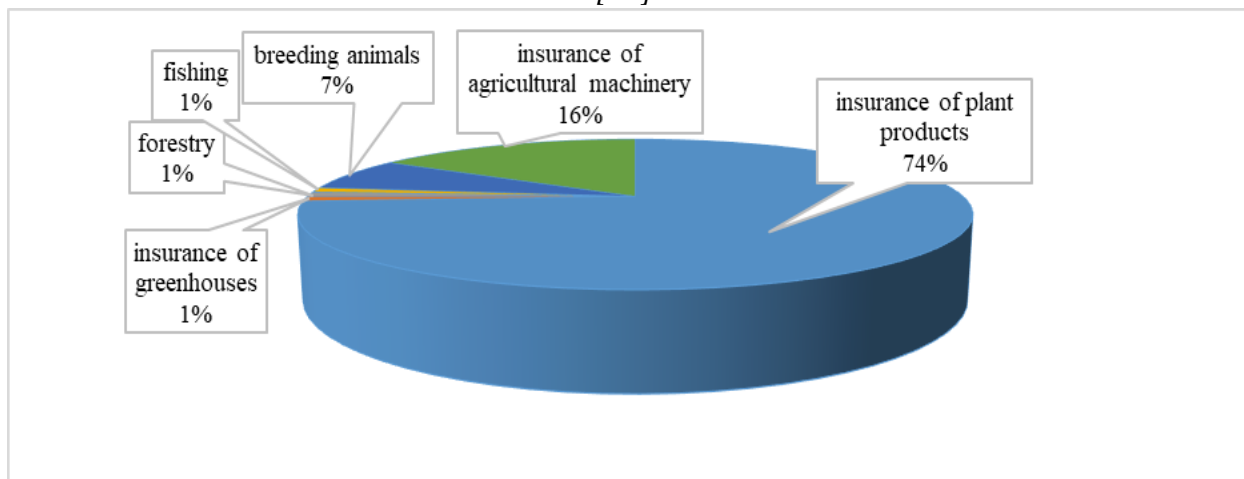


Chart datum show that the insurance of plant products (perennial plantings, orchards) distinguish by 74%, agricultural machinery insurance by 16% and breeding animals insurance by 7%. Global volume of insurance premiums that is collected in the field of agrarian insurance around the world is amount of 29.3 USD billion for 2018 according to analysts and experts who operating in financial sector. According to forecasts, it is expected to increase to 30 USD billion by 2022.

### 3.1. Russian experience of state support for risks insurance in exporter farms

One of the main directions of the state policy on foreign economic activity in the Russian practice is the increase in the volume of export of Russian goods and services to foreign countries. The government pays special attention to the economic sustainability and competitiveness of small and medium-sized businesses. A system of state support have established to eliminate the barriers preventing export activities and to support the export of processed products. Through export support mechanisms, it helps solving a number of financial and non-financial issues that make it difficult for Russian goods and services to enter foreign markets at certain stages of the export project. Stimulation of small and medium-sized enterprises (SMEs) exports is actively improving mechanisms that allow companies to cross their export routes with maximum efficiency and minimum costs. Export support mechanisms have been identified export project of SMEs and at every stage of export operation. The export support system includes a number of organizations that provide non-financial and financial support to fully or partially export-oriented enterprises:

- Trade Missions of the Russian Federation;
- Export Support Centers in the regions;
- Regional integration centers;
- Russian export center [3].

Mechanisms of state financial support are available for exporter farmers in Russia.

- a) Paying of a part of expences for transportation of agricultural and food products. (in the form of subsidies); Compensation is paid up to 50% of actual costs incurred to customers who have trade relations with China in Russia and also is paid if the value of agricultural and food products is not more than 50%. The exact formula for calculating the amount of compensation, the list of product codes for which compensation is received and other conditions for obtaining this, have been approved by the Government Decree of September 15, 2017. Documents and other administrative and organizational matters for obtaining the amount of compensation are determined by the Russian Export Center.
- b) Crediting and insurance of export for exporters and farms that that export agricultural, food products.; Insurance support for exporters is provided by the Russian Export Credit and Investment Insurance Agency (EXIAR). EXIAR products are meant to protect the material interests of Russian exporters and financial institutions (that finance them) from range of external risks.

A number of instruments are used to stimulate exporters, at this time:

- Export credits;
- Delivery of export products to the intended destination on the basis of deferred payment ;
- Certified letters of credit [3].

The main advantages of EXIAR are:

- The insurance contract can be used pledge as collateral for certain credit facilities that the exporter has attracted to execute the export contract;
- Enhancing the competitiveness of export contracts;
- Elimination of administrative liability and sanctions and currency control provided by the Administrative Code for the avoidance of currency margin income in the Russian Federation;
- The cost of the EXIAR insurance benefits belonging to the organization's costs (VAT not applicable);

EXIAR helps solve two major problems related to export financing:

- Solving pledge issue for credits
- Solution of high interest rates on credits.

c) Based on result of assessment of the readiness of the product for export activities requires the purchase of raw materials and materials to fulfill the obligations under the foreign trade agreement and attraction of foreign financial resources for payment according to subcontractors' services.

ROSEXIMBANK provides implementations of crediting and guaranting support to exporter farmers in Russia. If financing of advance payment is provided under the terms of the foreign trade agreement and the foreign buyer is ready to transfer the advance payment under the bank guarantee then ROSEXIMBANK secures the company's liabilities by repaying the advance payment. In order to meet the obligations under the foreign trade agreement, the regular export supply acts as a credit organization for financing of current expenses on its obligations. The main conditions for obtaining export credit for farmers are:

- Resources of Russian production -(Cost of Raw materials, materials, components, works and services that made in the territory of the Russian Federation) the share of the total value of the foreign trade contract must be at least 30%;
- Given up to 80-85% of the amount of the foreign trade agreement or commission agreement between the producer and the exporter;
- Credit is issued in Russian rubles or in foreign currency provided by the foreign trade agreement;
- Credit period - up to 2-5 years [7].

*Table 2: Introduction of state support mechanism for exporters in Russian practice, % [7]*

№	Stages	Forms of support			Supporting subjects
		Researches	Exhibitions and fairs	Analyzes	
1	Market selection, search of buyers	Researches	Exhibitions and fairs	Analyzes	Russia Export Center, Support center to the Export-oriented SMEs, Trade Representation ROSEXIM BANK, EXIAR
2	Adaptation to market requirements and preparation for it	Certification	Protection of exporter rights	Documentation	
3	International relations and conducting business negotiations	Organization of negotiations	Contract and expertise	Translations into a foreign language	
4	Production	Enlightenment of exporters	Financing prior to the exporter		
5	Export Preparation, Transportation and Delivery	Consultations in the field of logistics	Customs and consultations in the field of permission documentation		
6	Currency payments	Crediting of buyers	Insurance not related to payments		

#### **4. EVALUATION OF CURRENT CONDITION ON INSURANCE OF AGRARIAN PRODUCTION AND EXPORT RISKS IN AZERBAIJAN**

Increase of agricultural crops production in the country in recent years has also expanded the export potential of this sector. The devaluation of the national currency have had a positive impact on the competitiveness of local products in 2015. A number of measures have already been launched in the field of promotion of non-oil products export.

Additional support is provided for the export of certain agricultural and food products in accordance with the Decree of the President of the Republic of Azerbaijan dated March 1, 2016 "On additional measures to promote the export of non-oil products". Exports of agriculture and food products increased by 66.9% in 2019, while exports increased by 22.4%. Fruits and vegetables accounted for the bulk of agricultural and exports of products food. Thus, the share of these products in exports increased from 63.1% in 2016 to 66.6% in 2019 [8]. Wheat, rice, live animals, meat and milk and dairy products also played an important role in imports of agricultural and food products. Food wheat are dominant in the import of wheat, predominantly breed animals are predominant the import of live animals. As a whole, the analysis of the import structure shows that there are still opportunities for import substitution in the livestock sector in our country. "Development of agrarian insurance" has been selected as a strategic prioriet at the section 3.2 of the "Strategic Road Map for the Production and Processing of Agricultural Products in the Republic of Azerbaijan" that approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016. Extensive measures have were taken in the framework of this priority in 2019. Law of the Republic of Azerbaijan "On agrarian insurance" was adopted in the direction of reorganization of agricultural insurance mechanism on June 27, 2019. The Agrarian Insurance Fund was established in accordance with the Decree of the President of the Republic of Azerbaijan dated August 19, 2019 "On Agrarian Insurance" and "On Establishment of Agrarian Insurance Fund". Project about determination of the subject of agrarian insurance and composition of the guaranteed risks was prepared by the government as well as. Suggestion of insurance products to farmers on relevant risks and subjects over the next few years have meant by the state. The following export subsidies are financed through the state budget:

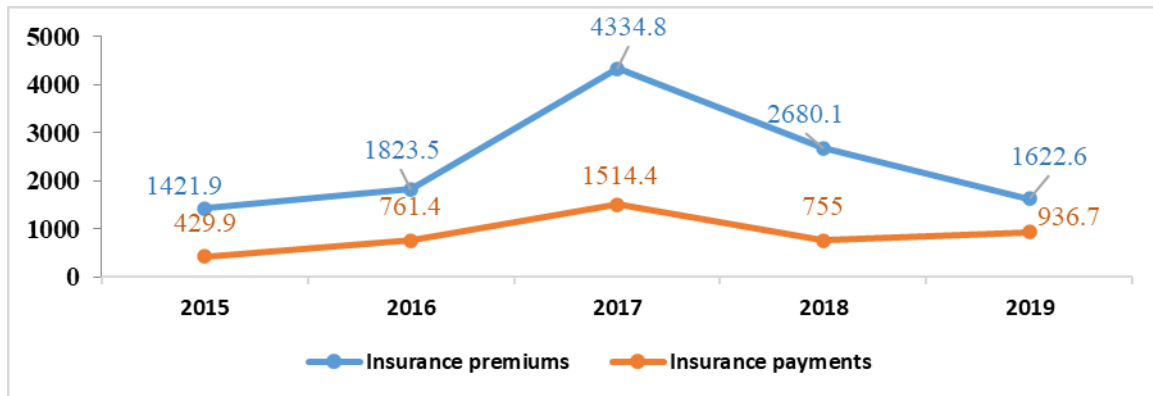
- Entrepreneurship Development Fund operating under the Ministry of Economy of the Republic of Azerbaijan;
- Export and Investment Promotion Fund (AZPROMO) under the Ministry of Economy of the Republic of Azerbaijan;
- Azerbaijan Investment Company under the Ministry of Economy;
- 'www.azexport.az' portal of the Center for Economic Reforms and Communications under the President of Azerbaijan;
- Agrarian Credit and Development Agency under the Ministry of Agriculture of the Republic of Azerbaijan.
- State Agrarian Trade Company under the Ministry of Agriculture of the Republic of Azerbaijan.

The following table presents the data for the last three years in the field of plant and animal husbandry in Azerbaijan: Insurance premiums on plant products insurance in 2018 amounted to 639.8 thousand manat, insurance payments amounted to AZN 180.3 thousand. The insurance premiums for the livestock sector amounted to 2.04 million manat and insurance payments were 574.7,000 manat. The volume of agrarian insurance premiums totally was 2.7 million manat [1]. The 5-year trend of agrarian insurance premiums and payments is described in the following chart:

*Figure following on the next page*



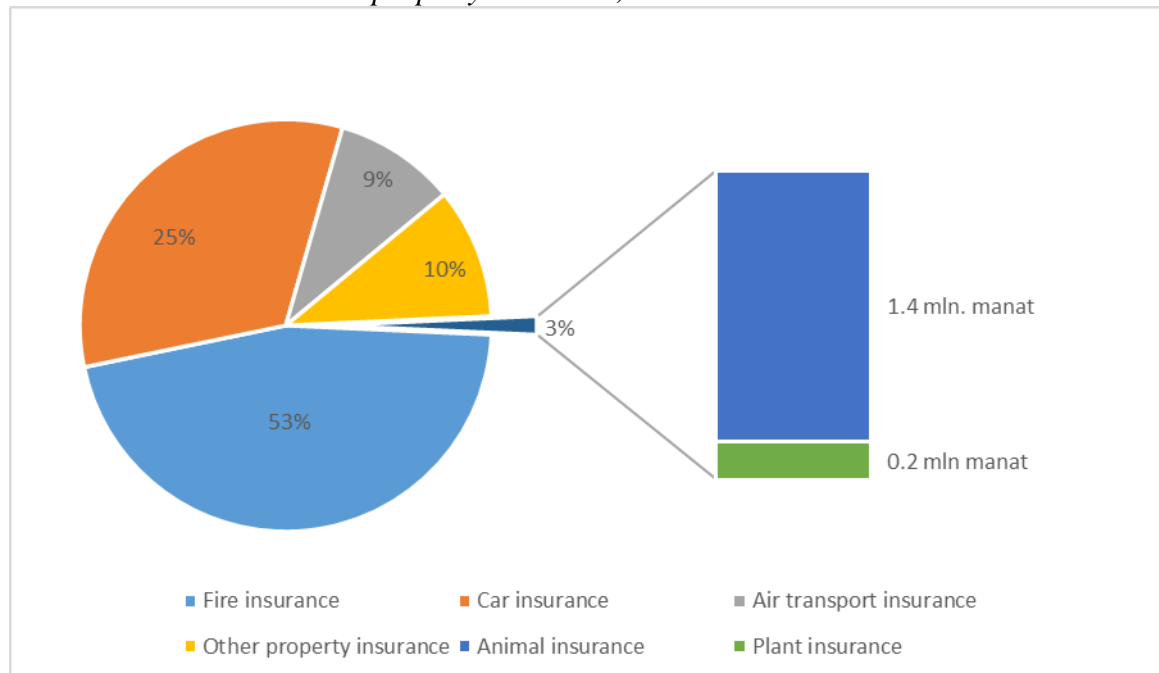
Figure 4: Agrarian insurance premiums and payments trend in Azerbaijan for 2015-2019, thousand manats



Source: Central Bank of Azerbaijan (<https://www.fimsa.az/menu/sinifler-uzre/118>) [1]

The trend over the years shows that there is a relatively steady decline in premium and payments in 2014-2016. There has been an increase in agrarian insurance premiums and payments as a result of systematic measures on the development of the agricultural sector and agrarian reform since 2016. Share of property insurance which belonging to agricultural insurance applies was 16% compared to the overall sector. The volume of premiums in the insurance sector is higher than in life insurance.

Figure 5: Insurance premiums that collected from the agrarian sector and its share in property insurance, % in 2019



Source: Central Bank of Azerbaijan (<https://www.fimsa.az/menu/sinifler-uzre/118>) [1]

Real estate fire insurance and car insurance account for 78% share of total property insurance. In general, the largest insurance premium and payments in the insurance sector in Azerbaijan are in car insurance. It is shown that agricultural risks are higher than those of other sectors, increasing insurance literacy in this area, enlightenment of farmers and requiring government support for insurance companies.

Several factors must be taken into consideration when developing a comprehensive agricultural insurance strategy for the country:

- a) understanding the economic and social importance of the agricultural sector;
- b) distribution of agricultural producers in agribusiness segments;
- c) risk assessment that affecting agricultural production;
- d) harmonization of risk management strategies implemented by agricultural producers and the state;
- e) assessment of financial sector activity in rural areas [9].

## 5. CONCLUSION

Proper agricultural risk assessment is a prerequisite for the development of sustainable agricultural insurance programs. Besides, formation of agricultural and hydrometeorological information base and further improvement of information infrastructure are required. In addition, supporting for the development of innovative agrarian insurance products and services is important for servicing to small-scale farms and expanding the overall market. In other words, agricultural insurance products should be tailored to the customers who are targeted. In our view, the following measures are appropriate to support for export of agricultural products in the country:

- development of support agencies to export (government agencies and non-governmental organizations); the establishment of effective mutual relations between them;
- consideration of privileges and state support for exporter farmer associations during the diversification of agrarian insurance products;
- intensification of information and consulting services in the direction of increasing insurance literacy among farmers;
- taking of measures to develop agrarian insurance and export insurance with international insurance and reinsurance companies;
- expanding export support instruments in accordance with WTO rules and regulations using international best practices.

## LITERATURE:

1. [http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Agricultural\\_insurance\\_in\\_LAC\\_web\\_FINAL.pdf](http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/Agricultural_insurance_in_LAC_web_FINAL.pdf)
2. [https://en.wikipedia.org/wiki/Crop\\_insurance](https://en.wikipedia.org/wiki/Crop_insurance)
3. [https://www.researchgate.net/publication/285176133\\_Risk\\_Agricultural\\_Production\\_and\\_Weather\\_Index\\_Insurance\\_in\\_Village\\_South\\_Asia/link/5b455f97aca272dc385f58d7](https://www.researchgate.net/publication/285176133_Risk_Agricultural_Production_and_Weather_Index_Insurance_in_Village_South_Asia/link/5b455f97aca272dc385f58d7)
4. [https://www.researchgate.net/publication/288288845\\_Systematic\\_Risk\\_in\\_Agriculture\\_A\\_Case\\_of\\_Slovakia](https://www.researchgate.net/publication/288288845_Systematic_Risk_in_Agriculture_A_Case_of_Slovakia)
5. <https://www.src-master.ru/article27188.html>
6. [http://lib.bbu.edu.az/read.php?item\\_type=lecture&file\\_type=pdf&file=130](http://lib.bbu.edu.az/read.php?item_type=lecture&file_type=pdf&file=130)
7. Обзор Национальных программ и стратегий поддержки экспорта сельскохозяйственных товаров в постсоветских странах, Продовольственная и сельскохозяйственная организация Объединенных Наций, Рим, 2018, 80 стр. (<http://www.fao.org/economic/est/international-trade/europe-and-central-asia/ru/>)
8. Учебное пособие для начинающих экспортеров, АНО ДПО «Школа экспорта АО», «Российский экспортный центр», Москва, 2016, 104 стр. ([https://mines.gov-murman.ru/about/obsch\\_sovet/novosti/uchebnoe-posobie.pdf](https://mines.gov-murman.ru/about/obsch_sovet/novosti/uchebnoe-posobie.pdf))
9. Export subsidies, export credits, export credit guarantees or insurance programmes, international food aid and agricultural exporting state trading enterprises, background document by the secretariat, World Trade Organization, G/AG/W/125/Rev.8/Add.2, Luxembourg 2018, 62 pages.

10. <https://customs.gov.az>
11. [https://www.nifi.ru/images/FILES/Journal/Archive/2014/3/16\\_3\\_2014.pdf](https://www.nifi.ru/images/FILES/Journal/Archive/2014/3/16_3_2014.pdf)
12. <https://www.trademap.org/Index.aspx>

## THE STRATEGIC ASPECTS OF NEW CHALLENGES OF AZERBAIJAN TRADE LOGISTICS IN THE AGE OF INDUSTRY 4.0

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### **ABSTRACT**

*In the article, the strategic aspects of new challenges of Azerbaijan trade logistics in the age of industry 4.0 have been researched. The problems of developing the country's economy on the basis of high technologies in a global context and a time of deepening of economic transformation have been explicated. The importance of improving the current mechanisms of industrial activity and the priorities for reducing the country's dependence on oil have been substantiated. The necessity to systematically research on the new challenges of trade logistics in the age of industry 4.0 at an international level and in this regard the implementation of pilot projects have been elucidated. The need to provide strategic approaches to the problems of developing and implementing activity mechanisms that are adequate with the standards of the fourth industry era have been emphasized. To increase the competitiveness of the country's economy and strengthen its position in international trade, the problems of formation and development of logistics system meeting the standards and criteria of the age of industry 4.0 to have been explicated. The effectiveness taking public-private partnerships to a new level and strengthening has been emphasized. Because of the significant difference of new challenges of the era of industry 4.0 from previous mechanisms and approaches, the necessity to develop and adapt feasible models of trade logistics mechanisms and management systems has been substantiated. The potential of adapting Azerbaijan's trade logistics system to industry 4.0 requirements has been revealed and the situation in this area has been researched. The volume of cargo transportation in the transport and non-transport sectors in Azerbaijan and the dynamics of cargo transportation and transit cargo transportation in the Azerbaijan section of the European-Caucasus-Asian transportation corridor have been analyzed. Directions for the development of trade logistics in Azerbaijan in accordance with the standards and principles of the era of industry 4.0 have been provided.*

**Keywords:** Azerbaijan, industry 4.0, international trade logistics, trade logistics, trade logistics infrastructure

### **1. INTRODUCTION**

In modern times, Azerbaijan is improving and updating its economic development model. The economic and structural changes in the country continue rapidly and important efforts are made to reduce the dependence of the economy on oil factor. As a result of the global financial crisis that began in late 2008, it became known that our country should evaluate the oil factor at a conceptual level and take measures to minimize the dependence of the economy on this factor. Over the past period, large-scale work has been done in this context and especially for the development of non-oil sectors, a number of state programs have been implemented, institutional changes have been made, and support for the development of entrepreneurship and the business world has been provided. However, it should be stated that the required level has not yet been reached on these issues, and much remains to be done to strengthen the country's economy at an international and global level. Azerbaijan is the initiator and financial donor of many projects in the region, especially energy and transportation projects. The reputation of our country is constantly growing, and international organizations have repeatedly made statements and assessments on this issue.

Relations with the European Union are particularly important, and in the framework of The Eastern Partnership program, implemented since 2009, relations in many areas, including trade and transportation, have expanded significantly. It is no coincidence that our country has become one of Europe's main energy security partners. Moreover, in the process of expanding international economic relations, Azerbaijan has strategically set important goals in diversifying the structure of international trade operations and increasing its export potential. Measures should be taken to develop the country's economy on the basis of high technologies, firstly, to adapt the activities of the industrial sector to global challenges and to implement in accordance with the industry 4.0 requirements in the future. These are quite complex issues and require an objective assessment of many factors and adequate precautions. Among these measures, fully modernizing the country's industrial sector and its adaptation to the era of industry 4.0 requires particularly strategic approaches. Undoubtedly, Azerbaijan's trade turnover has increased significantly, mainly due to oil and gas, but it is also a fact that the range and volume of non-oil exports have increased in recent years. It is interesting to introduce strategic approaches to the creation of national brands and their entry into world markets. Interest in the EU market has grown particularly. Azerbaijan's logistics and trade development priorities have been conceded extensively, and systematic approaches to the related problems have been emphasized in the preparation process for the age of industry 4.0. All this is stated in the "Strategic Roadmap for the Development of Logistics and Trade in the Republic of Azerbaijan" approved by the Decree of the President of Azerbaijan dated December 6, 2016 (Strategic Roadmap for development of logistics and trade in Azerbaijan, 2016). As it is known, there is a comprehensive approach to the development of trade and logistics systems in the world, especially in economically developed countries, and in this regard, the role of trade logistics is gradually increasing. In general, according to the world-class experience, it can be concluded that an advanced logistics system can generate growth potential of up to 3% of GDP. There is a need to develop trade logistics on the basis of high technologies and to ensure the development of this sector on the basis of the digital economy mechanisms due to the sharp increase in world trade turnover and global trade volumes and being this indicator at the level of 18-19 trillion and so on. So, the volume of world trade had been close to \$ 19 trillion at the end of 2018, for comparison, this indicator had been \$ 17.2 trillion in 2017. China, one of the main partners of Azerbaijan on the Great Silk Road, made up 13.4% of world exports in 2018 and on this indicators, the share of USA has been 8.98%, Germany has been 8.42%, Japan has been 3.98% and South Korea has been 3.26% (All goods. Import and Export, 2018). In this context, it is possible to state that there is a high potential for trade logistics development and efficiency. It is not a coincidence that trade logistics overtake other areas in terms of investment. According to experts, logistics services should be considered as one of the key factors in the efficiency of international trade. In the World Bank's 2018 report, which covers the trade logistics system of 168 countries, it is shown that the efficiency of the logistics system reduces trade costs and makes the chain of goods delivery more stable. Therefore, the development of logistics infrastructure is an important condition (According to trade logistics performance indicators, the gap between developed and developing countries still persists, 2018).

## **2. LITERATURE REVIEW**

In the modern world, the transformation of the world economic processes is deepening. Moreover, increasing global impacts require systematic implementation of new programs and mechanisms in all industries and also in trade logistics. Therefore, in these directions, conducting fundamental research and concentrating scientific research could be of great importance. In particular, development issues of economic mechanisms, economic development model, including industry sector that will be able to meet the requirements, principles and characteristics of the era of industry 4.0, have been emphasized.

In the scientific works of D. Schulz (Schulz, D., 2017 and Schulz, D., 2018), C Brandl, A Mertens and H. Luczak (Brandl, C., Mertens, A., Luczak, H. et al, 2018), the characteristics of industry 4.0, the essence of the technologies and system programs to be applied, and the principles of their operation have been explicated. In the research of H. Malleck, C. Mecklenbräuker (Malleck, H., Mecklenbräuker C., 2017), Müller, J. M., Voigt, K. (Müller, J. M., Voigt, K. (2018), Peukert, S., Treber, S., Balz, S. et al (Peukert, S., Treber, S., Balz, S. et al, 2020), Trunzer, E., Calà, A., Leitão, P. et al. (Trunzer, E., Calà, A., Leitão, P. et al. (2019), the complexity of transformations until the age of industry 4.0 has been specified, and the importance of improving the related preparations and current operating mechanisms on the basis of high technologies, , primarily with the digital economy mechanisms has been explained. Such research indicates that in the age of industry 4.0, current approaches and operating principles will change significantly due to the large number of services and management mechanisms to be provided through virtual and internet. In other words, ideas, different action algorithms, models and real action concepts will come to the fore. In addition, the deeper application of digital technologies also increases global risks, and in this regard, developing different programs and testing adaptability is considered important. In the scientific works of a group of researchers- A. V. Dmitriyev (Dmitriyev A. V., 2019), B. Vogel-Heuser (Vogel-Heuser, B. (2015), H. Zsifkovits və M Woschank-ın (Zsifkovits, H., Woschank, M., 2019), the substantiation problem of works done due to strengthen the competitiveness of industries, manage the risks associated with the active and transparent use of internet resources in all areas and increase the efficiency of trade logistics in the global context and in the process of transition to the age of industry 4.0, have been researched. It should be noted that in accordance with the requirements and new challenges of the era of industry 4.0, current problems, efficiency issues and development perspectives of global trade logistics have been reflected in the work of many other researchers - M Mazzarino (Mazzarino, M., 2012), C. Rajkumar, Kavin, L., X. Luo et al. (Rajkumar, C., Kavin, L., Luo, X. et al., 2016), H. Zhang, G. Zhang, B. Zhou (Zhang H., Zhang G., Zhou B., 2007), H Zsifkovits, M. Woschank (Zsifkovits, H., Woschank, M., 2019). It is possible to conclude from the materials studied on the considered problems that it will be necessary to maximize the technological level of trade logistics in the era of industry 4.0 and to invest in the development and application of these technologies. Moreover, all issues from the production process to the delivery point will be regulated and managed automatically. In these processes, modelling of systemically important virtual programs and control mechanisms, maximum automation of logistics processes have been researched substantiated in the scientific works of a number of scientists, such as E. Trunzer, A. Calà, P. Leitão et al. (Trunzer, E., Calà, A., Leitão, P. et al., 2019), O. N. Kvashina (Kvashina O. N., 2017), I. N. Lavrikov (Lavrikov, I. N., 2016), M. N. Yashina (Yashina M. N., 2017) və V. I. Pleshchenko (Pleshchenko V. I., 2018). It is noted that the use of digital technologies, robots and automated control systems could be highly effective at all stages of the trade logistics system, including the creation of infrastructure, management of machinery and mechanisms. As a result, the full efficiency of the relationship between service providers and customers is ensured in trade logistics activities. A group of Azerbaijani scientists and researchers -A. G. Aliyev, R. O. Shahverdiyeva (Aliyev A. G, Shahverdiyeva R. O. (2018) və A. S. Shakaraliyev, Z. A. Shakaraliyeva (Shakaraliyev A. S., Shakaraliyeva Z. A. (2019) have focused on the global development problems of the country's logistics system at global standards. Particularly, the importance of objective study and adequate measures for the new challenges of trade logistics in Azerbaijan in the era of industry 4.0 has been emphasized. Thus, maximum effective use of transport-transit and transport-logistics potential of the country and considering the new challenges in the world in this area and developing and actively implementing new mechanisms has been required and all this can contribute significantly to Azerbaijan's trade logistics.

Also, because of being on the verge of transition to the era of 4.0 industry, there is a need to adapt trade-logistics of Azerbaijan to the requirements and standards of this era and identify solutions to the actual problems of the new challenges and this will lead to new research.

### **3. RESEARCH METHOD**

Systematic examination of new challenges of trade logistics in the age of industry 4.0, determination of problems, research and evaluation of the potential development perspective of this area are important conditions. For this purpose, the main methods available in the economy have been used: analysis, observation, comparative analysis, synthesis, generalization, evaluation, forecasting and others. In the article, scientific works and approaches of world scientists-researchers and experts on the formation and development of trade logistics have been used. Ideas, opinions and forecasts on the requirements of trade logistics in the age of industry 4.0 have been included. The work done by Azerbaijan in these areas has been reviewed through analysis and generalization and the potential of our country to develop trade logistics has been analyzed comparatively. As an significant trade and logistics hub between Europe and Asia, the strategic importance of our country and its advantages over other countries have been emphasized and assessed.

### **4. RESULTS AND DISCUSSION**

It should be noted that industrial revolutions, which determine the direction of future development, are an inevitable process, and therefore it is important to prepare the country's industry for this period in a systematic and planned manner. The world is already arriving the period of the 4th industrial revolution. Today, innovative companies are working on projects that we considered fantastic yesterday, and are achieving certain results. The main feature of this period is its speed, scope and systematic impact, and the recent industrial revolution can be compared with the renaissance in art. At present, "Industry 4.0" genetic engineering, augmented reality systems, environmental technologies, self-driving cars, clean energy sources, drones, nanotechnology, cloud systems, the Internet of Things continue with the widespread use of artificial intelligence. It is known that the application of high-tech innovations requires large capital investments and diversification of the economy (Fourth Industrial Revolution: Azerbaijan must be a leader!, 2019). Thousands of firms and companies around the world, including companies specializing in trade logistics, are transitioning to these technologies, and the scope of new high results is expanding year by year. In the conditions of industry 4.0, the demand for energy resources, water and food products will increase and hence, an increase in the volume of trade operations will be inevitable, and consequently, there will be a need for faster development of trade logistics. In the business process, including international trade, there will be an urgent need to quickly adopt new technologies and adapt to the requirements of the 4.0 industry age. Due to the application of new technologies, it is possible to systematize information on the trade logistics chain, exchange the necessary databases, minimize risks and reduce costs. For instance, tracking the movement of goods and materials through international trade channels and routes and providing long-distance services will be realized through internet-IT technologies. "Smart" technologies will be widely used in the trade logistics system. In the conditions of the high level of logistics services in Germany, one of the main priority approaches is to significantly expand and deepen the digitalization of the transport and logistics system. And this allows for a more efficient organization of the logistics system, including trade logistics, and the active implementation of innovative mechanisms and functions. By automating the assembly and transportation of goods and products, in general loads, the creation of an interactive system based on digital technologies and the organization of automated logistics systems lines are among such measures (Merenkov A. O., 2017). It is not easy to express an opinion about the transition to the maximum intensive phase of processes related to

the more productive and efficient organization of the trade logistics system. However, the rapid development of information technology can further these processes. Industry 4.0 facilitates the integration of global industrial production with online technologies, and this factor provides transnational companies with great advantages. So, they have the opportunity to access production information along their supply chain. Furthermore, companies can react faster to business trends and plan their activities based on accurate forecasts (Aliyev A. G, Shahverdiyeva R. O., 2018).

#### **4.1. The strategic importance of conceptual approaches to existing problems of new challenges in the fourth industrial conditions**

Predicting new challenges and taking adequate preventive measures in the fourth industrial conditions are known as conceptual approaches. It is known that during this period, the principles of virtual management and the provision of services over the Internet will play a key role. The use of digital technologies as a whole in daily life, society and all sectors of the economy will create new conditions. High technologies and digital programs will be applied in all areas of activity. Therefore, the standards and criteria of the 4.0 industry age are already being formed and deepened and in our opinion, there are no alternatives. In other words, it is important to consider the requirements of the new age and the impact of global trends. In this regard, approaches based on high intelligence and knowledge should be formed within the mechanisms and tools of activity. In daily activities, a strategic vision should be created regarding the needs of the future 4.0 industry age (Ploss, R, 2014). Development of industries and active application of new technologies will cause the acceleration of processes and undoubtedly deep transformation of existing economic mechanisms. In this case, efficiency issues and standards will need to be raised to a higher level. Increasing industry standards to higher parameters than previous analogues creates new questions and tasks for producers, marketers, managers, in short, for each of the participants in a market economy. Existing mechanisms and tools applied, economic models, marketing and management concepts, economic security and economic development strategies should meet the requirements of the 4th industrial revolution (Brandl, C., Mertens, A., Luczak, H. et al, 2018). In order to adapt to the requirements and standards of this period, consistent measures should be taken, public-private partnership should be strengthened, and an in-depth study of world experience should be ensured. As the technological difference between economically developed and developing countries decreases, the struggle and competition in this direction will intensify. Not only technologies will change, but also practical approaches, mechanisms for the mobilization of intellectual resources, as well as the level of maintenance, resource creation, including organization of logistics services adequately to new challenges will be required. The attributes, mechanisms and tools of the intellectual and digital economy will come to the fore in all areas and this all will dictate its conditions to society and the economy, not as a fashion, but as a reality (Schulz D., 2017). In general, the features of the 4.0 industrial period will definitely show itself, that is, the management will be updated in all areas. If the existing mechanisms and these traditionally successful approaches are deformed during this period, it may be more useful to consider it a natural and legitimate process. In this case, it could be possible to objectively assess the situation and take adequate measures. One of the leading and decisive factors in the fourth industrial age will be related to staff, and in this case, the role of personnel in the highest level of use in intelligence management will increase significantly (Röcken C., 2017). Of course, these aspects will also be characteristic of trade logistics, and the deeper and global study of the problems in this area, the development of quite different and effective mechanisms and the integration of human intelligence and digital technology will be of great importance. Therefore, the development and implementation of pilot projects and pilot programs, and the implementation of adaptive processes in these areas could be effective.



Thus, active implementation and expansion standards and mechanisms of industry 4.0 in some economically developed and more intensively developing countries will create additional value of \$ 100 billion. Regarding the 4th Industrial Revolution, comprehensive action programs have been adopted and enforcement processes are being implemented in many countries of the world, including the USA and Germany, the Netherlands, Spain and Malaysia. But, the wider implementation of the 4.0 sector criteria and principles across the world will take some time and in this regard, the transition to digital economy should be accelerated in other countries of the world, and adequate sequential projects and programs should be implemented in accordance with the requirements of the 4th industrial period. For this purpose, it is recommended to develop different configurations of a number of "industry 4.0 improvement" models and adapt the results to real economic processes. As a result of the implementation of such a pilot model, it is possible to assess the real state of the economy and identify the potential, determine the problems and deficiencies (Peukert, S., Treber, S., Balz, S. et al, 2020). It is known that the existing opportunities of trade logistics and, in general, the logistics system are not yet actively used. In many countries, the implementation of this system is at an early stage. However, it should be noted that differences in the pace of development of trade logistics among countries with large economies are decreasing year by year. This situation can be attributed to the relations between "the G7 countries", especially China and the USA and their pace of economic development, including the intensity of trade logistics. In other words, China is increasing its economic and infrastructure strength every year in this area by further developing its trade logistics system and expanding its scope of activities. The level of digitalization in these areas is also intensive, and it would be appropriate to apply high-tech competitive environment to logistics trade. Thus, the more transparent and global internet affects the economy and society, the more it could affect industry and service sectors, including the organization of trade logistics and the efficiency of operations, and cause the greater risks. In short, in the near future, the digital transformation of existing economic mechanisms will be in the spotlight as a leading issue that will determine our future (Malleck, H., Mecklenbräuker C., 2017). In such a case, researchers H. Zsifkovits and M. Woschank think that "smart logistics" will come to the fore greatly and such a model of trade logistics will be highly effective as a universal model that combines the problems and their solutions in the sector (Zsifkovits, H., Woschank, M., 2019). Productive results, high profitability, competitiveness, maneuverability and efficiency will be ensured due to the "smart logistics", which consists of intelligent management, rich information and digital technologies. Working in the form of a network, the principles of decentralization, transparency of information and sufficient substantiation and flexibility of decisions will be of particular importance. CPS Cyber-physical systems are an example of a system that allows the formation of an attractive trade logistics model, and this system will allow to regulate the interaction by combining the digital sphere, as well as the physical sphere, the biological sphere, biological factors. It should be noted that the new challenges of the 4.0 industry age are significantly different from previous mechanisms and approaches. In this context, all processes related to products, their production and sales processes, production technology, transport and logistics chain, especially international trade logistics, will be regulated and managed on the basis of digital technologies and digital economy. In short, all participants in international trade logistics processes, as well as participants-subjects directly and indirectly involved in these processes, will have mostly virtual connections with each other and human contact will be minimized. Any deviations in all stages of trade logistics chain based on precision digital technology and programming, will be immediately registered and eliminated (Trunzer, E., Calà, A., Leitão, P. et al., 2019). Many issues should be addressed comprehensively and systematically in order to improve trade logistics. Among these issues, it is important to provide the right approach in the selection of shippers and intermediaries, to achieve the optimal routes and means of transport for the transportation of goods and to shorten the time of delivery of

goods to the final destination as much as possible. Additionally, one of the important issues of trade logistics in the 4th industry age will be updating the procurement strategy of goods and ensuring maximum efficiency (Pleshchenko V. I., 2018). So, efficiency, that is, the efficiency of trade operations, as well as trade logistics will be maximally increase.

#### **4.2. Development issues of trade logistics in accordance with the new challenges of the 4.0 industrial age**

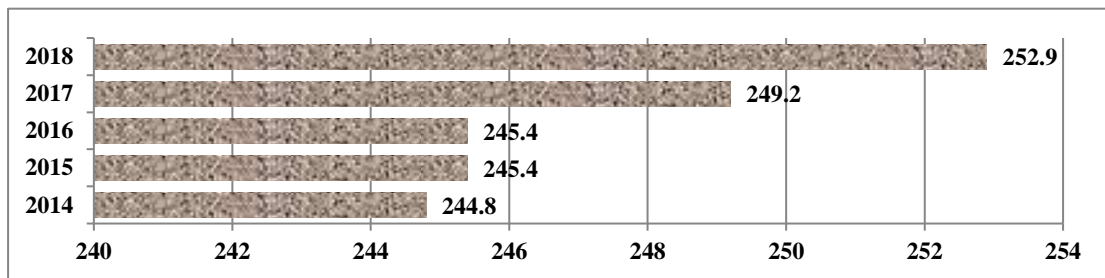
The processes of renewal, improvement and gradual entry of the world's economic processes into a more complex period, including the intensification of the transition to the 4.0 industry age, require the maximum assessment of new challenges and the achievement of adequate results. In these processes, upgrading the logistics system to the new level of requirements is considered as one of the necessary conditions, and measures in this direction are already becoming more intense. Since the 70s of the XX century, the development of logistics as an effective service tool is associated with the achievement of the highest level of organization of the logistics system in Japan. Thus, the basic principles of establishing the logistics system of "Toyota" Company, such as analysing processes related to the logistics system, organizing high level of control, eliminating inactivity and preventing in the production process, expanding automation, applying the principle of "exact time" in production, creating a control schedule, balancing production and maintaining standards, and finally, increasing the efficiency of supply and sales operations, as well as trade operations, have been strategically viewed (Rezer A. V., 2014). In Europe and USA, the need to apply high technologies in the sphere of trade logistics has increased. Trade logistics services are more intensive in the USA. Thus, USA companies and firms that use advanced logistics strategies and methods based on high technology are quite active on important routes of the global trade logistics system, the net income of the country's trade logistics system only from warehouse farms is between \$ 40 billion and \$ 50 billion a year. Trade logistics in European countries play an important role in increasing the volume of international trade operations and increasing the efficiency of the EU market. The use of digital technologies to organize planning, managing and controlling stocks, assets, and the flow of goods and products involved in trade operations, is at a strategic level (Yashina M. N., 2017). In commercial operations and trade logistics, management and regulation of transport infrastructure, machines and mechanisms and parking facilities is realizing through the Freight IT system. Monitoring of events, situations and changes occurring along trade logistics routes and processes, grouping of goods, distributing goods and products and other important measures are carried out automatically through GSM and GPS systems. Ensuring a unified approach to the process of delivery of goods and products from producer to end consumer and cost optimization, identifying strategic shippers group, forming efficient trade logistics systems and selecting the most affordable transport vehicle and others are among the main targets (Rajkumar, C., Kavin, L., Luo, X. et al., 2016). One of the important conditions in global trade logistics is provide the end consumer with the necessary goods and products in a timely, accurately and reliably over a long period of time, regardless of the proximity or distance to the producer. For instance, regardless of which part of Europe produces or grows goods and products, Western European countries are the main market through a more mobile and efficient trade logistics system and this tendency will continue in the future (Mazzarino, M., 2012). At present, the share of direct expenditures on logistics and logistics services in Germany is about 8% of the country's GDP, in France - 10%, and in the European Union as a whole - more than 10%. As a result of the optimal operation of the logistics system, 40% of the revenues of the transport complex in the Netherlands are formed through logistics activities. This indicator is 31% in France, 25% in Germany and 30% in Central and Eastern Europe countries. As a progressive experience in the organization of the logistics system, we could note the achievements of the Netherlands in this sector.

Rotterdam, one of the largest ports in Europe, also ranks fourth in the world in terms of trade logistics transactions. The approaches to the development of trade logistics in Southeast Asian countries are remarkable. In Singapore, considered as one of the most important participating countries in world trade, the most modern infrastructure and mechanisms of the trade logistics system have been created. In general, the intensive development of trade logistics in Southeast Asia is increasing the interest of other countries to the region, and in this area, China's initiatives have an important role (Zhang H., Zhang G., Zhou B., 2007). In the process of comprehensive and systematic development of trade logistics and its adaptation to the standards of the 4th industrial period, it is important to more actively apply innovative technologies. This can be seen in the case of Amazon, the world's largest e-commerce company. This can be seen in the case of "Amazon" Company, the world's largest e-trade company. Thus, the market value of this company is more than \$ 1 trillion, and internet has a key role in its operations. Innovative relationships are established between millions of producers and consumers, and products and services are sold through the Internet. The trade logistics of "Amazon" Company first started in peoples, and then a computer control system and algorithm have been developed to achieve greater efficiency. At this company, it takes only 30 seconds to complete an order. In this company, it takes only 30 seconds to complete an order. and a computerized conveyor line processes 500 orders per second, and vehicles loaded with envelopes leave the warehouse every two minutes. In the company's warehouses, 40 thousand robots are working (Theoretical and conceptual problems of logistics and supply chain management, 2019). As you can see, it is not difficult to imagine how intense this competition will be in the age of industry 4.0, if the world's largest trading companies have now reached such a high level of activity. So, it will be necessary to master more efficient and flexible management mechanisms, a new generation of high technologies (Logistics 4.0, that is. . . Integrate systems and people in the transport and logistics sector, 2018). The proposed new mechanisms and management methods of trade logistics should reflect the world's economic development trends and have maximum efficiency.

#### **4.3. The ways for increasing the capacity of Azerbaijan's trade logistics system to meet requirements of industry 4.0**

It is commendable that Azerbaijan aims to be among the leading countries in the age of industry 4.0 as a strategic goal and incumbencies and in our opinion, there are solid reasons and potential for this. In addition, our country can attain high results in this sector by using international trade opportunities efficiently and achieving a conceptual approach to the development of trade logistics. Renovation of industries on the basis of high technologies, and significant work on the creation of transport and logistics infrastructure has been realized accordingly. One of the main problems in this process is to reduce the role of the oil and gas factor in the country's economy by diversifying and balancing the country's industrial structure and accelerating the development of the non-oil sector (A. S. Shakaraliyev., Z. A. Shakaraliyeva, 2019). Thus, locating our country on the Silk Road and its importance as one of the major international hubs allows it. On September 7-8, 1998, an agreement was reached in Baku on the restoration of the Silk Road with the participation of delegations from 9 countries, 13 international organizations and 32 countries, and the "Basic Multilateral Agreement on International Transport for Development of the Europe-the Caucasus-Asia corridor" was signed within the framework of the European Union's TRACECA program. The capacity to transport 5 million tons of freight now, 17 million tons in perspective and more in the future via the Baku-Tbilisi-Kars railway, creates new opportunities for the development of the country's trade logistics system (Foreign expert: "Azerbaijan is becoming an important transport and logistics hub", 2019). Additionally, after the full commissioning of the Alat International Sea Trade Port, the total volume of freight will increase to 25 million tons per year.

Moreover, the role of trade logistics will increase significantly with the launch of the Alat Free Trade Zone in 2021. This logistics and trade infrastructure, and Azerbaijan's logistics system as a whole will be one of the key hubs linked Europe and Asia (Azerbaijan is a corridor between Europe and Asia and is currently becoming a main logistics center, 2019). The diversified and integrated transport and logistics hubs in Azerbaijan link many countries in Eurasia. Our country has become a center linking transport and logistics systems of different countries, located in a fairly large area in Eurasia (Azerbaijan is an important transit and logistics center in Eurasia, 2019). Due to the effective use of the Baku-Tbilisi-Kars international railway route, Azerbaijan's trade and economic relations with many countries are diversifying and trade turnover is growing. In Aktau, the city located on the shores of the Caspian Sea on the Kazakhstan side, the production and trade logistics center of our country started its operations (Azerbaijan's logistics policy is becoming a strong changing factor in Eurasia, 2019). In order to visualize the perspectives for the development of trade logistics, it would be expedient to view the analysis of freight transportation, as well as transit freight transportation in Azerbaijan. In Figure 1, the dynamics of the total volume of cargo transportation in the transport and non-transport sector in our country in 2014-2018 have been indicated, and at the end of 2018, the total volume of freight transportation was approximately 253 million tons.



*Figure 1: Dynamics of the total volume of freight transportation in the transport and non-transport sector in Azerbaijan, million tons, 2014-2018 years*

*(Source: Designed by author according to the data of the State Statistical Committee of the Republic of Azerbaijan. <https://www.stat.gov.az/>).*

In Figure 2, the dynamics of freight transportation and transit freight transportation in the Azerbaijan section of the European-Caucasus-Asian transportation corridor have been indicated, and it is seen that there was not much growth in 2015-2018. So, measures should be taken to further research reserve opportunities and strengthen transport and logistics infrastructure, and high-tech-based, including digital and Internet-driven trade logistics models that meet the requirements of the 4.0 industry age should be developed and actively implemented in order to increase the volume of freight transportation.

*Figure following on the next page*

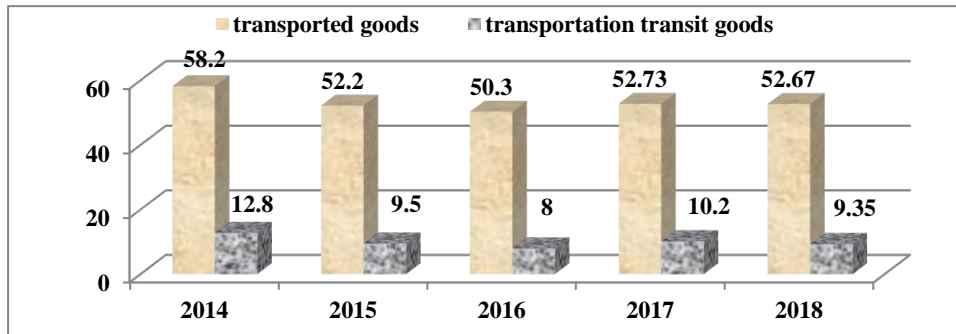


Figure 2: Dynamics of freight transportation and transit freight transportation in the Azerbaijan section of the European-Caucasus-Asian transportation corridor, million tons, 2014-2018 years

(Source: Designed by author according to the data of the State Statistical Committee of the Republic of Azerbaijan. <https://www.stat.gov.az/>).

Given the potential of current trade logistics, it should be noted that the development of the transportation and logistics system in our country is at an early stage, and it is required to take measures to form and improve economic, organizational, institutional and legal mechanisms in accordance with world experience. These factors should be considered as a solid basis for the development of the trade logistics system and the President of Azerbaijan summoned entrepreneurs to establish logistics centers abroad: “We should analyze the markets, the current situation and perspectives very carefully and gain access to new markets. We should strengthen our position in foreign markets, and for this, the establishment of logistics centers is of particular importance” (President Aliyev called on entrepreneurs to establish logistics centers abroad, 2019). This shows that the priorities for the development of trade logistics system in Azerbaijan are considered at a high level, and this issue will be quite strategic in the processes of the 4th industrial revolution.

## 5. CONCLUSION

It should be noted that the processes of economic development in Azerbaijan are accelerating and reforms are deepening. There is great interest in the implementation of high-tech economic mechanisms in the country, and diversifying the economy and reducing its dependence on oil are key strategic goals. The establishment of a strong transport and logistics system, including the international trade logistics system, has been included in the important tasks order in achieving these goals. It should be noted that the profitability of logistics services is directly related to by allowing this sector to optimize the prime cost of final products and increasing the competitiveness of finished products sales in world markets. The most effective organization of the logistics system in the world is not an easy issue. In particular, in the process of transition to the fourth industrial period, the priorities for the development of trade in Azerbaijan have become strategic, and for this purpose, It is important that the international trade logistics system be built in accordance with industry standards and principles and meets the challenges of the period. In this context, a number of issues and actual issues should be given more emphasizes:

- Reforms, structural changes and the active application of new technologies in various sectors of Azerbaijan's economy, increase the development of the country's economy to a higher level and make the transition to the industrial age more prepared. there is a need to intensify the processes related to this issues as much as possible according to world experience;

- In order to increase the strength and share of our country in international trade and the world economy, the need to diversify trade relations and access world markets with oil, gas and other competitive products has increased;
- In order to increase the level of profitability of trade of goods and products and the entire trade turnover and to optimize costs, further strengthening of trade logistics infrastructure of our country and expanding cooperation with world companies in this sector should be ensured;
- The development model of the global logistics system of our country in the context of modern and future challenges should be formed and implemented for the reason that the global logistics systems and approaches, including the trade logistics systems start more intensive development processes in a situation of growing globalization;
- Strategies for developing Azerbaijan's trade logistics model such as models of trade logistics managed on a more virtual level based on information technologies should be prepared and implemented and etc.

#### LITERATURE:

1. 4th Industrial Revolution: Prospects for Azerbaijan (2018). – <https://az.trend.az/business/it/2985579.html>.
2. According to trade logistics performance indicators, the gap between developed and developing countries still persists (2018). – <https://www.vsemirnyjbank.org/ru/news/press-release/2018/07/24/trade-logistics-gap-persists-between-developed-and-developing-countries>
3. Aliyev A.G, Shahverdiyeva R.O. (2018). Analysis impact of the of the fourth industrial revolution on the sectors and innovative structures of information economy // Problems of the information society, №2, P. 52-64.
4. All goods. Import and Export (2018). [https://trendeconomy.ru/data/commodity\\_h2](https://trendeconomy.ru/data/commodity_h2).
5. Azerbaijan is a corridor between Europe and Asia and is currently becoming a main logistics center (2019). - <http://privatization.az/index.php/az/niy-az-rbaydzan/16-menyu-az/138-az-rbaycan-avropa-il-asiya-aras-nda-d-hlizdir-v-haz-rda-iri-logistika-m-rk-zin-cevrilm-kd-dir>.
6. Azerbaijan is an important transit and logistics center in Eurasia (2019). - <http://www.respublica-news.az/index.php/dig-r-x-b-rl-r/dig-r-x-b-rl-r/item/23516-azaerbaydzan-avrasiyada-muhum-tranzit-vae-lozhistika-maerkaezidir>.
7. Azerbaijan's logistics policy is becoming a strong changing factor in Eurasia (2019). - <https://denizxeber.az/2019/11/10/az%C9%99rbaycanin-logistika-siyas%C9%99ti-avrasiyada-guclu-d%C9%99yisdirici-faktora-cevrilir>.
8. Brandl, C., Mertens, A., Luczak, H. et al (2018). Produktion in der Industrie 4.0: Renaissance der arbeitswissenschaftlichen Forschung für manuelle Montagesyst // eme. Z. Arb. Wiss. 72, P. 227–228.
9. Dmitriyev A.V. (2019). Digital traceability technologies in transport and logistics systems. Strategic solutions and risk management. 10(1) – Page 20-26.
10. Foreign expert: "Azerbaijan is becoming an important transport and logistics hub" (2019). - <https://finans.az/xeber/xarici-ekspert-azerbaycan-vacib-neqliyyat-ve-logistika-habina-cevrilir.html>.
11. Fourth Industrial Revolution: Azerbaijan must be a leader! (2019). <http://xalqqazeti.com/mobile/az/news/405720>.
12. Kovalyov, M.M. (2017). Transport logistics in Belarus: state, prospects: Monogra./M. Kovalev, A. A. Queen, A. A. Dutina. - Minsk: Ed. BSU center. P 327 .

13. Kuzmenko Yu.G., Okolnishnikov I.Y., Saveleva I.P., Skatkova E.D. (2016). Logistics of trade services: innovative spatial aspects//Journal of the UURSU. Series: Economics and management. № 3. - P. 162-174.
14. Kvashina O.N. (2017). Specifics of management of logistic processes in a modern production system//the International research magazine, No. 01 (55), P. 26-29.
15. Lavrikov, I.N. (2016). Transport Logistics: Tutorial/I. N. Lavrikov, N. V. Penshin. - Tambov: TGTU, 92 p.
16. Logistics 4.0, that is... Integrate systems and people in the transport and logistics sector. (2018). - <https://trans.info/ru/logistika-4-0-to-est-integrirovat-sistemyi-i-lyudey-v-sektore-transporta-i-logistiki-116634>.
17. Logistics Systems in the Global Economy (2019)/Materials IX International. науч. - практ. конф. (March 21-22, 2019, Krasnoyarsk): electron. St./SibGU named after M. F. Reshetnev. - Krasnoyarsk. – <https://www.sibsau.ru/scientificpublication>.
18. Logistics: Modern development trends (2018). /Materials XVII Internunar. науч. - практ. конф. April 12, 13, 2018: Ч 1: мат. докл. / edition. Col.: V.S. Lukinsky Ed.) et al. - SPb.: GUMRF Institute named after S.O. Makarov, 2018. – 356 p.
19. Logistics: Modern development trends (2019). /Materials XVII Internunar. науч. - практ. конф. 4, April 5, 2019: Ch. 1/Ed.: Ed.) V. S. Lukinsky, [et al.]. - SPb.: Admiral S. O. Makarov GUMRF, 380 p.
20. Malleck, H., Mecklenbräuer C. (2017). Digitale Transformation, Chancen und Risiken. Elektrotech. Inftech. 134, P. 323–325.
21. Mazzarino, M. (2012). Strategic scenarios of global logistics: what lies ahead for Europe?. Eur. Transp. Res. Rev. 4, P.1–18 <https://doi.org/10.1007/s12544-011-0069-y> - <https://link.springer.com/article/10.1007/s12544-011-0069-y#citeas>.
22. Merenkov A.O. (2017). 4.0 industry: German experience in digital transport and logistics//Management. № 4 (18). - S. 17-21.
23. Müller, J.M., Voigt, K. (2018). Sustainable Industrial Value Creation in SMEs: A Comparison between Industry 4.0 and Made in China 2025. Int. J. of Precis. Eng. and Manuf.-Green Tech. 5, P.659–670.
24. Peukert, S., Treber, S., Balz, S. et al (2020). Process model for the successful implementation and demonstration of SME-based industry 4.0 showcases in global production networks / Prod. Eng. Res. Devel. – <https://link.springer.com/article/10.1007/s11740-020-00953-0>.
25. Pleshchenko V.I. (2018). Purchasing in transition to industry 4.0: features and prospects//Logistics today. - No1. - C.66-72.
26. Ploss, R. Industrie 4.0 – Chance für Europas Wirtschaft (2014). / Elektrotech. Inftech. 131, 198 - <https://link.springer.com/article/10.1007/s00502-014-0225-x>.
27. President Aliyev called on entrepreneurs to establish logistics centers abroad (2019). <http://interfax.az/view/701122/az>.
28. Prospects for the development of the electrical industry in Azerbaijan (2018). <https://kriptoeconomy.com/2018/01/10/az%C9%99rbaycanda-elektrotexnika-s%C9%99nayesinin-inkisaf-perspektiv%C9%99ri/>.
29. Rajkumar, C., Kavin, L., Luo, X. et al. (2016). Doctoral dissertations in logistics and supply chain management: a review of Nordic contributions from 2009 to 2014. Logist. Res. 9, 5. - <https://link.springer.com/article/10.1007/s12159-016-0132-0#citeas>.
30. Rezer A.V. (2014). Methodology of integrated transport and logistics systems management. Moscow. – 348 p.
31. Röcken, C. (2017). Industrie 4.0 in der Pathologie // Pathologie 38, P.489.
32. Schulz, D.(2017) Flexibilität, Kosten und Industrie 4.0 im Blick // J Oberfl Techn 57, 6. <https://link.springer.com/article/10.1007/s35144-017-0099-x>.

33. Schulz, D.(2018). Von höherer Reinigungsleistung bis Industrie 4.0. // J Oberfl Techn 58, 5.
34. Shakaraliyev A.S., Shakaraliyeva Z.A. (2019). - Socio-economic problems of the non-oil sector in modern condition / 37th International Scientific Conference on Economic and Social Development – "Socio Economic Problems of Sustainable Development" - Baku, P. 651-656.
35. Skuzovatova N.V. (2016). Development of retail network logistics systems in crisis conditions//NGUEU Gazette. No. 1. - C.233-247.
36. Smart Industries haqqında Imec. 2018. <https://az.infinite-electronic.hk/news/Imec-on-Smart-Industries.aspx>.
37. Strategic Roadmap for development of logistics and trade in Azerbaijan (2016). Baku, 67 p.
38. The foreign trade of Azerbaijan Statistical yearbook.Baku, 216 p.
39. Theoretical and conceptual problems of logistics and supply chain management (2019)/Collection of articles of the All-Russian Scientific and Experimental Conference./MNIC PGAU. - Penza: RIO PGAU. - 92 s
40. Transport in Azerbaijan. Statistical yearbook.Baku, 86 p.
41. Trunzer, E., Calà, A., Leitão, P. et al. (2019). System architectures for Industrie 4.0 applications. Prod. Eng. Res. Devel. 13, P.247–257.
42. Vogel-Heuser, B. (2015). Irgendwo zwischen Industrie 3.5 und 4.x. Informatik Spektrum 38, P. 173–174.
43. Yashina M.N. (2017). Fourth Industrial Revolution in Logistics//Journal of Saratov State Socio-Economic University. № 3 (67).P.131-132.
44. Zhang H., Zhang G., Zhou B. (2007). Research on Selection of the Third-Party Logistics Service Providers / The International Federation for Information Processing, vol 251. Springer, Boston, MA - [https://link.springer.com/chapter/10.1007/978-0-387-75466-6\\_24](https://link.springer.com/chapter/10.1007/978-0-387-75466-6_24).
45. Zsifkovits, H., Woschank, M. (2019). Smart Logistics – Technologiekonzepte und Potentiale. Berg Huettenmaenn Monatsh 164, P.42–45.



## WHY CRYPTOCURRENCIES SCARE BANKS AND GOVERNMENTS?

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### **ABSTRACT**

*If we look at the real world today, we can see the effects of digitalization in all areas. But are we ready for all aspects of digitalization? Because of the digitalization of traditional money that we use today is an actual issue, extensive research is needed in this area. This article will focus on many nuances, such as the transformation of money, created as a human activity reciprocal, to digital money, the positive and negative results of digital money and the prohibition of the use of cryptocurrencies in many countries. As we know, money is the driving force behind economic factors, an asset used in the settlement of transactions and also the equivalent of the service provided by the employment of labor. But if money is digitized, will it make us more free—or less? Although there are some organizations that support the cryptocurrency, most central banks tend to be cautious considering the extreme volatility of the market. Because of that, some countries of the world are taking a number of measures to limit the use of digital money. These measures can have a negative impact on the emergence of digital money. But we currently see new cryptocurrencies created by the different companies. If there are prohibitions on the use of cryptocurrencies, what are the reasons for new cryptocurrencies to create? It is essential to implement tracking process of illegal activities to eliminate the expression "black e-commerce". Research on the availability of certain mechanisms to control cryptocurrencies will be included in the article.*

**Keywords:** *cryptocurrency, digital money, prohibitions on cryptocurrency use, transformation of money*

### **1. INTRODUCTION**

Digital transformation is an irresistible and inevitable process to adapt to new conditions in the 21st century. In this new digital governance and economy, it would be surprising to assume that traditional models, methods and processes will work with the same efficiency. For this reason, the positive and negative consequences of increasing digitalization in all areas provide a basis for greater research. As we know, in the modern world, countries that use the latest forms of digitalization and attach great importance to the application of technology in various processes are able to move forward economically. Unfortunately, it is still impossible to avoid the negative aspects of digitalization. It is known that money, as a medium of exchange, a measure of value and a means of accumulation, plays an important role in the economy. Globalization, prevails all over the world, has also led to the transformation of traditional money into digital money, and the change in this means, which was created in return for human activity, has affected all areas. Although e-money and digital money may seem the same at first glance, there are big differences between them: e-money has been around for a long time, and they are easily interchangeable with cash and are compatible in quantity. That is, we can cash our electronic money in any currency at any time. However, while digital money can be considered a commodity, it cannot be easily converted into physical currency. Virtual currency, that is, digital currency is the electronicization of illegal currency, and its regulation is not under the authority of the Central Bank. Digital currencies include digital money and cryptocurrencies. Such money is usually created in a virtual environment and put into circulation. Cryptocurrency is a tool for performing financial transactions via the Internet with cryptographic functions.

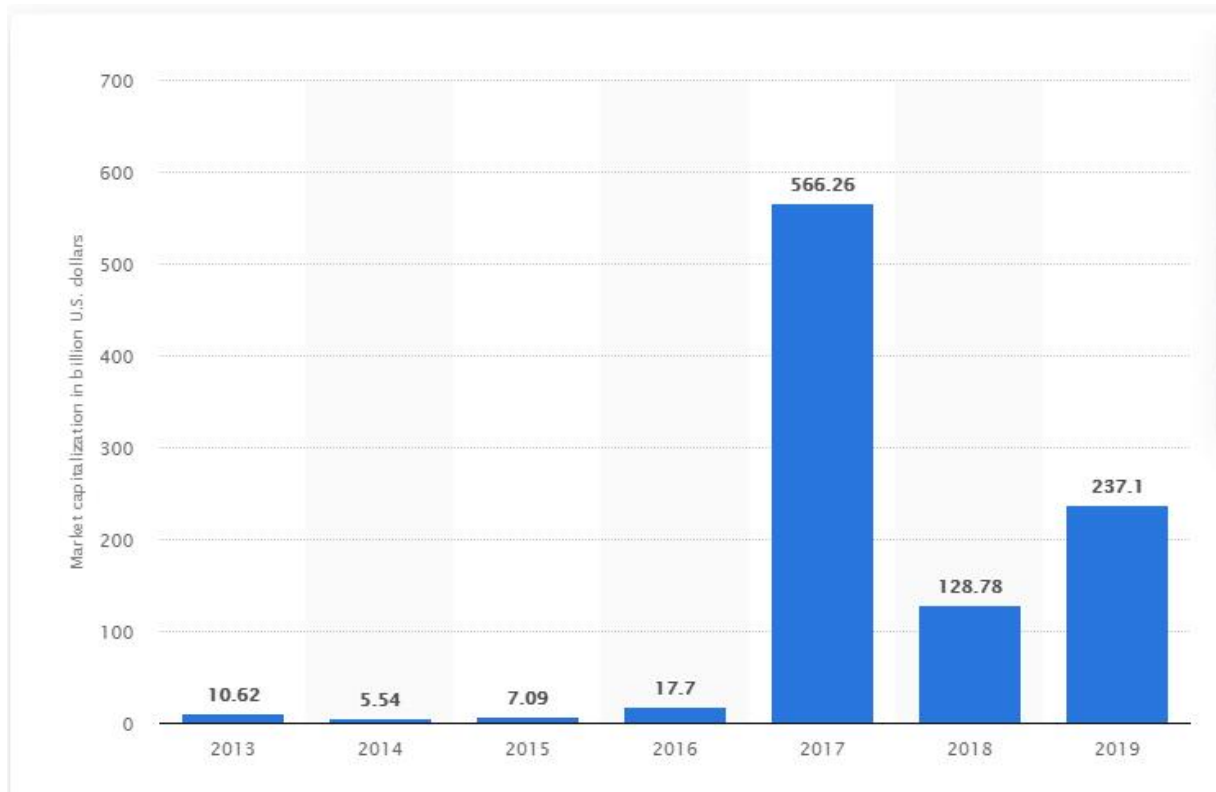
Cryptocurrencies created through blockchain technology are decentralized and unchanging virtual money that are not managed by any central authority, but are involved in the process of buying and selling between two parties through private and public keys. When financial transactions are carried out with this money, it is possible to avoid various high costs incurred by financial institutions and to conduct all transactions at a minimum cost. Although many countries prohibit the use of virtual money because it does not track transactions and facilitates illegal transactions, a number of states that try to detect transactions through the application of modern technologies do not restrict their use. Cryptocurrencies do not need to be identified with gold, silver or any other object like traditional currencies. They can simply be issued and circulated through various cryptographic algorithms. These currencies, which ensure the anonymity of the buyer and user and the confidentiality of the processes carried out, have troubled the state and the banks, which are the main economic intermediaries in the collection of money, the settlement of money, the issuance of money and the issuance of various securities. According to the Bank for International Settlements (BIS), many central banks around the world have conducted extensive research on cryptocurrencies, but are not yet ready to issue digital money. However, they also believe that the use of traditional money will be limited in the coming years, and over time, virtual money will be introduced under the management of central banks. In 2018, Hyun Song Shin, the economic adviser and head of research at Monetary and Economic Department of BIS had expressed an opinion about cryptocurrencies that “Cryptocurrencies promise to replace trusted institutions with distributed ledger technology. Yet, looking beyond the hype, it is hard to identify a specific economic problem which they currently solve. Transactions are slow and costly, prone to congestion, and cannot scale with demand. The decentralized consensus behind the technology is also fragile and consumes vast amounts of energy. Still, distributed ledger technology could have promise in other applications. Policy responses need to prevent abuses while allowing further experimentation” [3].

## **2. WHAT ARE THE OBLIGATIONS OF CRYPTOCURRENCES TO STATES?**

Cryptocurrencies have a number of different characteristics from authorized money and other traditional currencies. So, this money is only available on electronic platforms, stored in digital wallets, and therefore they do not have any physical form. It is a well-known fact that a digital wallet refers to various devices used by people, which means that you can always carry all your money virtually on you and have high availability. Cryptocurrencies are decentralized currencies, that is, they are more secure due to the fact that transactions are carried out in real time. Moreover, since transactions are not monitored, that is, all processes are occurring secretly, no communication can be established between the consumer, the producer or other third parties, the producer and the consumer can only know each other virtually. Cryptocurrencies can reap all the benefits when they are open to use as legal use. However, in terms of these privacy features, virtual money is perceived as a threat by many states. Because the use of digital money makes it impossible to track the number of transactions and the process, criminals prefer these currencies when laundering dirty money. The number of currencies is growing every day and it is impossible to track. Another disadvantage of cryptocurrencies is that they are highly volatile. The regulation of the values of traditional currencies by central banks makes them more stable. However, prices in cryptocurrencies can fluctuate instantly and bankrupt money holders at once. Creating cryptocurrencies is a difficult process and requires very powerful computers and a network. Cryptocurrencies have been created and used in many technologically advanced countries. If we look at the capitalization of the cryptocurrency market, we can see that between 2013 and 2016, the purchasing power of cryptocurrencies was more stable, and there was a sharp increase in 2017, and the value of the capitalized currency increased by 30-100 times compared to previous years, reaching 566.26 billion dollars.

The following year, it fell four times to 128.78 dollars billion, and in 2019 it doubled to 237.1 billion dollars.

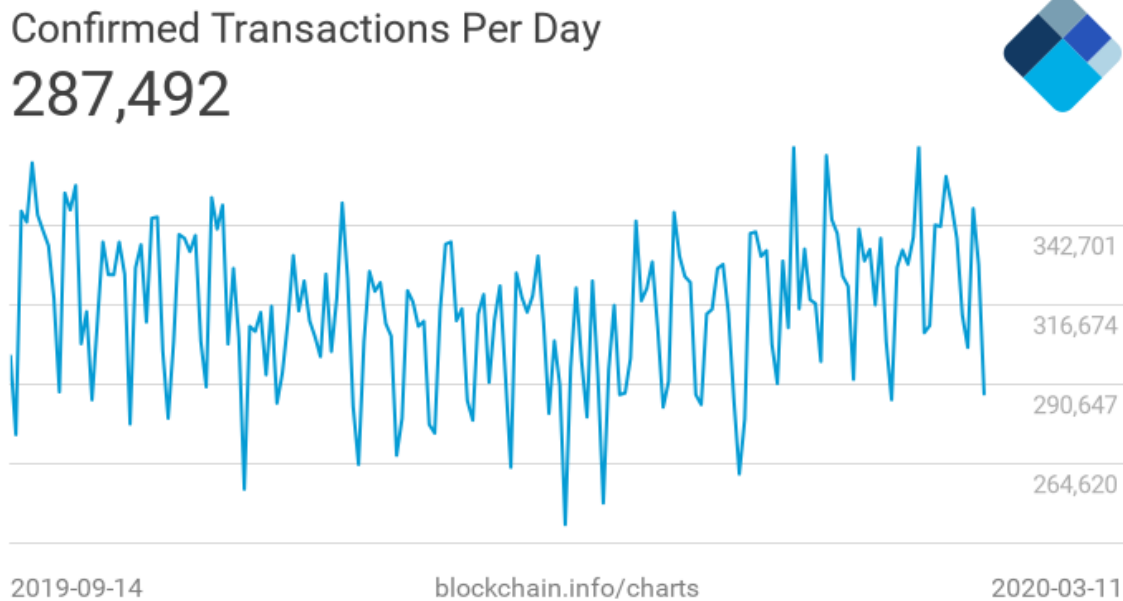
*Figure 1: Market capitalization of cryptocurrencies from 2013 to 2019.*



Source: <https://www.statista.com/statistics/730876/cryptocurrency-maket-value/>

As we know, cryptocurrencies are not issued, approved or regulated by any central bank. The lack of any regulatory policy delays the legalization of the use of this money. Let's look at the countries and their regulatory structures where the use of cryptocurrencies is legal. The use of Bitcoin, the most popular and widespread of cryptocurrencies, is legal in 111 countries. Germany, United Kingdom, Japan, Hong Kong, Singapore, the Bermuda, Switzerland, the Netherlands, Slovenia, Malta, Ukraine, Lithuania, Estonia, Georgia, Belarus and Gibraltar are among these countries. While large economies such as the United States, China and Canada have taken a positive approach to the use of cryptocurrencies, they are also taking serious steps to combat money laundering. Thus, a number of large companies, such as Chainalysis (China), CipherTrace (USA), were able to monitor covert operations and prevent illegal transactions by working on blockchain analysis programs. The countries that have strictly banned the use of cryptocurrencies are mainly South and Southeast Asian countries. Given that there are many illegal processes in the world and examination of all of them are a very long and difficult process, we should accept that we are at the beginning of these processes and all the countries of the world do not have these opportunities based on the analysis of the current situation. The main concern of states for existing cryptocurrencies is the weak security and control mechanisms. When trading in cryptocurrencies, all relationships remain confidential, except in cases where the law requires disclosure. Transactions are carried out in a decentralized form without any restrictions, with the owner of the virtual wallet receiving a single key to use this money. This means that anyone with a key will be able to connect anywhere and anytime. In this case, there would be no need for banks to act as intermediaries in financial transactions.

Figure 2: Worldwide Bitcoin transaction per day in the last three month of 2020



Source: <https://blockgeeks.com/the-impact-of-bitcoin-on-the-global-economy/>

The number of cryptocurrencies continues to grow, and each has its own market value. Currently, there are more than 5,100 cryptocurrencies worth more than 250 billion dollars by 2020, with Bitcoin being the leading currency with the highest market value. It is worth 159 billion dollars, accounting for 63% of the total cryptocurrency market. The vast majority of illegal transactions in the world, such as drug and weapon trafficking around the world, are done through Bitcoin, and this \$ 76 billion transaction accounts for 46 percent of all Bitcoin transactions. This is a very large number and will increase if transactions are not tracked and will be difficult to prevent. Given that the economy is governed by the buying and selling of money, it is possible to understand that cryptocurrencies will have a major impact on the economy. Thus, the process of legalization will be delayed until countries learn how to monitor all transactions with cryptocurrencies, as well as how to benefit from the use of this money.

### 3. CONCLUSION

The concept of banking will change radically in the future. Decentralized management of cryptocurrencies will reduce the dependence of digital money holders and allow them to use their money more freely, as well as provide special services to people who do not receive any banking services. These will have a great impact on the activities of banks. It will benefit its owners with less financial cost in money transfers and e-trading processes. Payments for services provided by banks will be significantly reduced in the course of financial transactions through cryptocurrencies. For instance, when transferring money over long distances, the concept of service fees paid to banks will fall to almost zero. States will lose control of cash flows, and the number of illegal transactions will continue to grow. But this is not an irresistible process. This is because large companies are currently working on blockchain analysis programs to track these transactions. However, this does not make it possible to track all transactions in the near future. Banks can issue money in dollars, which leads to inflation, the process of devaluation of money, which is accompanied by an increase in prices for goods and services. However, this is not possible in cryptocurrencies and therefore reduces the risk of inflation, and digital money does not lose its value.

## **LITERATURE:**

1. Buchko, S. The Impact of upcoming cryptocurrencies on the financial industry. Toshi Times - 2018. <https://toshitimes.com/the-impact-of-upcoming-cryptocurrencies-on-the-financial-industry/>.
2. Williams, S. Which cryptocurrencies have the lowest transaction fees? The Motley Fool.
3. <https://www.bis.org/publ/arpdf/ar2018e5.htm>
4. <https://projecthydro.org/blog/impacts-of-cryptocurrency-in-the-real-world/#>
5. <https://bitcoinist.com/yes-your-bitcoin-transactions-can-be-tracked-and-here-are-the-companies-that-are-doing-it/>
6. <https://cryptonews.com/guides/countries-in-which-bitcoin-is-banned-or-legal.htm>
7. <https://www.statista.com/statistics/730876/cryptocurrency-market-value/>
8. <http://thecircular.org/cryptocurrencies-bad-sides-bitcoin/>
9. <https://blockgeeks.com/guides/what-is-cryptocurrency/>
10. [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)
11. <https://blockgeeks.com/the-impact-of-bitcoin-on-the-global-economy/>

# ASSESSMENT THE ROLE OF INDUSTRIAL AND TECHNOLOGY PARKS IN THE DEVELOPMENT OF NON-OIL SECTOR IN AZERBAIJAN

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## **ABSTRACT**

*Internationally, technology and industrial parks play an important role in terms of the development of information technologies, job creation, the establishment of business companies, attraction of international investments and development of the geographical area of technology parks. International experience also shows that universities, companies, research centres and technology transfer offices usually operate within the geographical locations of technology parks which creates a favourable condition for their cooperation thereby leading to success. Furthermore, technology parks are an important place for international investments and innovation activity. Despite the fact that the government of Azerbaijan invested in the creation of industrial and technology parks in Azerbaijan as a part of development policies, this paper finds out that technology parks have not contributed to the national economic development due to certain factors including poor management, lack of global business connections, and infrastructure facilities. The paper's conclusion is that technology park can contribute to the technological development in Azerbaijan, if their management is enhanced, proper infrastructure is established and global business connections is built.*

**Keywords:** *Industrial park, technology park, non-oil sector, innovation activity*

## **1. INTRODUCTION**

Before evaluating the role of industrial and technology parks in the development of non-oil sector in Azerbaijan, understanding their role in the national economy is extremely important. Hardy and Pose (2014, p.1) note in “Technology and Industrial Parks in Emerging Countries: Panacea or Pipedream?” that majority of developing countries consider that the establishment of technology and industrial parks can be a “panacea” in terms of tackling their economic and social problems. They argue that developing countries consider that the creation of industrial and technology parks will reduce their institutional, political, economic, social and technological problems, but the actual role of technology parks in the developing world is poorly understood. In general, innovation and technological development have always been the major driving forces for economic growth. Developing countries do understand this significance of this issue, and they do their best to benefit from innovation and technology for their development. Technological development and technology transfer are not only important in terms of competing in the global economy, but also reducing the gap between developed and developing countries. Furthermore, industrial and technological parks are considered as one of the most controversial, but modern policy instruments to promote innovations. Thus, the examples of success in Silicon Valley and Massachusetts Highway 128 in the US, Cambridge Industrial Park in the UK, Sofia Anti-Police Park in France, and Tsukuba Industrial Park in Japan empower developing countries to practice the same experiences of the industrial development. Successes in technology and industrial parks create globally successful stories about them. While developing countries are lagging behind developed ones, these countries continue to invest heavily in the development of industrial parks given the lost time. The initial version of the technology parks was an industrial park. Hardy and Pose write that “industrial parks are simple initiatives that create an optimal environment for industrial tenants” (2014, p.

3). The environment goes through the creation of infrastructure, favorable regulatory conditions and fiscal incentives. Compared to industrial parks, technology parks often provide support packages to meet the needs of more specialized infrastructure and industry members. The park is generally considered to be technologically transferable as a result of their activities, innovation is applied, and in the end the expanding fleet contributes to the development of industry at a more local level. Other purposes of creating industrial parks are to create favorable conditions for foreign investors in the country, to apply tax and customs privileges, to provide preferential loans, to stimulate different types of preferential terms. Furthermore, technological parks have a number of world-class advantages that can be attributed to technology development, job creation, company building, attraction of investments, and development of the park. Universities, companies, research institutions and technology transfer offices are located close to successful technology parks in the world, and their mutual collaboration has a significant impact on the success factors. In addition, the names of technological parks make them a successful attraction for international investment.

## **2. INDUSTRIAL AND TECHNOLOGY PARKS IN AZERBAIJAN**

Creating techno parks with modern infrastructure is one of the most important issues for the government of Azerbaijan in terms of application of science and innovation, attraction of investments and increase of performance in the non-oil sector. The 2018 bulletin “Innovation Activities: Technoparks, Industrial Parks”, published by the Economic Research Institute for Economic Reforms, states: “Creating industrial parks, as well as sustainable development of the non-oil sector of the country is particularly important from the point of view of increasing ability of techno-parks to produce competitive and import-substituting products, to provide employment in the surrounding areas, and to meet the challenges of attracting investments and modern technologies” (2014, p. 9). Technological parks should include several specific features. These include facilities within the technology Park and geographically adjacent structures. Techno parks usually have good technical infrastructure. These include business incubators, technology transfer offices, research centers and small office space for startups. There are also universities in or near the tech parks. In the world practice, such cases are in the US and Israel, where the world's most advanced technology parks that is. Silicon Valley, one of the world's most recognized technology parks, was created on the basis of Stanford University. In addition, Israel has a technology park near the Jerusalem University. Sometimes universities even have such technology parks. It should be noted that, despite the functioning of techno parks under the Azerbaijan State University of Economics (UNEC), Baku Engineering University, Azerbaijan State Oil Academy and Technical University, their relationship with global companies and outside work remains impoverished. The industrial portal of the Ministry of Economy of the Republic of Azerbaijan provides general information about 7 industrial and technology parks operating in Azerbaijan, including Sumgait Chemical Industrial Park, Balakhani Industrial Park, Garadagh Industrial Park, Mingachevir Industrial Park, Pirallahi Industrial Park, High Tech Park Azerbaijan and Mingachevir High Tech Park. In addition, the High Technology Park operates under the National Academy of Sciences of Azerbaijan (ANAS).

### **2.1. Sumgait Chemical Industrial Park**

The park was established on December 21, 2011 by the decree of the President of the Republic of Azerbaijan, Mr. Ilham Aliyev. The purpose of the park is to export competitive technology products of Azerbaijan, support the creation of new jobs and bolster the development of the non-oil sector. The park covers 32.5 km in Sumgait and owns a huge infrastructure. There are 22 resident companies in Sumgait Chemical Industrial Park, which include Galenka Azerbaijan LLC, Archi Glass LLC, Nexus Labs LLC, LabDisc Azerbaijan LLC, SumPlast LLC, SOCAR

Urea Plant, Tabaterra JSCC. , STP LLC, “Azerkhalcha” LLC, “STDC” LLC, “Alco” LLC, “Agro-chemistry” Azerbaijan LLC, “MST Engineering Services” LLC, “SIKA” LLC, “Baku Non-ferrous Metals and Ferroalloys” LLC, SOCAR Polymer, Azerbaijan, FIBRO Cement, Azerfloat JSCC and Azertechnolin LLC. Despite the fact that there are quite a few resident companies in the area that are not resident of Sumgait Chemical Technology Park, many of these companies are listed as exporters in the Export Review Report 2019 of the Center for Analysis of Economic Reforms. Socar Polymer LLC is listed as one of the major state-owned non-oil sector exporters and its revenues were \$69.8 million for a year.

## **2.2. Balakhani Industrial Park**

Balakhani Industrial Park was established by the decree of the President of the Republic of Azerbaijan on May 4, 2011. The Park operates under the subordination of “Tamiz Shahar”. The purpose of the park is to enable recycling companies to invest in recycling businesses in the park and to be responsible for their business activities. Companies that are resident in the park are exempt from import duties for 7 years from taxes and goods imported to the park for production purposes. In addition, the state has a single infrastructure. The park covers 7 hectares. According to the “Innovation activity: technology parks, industrial parks” section, 5 residents have been registered in the park and invested 210 million AZN (2018, p. 20). However, as the park lacks detailed and precise information on its activities, it is difficult to say what the park's role is to increase the non-oil sector's export potential in Azerbaijan. According to the Azerbaijani industrial portal, 14 residents are registered in the park which includes "Ekokat" LLC, "Az.Ekol" LLC, "MET-AK" LLC, "Foriella" LLC, "Bioropean" LLC, "Altura Group" LLC, "Alphapack" Azerbaijan, Carboza LLC and MET-AK LLC.

## **2.3. Garadagh Industrial Park**

The Garadagh Industrial Park was established by the decree of the President of the Republic of Azerbaijan dated July 3, 2015 and covers 72 hectares in the Garadagh district. There is only one resident in the area, which is the Baku Shipbuilding Company. The plant will be engaged in the creation of various types of ships and naval installations. Although it is difficult to find information about the export indicators of the Baku Shipbuilding Company, the preparation and sale of ships in the future may affect the export potential of the non-oil sector. Established jointly with SOCAR, the Azerbaijan Investment Company and Singaporean company, the plant is highly valued in the export of industrial products for the future development of the non-oil sector. The future success of this park depends on exports.

## **2.4. Pirallahi Industrial Parks and Mingachevir Industrial Park**

Pirallahi industrial park was established in 2016. Currently, there are 4 residents in the park and the area of the park covers 30 hectares. These residents are Hayat Farm LLC, Diamed Co LLC, Caspian Pharmed LLC and IFFA LLC. The Mingachevir Industrial Park was also established by the President of the Republic of Azerbaijan in 2016 and has 1 resident company in the park with a total area of 14.8 hectares. Mingachevir Textile LLC is a resident of the park and is engaged in spinning.

## **2.5. High Tech Park Azerbaijan and Mingachevir High Technology Park**

Both the High Tech Park Azerbaijan and the Mingachevir High Technology Park were established in 2012 under the current Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan. The purpose of creating parks is to attract high tech companies from Azerbaijan and the across different countries to offer tax benefits. High Tech Park located in Pirallahi. Because of its inability to build infrastructure, having a resident, achieving any income sources, it did not produce even significant results.



The issues mentioned for Mingachevir High Technology Park are typical. In 2018, considering the parks' inactivity, both parks were cancelled and transferred to the Innovation Agency Azerbaijan under the Ministry of Transport, Communications and High Technology. Despite all the work done, both parks remain inactive due to the remoteness of the parks, lack of infrastructure and improper management of their activities and export potential of the country's non-oil sector.

## **2.6. The High Technology Park of ANAS**

The High Technology Park of ANAS is a park created in 2016 by the order of the President of the Republic of Azerbaijan. There are currently 10 resident companies in the park, which include ANAS Experimental-Industrial Plant LLC, Millers Oils Azerbaijan LLC, Science and Technology Park LLC, EPC Group LLC, DN Technologies LLC, Algorithmic LLC, Azeltech LLC, Burmon Armor, Azmonbat and InCor. The activities of the companies operating in the High Technology Park of ANAS are limited and do not produce active income for Azerbaijan.

## **3. FINDINGS AND MAIN RESULTS**

The main characteristic of techno-parks in Azerbaijan is that they are mainly subordinated to the ministries and other agencies. In many cases their financial income sources are not developed. Some technology parks are located far from the city, where infrastructure opportunities and distance make it unattractive to both local and international businesses. In addition, the international links of techno parks remain weak and have almost no contact with global companies. All these indicators limit the access of Azerbaijani technology parks and their residents to the world market and reduce their opportunities for expansion. Various tax benefits have been applied within the area Azerbaijani technology parks for a period of seven years, which does not appear to be a major attraction for international companies. The State Program for the Development of Industry in the Republic of Azerbaijan for 2015-2020 states that the main purpose of the industry is to increase the competitiveness of industrial facilities and their access to international markets. The key actions undertaken by the Government of Azerbaijan to promote the industry are to promote investment, improve the business environment, strengthen international trade and exports, provide human resources and capital, establish industrial and technological parks, promote regional technology transfer, and promote innovation. The most important of the above activities is to provide technology transfer and to promote critical innovation. At the same time, the program states that innovation promotion programs must be implemented in techno parks of Azerbaijan. It should be noted that the level of research and development capacity of Azerbaijan must be strengthened at this time. Technology transfer, enhancing local technological capabilities, technology transfer, improving the skills of small and medium-sized businesses and, ultimately, supporting startups in high- and mid-level technology sectors are at special interest of Azerbaijani government. Furthermore, the program shows that the capacities and logistics of industrial parks should be strengthened and new parks should be built. The document emphasizes that strengthening industrialization and establishing technology parks would have a positive impact on the export potential of the non-oil sectors. In addition, the use of innovative technologies in established industrial enterprises and special zones in Azerbaijan is encouraged. The establishment of industrial infrastructure in the country will remain one of the key areas for the development of the non-oil sector. It is almost certain that in the future, the basis of industrialization policy in Azerbaijan will be a matter of passing industrial parks in each economic zone. In these zones, production and export of knowledge-based products will be considered as one of the most important factors. Generally, the technology parks in Azerbaijan for now are quite limited in their ability to increase the export capacity of the non-oil sector, and the companies operating in these parks cannot produce the non-oil exports.

The main problems are that industrial parks are lagging behind advanced parks at the global level and international cooperation remains at a very low level. There are still problems with the management of industrial parks and the ease of access of companies to these parks must be simplified. Involvement of international companies in technological parks remains a serious problem. The infrastructure and technical base of the parks remain poor. The activities of some parks overlap, which increases public spending on the maintenance of parks. Here, in order to enhance the operation of parks, it is necessary to combine and integrate the overlapping parks and build their activities in accordance with international standards. In addition, there is a great need for technical cooperation with universities and at the same time attracting international companies to the parks for proper operation of parks. These would significantly enhance the activities of the parks. Almost no industrial park has a significant impact on the non-oil sector, but the infrastructure established at Garadagh and Sumgait Chemical Park looks promising in the future. In short, the role of technology parks and industrial parks in the activities of the non-oil sector is weak, and does not affect international export indicators of Azerbaijan. In addition, President Ilham Aliyev underlined the importance of implementing innovations and high technologies in all institutions in the development of the non-oil sector as a result of several reforms implemented in the country in 2019. In order to increase agricultural productivity and export, new technology parks and business acceleration programs are being established in Azerbaijan, the most important of which is the AgroX program. The main partners of the program are the Agrarian Science and Innovation Center under the Ministry of Agriculture, Innoland Business Acceleration Center, Startup Azerbaijan and Azerbaijan Internet Forum. “The main objective of the AgroX Program is to help increase productivity in the agrarian sector through the use of innovations and digital technologies, to improve agrarian management, and to make more effective and flexible decisions” (AgroX Program). The launch of this program is one of the factors that will prove successful in the future. There are business acceleration centers along with techno parks in Azerbaijan, which actively support SMEs and startups. These types of acceleration centers include AgroX, Barama Center for Innovation and Entrepreneurship, and the New Idea Accelerator program, which helps develop serious businesses. Unlike technology parks, their logistics and infrastructure, the location of their offices in the city center create better opportunities for businesses and startups. Leaving Azerbaijan without growing businesses and leaving larger markets remains a problem. Although the establishment of such centers in Azerbaijan is a new trend, how much they will benefit the future of the non-oil sector, but today they play a very important role in the creation of startup businesses, skills development and encouraging people to start new businesses. It should be noted that the parks did not play a significant role, despite emphasizing the importance of the non-oil economy in Azerbaijan to increase exports. In the future, parks will need to be primarily focused on capacity building and management development. At the same time, it is an indisputable fact that despite the large investment of Azerbaijan in industrial and technological parks, the effectiveness of these investments is questionable. As important as the establishment of technology parks, it is also necessary to pay close attention to the control and efficiency of their operation. Techno parks have been funded mainly by the state, resulting in a failure to attract global companies' interest in technology parks. Despite job creation and public investment, industrial and technological parks have not significantly affected the export potential of the non-oil sector. As the area is new, it should also increase its capacity and expand its infrastructure, along with the creation of new parks. In addition, the activities of technoparks should be more organized and optimized based on international experience. Preliminary research on industrial parks shows that they have not played a significant role in the export potential of the national economy, and therefore should be strengthened.

#### **4. CONCLUSION**

This paper assessed the role of industrial and technology parks in the development of non-oil sectors in Azerbaijan. The main conclusion of this paper is that despite the fact that Azerbaijan has invested many funds in terms of building and development techno and industrial parks, they have not contributed much to the international non-oil export indicators of Azerbaijan. This is due to the fact that techno parks' activity has been limited locally, their infrastructure is impoverished and management experience is ineffective. Most techno-parks have overlapping in their activities, and therefore, they have to be merged and management should be improved. Global business connections must be built to produce robust results in the future.

#### **LITERATURE:**

1. AgroX Program, available at <http://agro.startup.az/>
2. Center for Analysis of Economic Reforms (2019) "Export Report" November №11 (32), available at [http://iqtisadiislahat.org/store//media/documents/ixrac\\_icmali/2019/11\\_Export-Review-2019.pdf](http://iqtisadiislahat.org/store//media/documents/ixrac_icmali/2019/11_Export-Review-2019.pdf)
3. Economic Research Institute for Economic Reforms (2018) "Innovation Activities: Techno parks, Industrial Parks", Baku.
4. Industry portal of Azerbaijan, (2014) available at [http://senaye.gov.az/en/senaye\\_zonalari/parks](http://senaye.gov.az/en/senaye_zonalari/parks)
5. Rodriguez-Pose, Andres, Hardy, Dan (2014) "Technology and Industrial Parks in Emerging Countries, Panacea or Pipedream?" Springer.
6. The State Program for the Development of Industry in the Republic of Azerbaijan for 2015-2020 (2014), available at [http://senaye.gov.az/en/normative\\_programs/industry\\_development](http://senaye.gov.az/en/normative_programs/industry_development)

## CURRENT STATE AND REGULATION OF THE EXTERNAL PUBLIC DEBT OF AZERBAIJAN

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### **ABSTRACT**

*The problems associated with the management and regulation of external public debt of Azerbaijan, as well as with the choice of the right debt policy, have always been relevant. Since, their successful solution leads to macroeconomic stability in the country. This article focuses on the current state of Azerbaijan's foreign public debt. The article analyzes the development, dynamics and structure of the external public debt of Azerbaijan. In addition, were considered modern methods of managing external public debt. For the main objectives of the study, we took the study of the socio-economic aspects of the external public debt of Azerbaijan and their features, as well as the assessment of signs that affect the amount of debt. From the point of view of the research methodology, the following was carried out: generalization, grouping, systemic relation, statistical analysis, econometric analysis and moderation. The methodologies used in this article are based on econometric methods. Since Azerbaijan is an exporter of raw materials, price fluctuations in the global oil market are one of the signs that affect some economic indicators, and especially external public debt. Which in turn, through the creation of fluctuations among other signs affecting debt, leads to certain restrictions. The presence of a statistical and econometric analysis of the features that affect the volume of Azerbaijan's external public debt, as well as the determination of their dependence on the state budget, monetary, credit and currency policy, made up the originality and novelty of this study. As a result of the study, an assessment was made of signs that affect external public debt. The practical significance of the study was the study of external public debt, its management, regulation and its application in choosing the right debt policy of the state.*

**Keywords:** *foreign public debt, state budget, monetary and monetary policy, GDP, oil prices*

### **1. INTRODUCTION**

And in the Republic of Azerbaijan, public debt is one of the main indicators characterizing the firmness and stability of the country's financial and credit system. Recently, the growth of external debts both in our country and throughout the world as a whole has made the study of these issues relevant, and has become the reason for the need to clarify their significance and content. At present, external debt is an urgent problem for Azerbaijan. An objective opportunity to pay external public debt is the main point of stability of the country's economy. The level of interest rates, the rationality of the state property budget, the stability of the currency rate within the country, and the processes for attracting investments depend on how well the country is managed and what decisions are made to pay off external debt. This means that when drawing up the state budget, government bodies must take into account the optimal amount of the country's external public debt. Public debt is the aggregate of debt obligations of Azerbaijan to individuals and legal entities; municipal authorities; foreign countries; international financial organizations; as well as debt obligations arising on the basis of the state guarantee given by Azerbaijan. External public debt is debt denominated in foreign currency:

- Amount of debt on government securities;
- Amount of principal debt on loans received by Azerbaijan;
- Amount on debt obligations based on state guarantees of Azerbaijan.

Now the economy has two goals: to develop the financial market within the country and to direct funds to reduce the deficit in the State Budget. If external public debt is large, then most of the budget is allocated for these purposes. For the same reason, there is a decrease in spending on social needs, on the development and expansion of production within the country. And this affects the standard of living of the population. Thus, there is a slowdown in the country's economic growth. The country's external public debt has both positive and negative effects on its national economy.

The positive effect consists of the following:

1. A great benefit for the country is that the funds taken from the debt can be directed to the state budget, while maintaining the relative amount of debt;
2. A budget deficit in the country leads to an increase in public debt, while a surplus, on the contrary, makes it possible to pay off the growing debt. This means that if a country has sustained economic growth, the budget revenues are growing, which in turn makes it possible to pay interest on public debt.

Negative effect consists of the following:

- As the country's external public debt grows, the government is forced to prevent investment in the national economy;
- The increase in external debt leads to a decrease in political freedom, including a large dependence of local finance on international finance;
- External public debt, like any other debt, must be repaid along with interest.

The country's external public debt can be managed with the help of such tools as conversion, obtaining funds in debt on preferential terms, and debt restructuring. The conversion consists of a partial replacement of external debt with national assets. A positive feature of this tool is that the country's external debt can be converted into shares using investment funds. Borrowing funds under preferential terms is beneficial only to those who have great benefits. In this case, the debtor country must have large reserves of gold. Restructuring consists of changing any debt service conditions. Currently, the Azerbaijani government is going to apply restructuring in relation to the external debt of the state. At present, in the presence of external debt restrictions, we can advise the following directions of Azerbaijan's debt policy for managing public debt:

- Keep the state's external debt level safe for the economy;
- Need to spend as rationally as possible the funds raised through external debt;
- Try to pay the foreign debt of the state with foreign currency associated with the national currency at a low exchange rate;
- Increase the competitiveness of local products and reduce the dependence of the economy on oil and gas revenues.

The external debt of the state is a heavy burden for the national economy of the country, since a significant part of the state budget money is spent on its repayment. All this slows down economic growth in the country, which means that there may be a reduction in national production. The constant increase in the country's debt, in fact, leads to its transition to the next generation.

## **2. THEORETICAL FOUNDATIONS FOR EXTERNAL DEBT REGULATION IN DEVELOPING COUNTRIES**

It should be noted that despite the fact that programs for the restructuring of external debts in the world have been carried out since the late 80s and early 90s of the last century, the total amount of external debt in developing regions of the world has increased sufficiently. Most poor countries in the world (countries with a large external debt) have a constant external debt, and

this debt is directly related to programs aimed at alleviating the condition of these poor countries. Since low-income countries are part of poor countries with large external debt, there is a relatively stable increase in the external debt of these countries. However, along with this, when it comes to middle-income countries, it will not be a mistake to state that external debt has again become a problem that causes serious concern. A long-term economic phenomenon - external debt - has three main activities:

- Reinhart, Rogoff and Savastano, [2003] support the idea of “debt intolerance” that in countries with weak financial intermediation and high levels of tax evasion, default is not an exceptional, but rather a natural phenomenon.
- Eichengreen, Hausmann and Panizza, [2003] put forward the “original sin” approach. They noted that the endless problems of developing countries with external debt are associated with “global imbalance”.

These two noted ideas can be quickly generalized into two questions:

1. Why are debt intolerant countries forced to borrow a lot? ("Debt intolerance");
2. How do they borrow? ("original sin").

Finally, such versatile international institutions as the World Bank and the International Monetary Fund have their own peculiar views. These institutions did not work out and prepare a theoretical approach, but only an empirical analysis. Moreover, their strength (duration) assessment data was accepted by all. The reason for this is their fears regarding the problems of acceptability and satisfactoryness of foreign debt. IMF staff paid more attention to strength (duration). Employees of the IB tried to classify countries according to the level of their foreign debt and per capita profit. The main objective of this document is a comprehensive empirical analysis of the latest trends in the foreign debts of developing countries. The second part gives a brief idea of the main and, including, the final approach, which will help us understand and master the basic characteristics of the phenomenon of foreign debt, to which developing countries are exposed. Their main intention was to discuss the ultimate development of sovereign debt profiles. Because they drew attention to the approach of "original sin." The third part presented empirical data on the ultimate development of existing foreign debt in developing countries. The fourth part briefly discusses the intervention of multilateral International Institutions in discussions on sovereign debt. According to the views of some researchers (Eichengreen, Hausmann, Panizza, 2003), if a state cannot borrow from abroad in its own currency, it suffers from “original sin”, and this is a developing state, as it accumulates foreign debts, faces currency mismatches on its own balance sheet. The structure of foreign debt - in particular, the level of nomination of a given debt in foreign currency - is the main factor for determining the credit rating of countries, stability of output, volatility of capital flows, and management of exchange rates. The “original sin” approach is connected with the consequences of the debt. The economies of developing countries are quite prone to default. For example, according to the studies of Esteves (2005) and Holland (2005), of the 43 defaults that occurred in the 1820-1913s, 34 occurred in these countries. In 22 countries, foreign debt was calculated mainly in the currency of 5 economically developed countries. The reason for this was borrowing in foreign currency. On the other hand, from the point of view of investors, this global historical phenomenon implies restrictions on portfolio diversification. Thus, it can be said that the size of the state matters, and the ability to borrow from foreign countries in its own currency is, to a large extent, inherent in large states. The authors analyzed some factors related to the “original sin” - credit and money reliability, financial fundamentals, managerial measures, the size of the financial system, capital flow control, etc. - and stated only a weak correlation between them. In addition, you need to know what is important for the concentration of the global portfolio in several currencies.

This means that the possibilities of diversification, while adding the costs and risks of each of the currencies, are faced with a decrease in marginal rationality. Suppose that each of countries A and B has its own currency (M and N, respectively), and each currency adds profitability and risks to a specific portfolio composed of these currencies M and N. However, according to the significant problem of “original sin”, the model implies different measures for each country (measured in GDP, trade or domestic credit): M - from a large economy, N - from a small one. “Primary sin” implies asymmetry not only in size, but also in terms of diversification; and each currency (or assets indexed in that currency) carries special risks and profitability. However, the risks of their portfolio are growing depending on the value of the transaction and the addition of the currency of the smallest country. In addition, the biggest economic risk is only the expected currency risk. Thus, for a “large economy” the investor will not be inclined to maintain the currency of the “small economy”. Although for a small economy, investors easily save foreign currency. In this case, developing countries are faced with hard struggle and competition when trying to add their own currency, which is the last participant in their international economic game, to the international portfolio. Hausmann and Panizza (2003) indicate that 87% of debt instruments issued in three major currencies (US dollar, euro and yen) are interest paid by local people, and residents of these countries issue 71% of all debt instruments. The international capital market was considered the root cause of recurring debt cycles and the offer of mechanisms for raising even more funds in debt to developing market countries. However, the main problem of these countries is the problem of borrowing even less. Studies show that non-paying countries borrow more than solvent countries. From a historical point of view, there is a large correlation in the “original sin” from 1850 to the present day. Hausmann and Panizza (2003) also analyzed aspects that explain the determinants of “original sin”. Currency bonds issued by emerging economies can be divided into three components:

- safe interest rate. It can be commented as a non-risky interest rate repaid by bonds of developing countries;
- currency risk;
- sovereign or credit risk.

The authors correctly believe that there is a positive correlation between currency risk and sovereign or credit risk, however, they do not mention the presence of a causal relationship between them. Is higher currency risk causing higher credit risk and vice versa? Investors are interested in optimizing the connection between risks and returns, based on forecast indicators. Later, when concluding an agreement with bonds of a small country, they receive ex-post interest rates, which at least should be equal to the stable interest rates offered by bonds denominated in foreign currency. And to this is added the expected devaluation of the local currency. Chamon and Hausmann (2002) note that in emerging markets (small economies), Central Banks prefer currency stability and therefore suffer from high volatility in interest rates and bankruptcy expenses. At the initial stage of the bond issuance process, lenders note the level of discount, taking into account the following:

1. The expected devaluation of the currency of a small country;
2. The right to lend in local currency at an ex-post rate.

Unlike interest rates in foreign currencies, this is compared with operating expenses for the separation of wealth in emerging markets. If the Central Banks of emerging market economies are trying to stabilize the exchange rate even at the cost of high domestic volatility in interest rates, the second aspect is more important in assessing the initial state of the future yield of bonds of emerging market economies. Chamon and Hausmann (2002) believe that if the increase in the interest rate required to maintain the exchange rate at a certain level is even higher than the damage function that led to the Central Bank’s bankruptcy and the level of

shock correspondence between the two instruments, then the Central Bank takes a categorical decision. They confirm this through an empirical study of the volatility of the exchange rate in Latin America in 1994-1999. Calvo and Reinhart (2002) consider them right, however, the choice is distorted due to the fact that most of these economies are in a stable exchange rate regime. In this case, it would be better to determine whether or not the level of volatility of interest rates is high and how much interest rates are relative to the exchange rate. The model can be generalized in order to take into account the attempts of monetary government bodies to prevent excessive exchange rate volatility and, at the same time, can cover the transition from high exchange rate devaluation to domestic inflation. In this case, the country may experience difficulties from “fear of a floating exchange rate”. However, as suggested by Chamon and Hausmann (2002), countries that borrow domestically in foreign currencies or at long-term interest rates will be countries whose Central Banks prefer exchange rate stability and that suffer more from high volatility and bankruptcy. Perhaps this is another, different description of “original sin.” Frankel and Wei in their study (2004) make it clear that if the “original sin” approach is correct, some countries will not be able to borrow from abroad in their own currency and will suffer from imperfections in the global financial market or currency mismatch. If the country's external debt is presented in foreign currency, a decrease in the real exchange rate will make it difficult to service this debt. Foreigners who know that the shock that affected the real exchange rate will weaken the country's ability to service debts are less likely to lend. And since the real rate tends to strengthen in good times and to weaken in bad times, it can reduce the willingness to lend. And thus, noting the cyclical nature of the flow of capital, they noted the difficulty of servicing foreign currency debts in difficult times. On the other hand, when there are short-term debts and the expression of external debt in dollars, crises are more frequent and more serious. And if the approach of “original sin” is correct, the following question arises: what are its determinants? Or, in other words, what determines abroad which countries borrow in their currency and do not take long-term debts within the country? Among several possible determinants, it is necessary to take into account the importance of financial market institutions, confidence in domestic money (Jeanne, 2002), financial solvency (Corsetti and Mackowiak, 2002), unsatisfactory capital markets (Chamon, 2001), and the exchange rate regime (Calvo and Reinhart, 2002). Hausmann and Panniza (2003) found that a country's GDP, trade, and domestic credit play a large role. That is, the incentives for large economies to keep currencies issued by small countries are limited. However, if it really becomes possible to classify countries according to the World Bank classification in terms of their external debt, can some countries achieve a significant reduction in their debt burden due to continued growth and lower interest rates? Will debtor countries be able to improve their classification for the better by pursuing internal (monetary or fiscal) policies in an economically significant period of time? In other words, can developing countries move to a solid path to reduce their external debt independently?

### **3. ANALYSIS OF FOREIGN PUBLIC DEBT IN AZERBAIJAN**

In general, borrowing from internal sources rather than from external sources is more appropriate. However, in Azerbaijan, domestic debts make up a small part of government debt. And this is due to the insufficient development of financial markets in the country, including the securities market. For this reason, in countries with a strong economic system, a large share is made up of domestic public debts, and in countries with a relatively poorly developed financial market - of external debts. In Azerbaijan, the goals, which mainly use financial resources obtained through external debt, include the following:

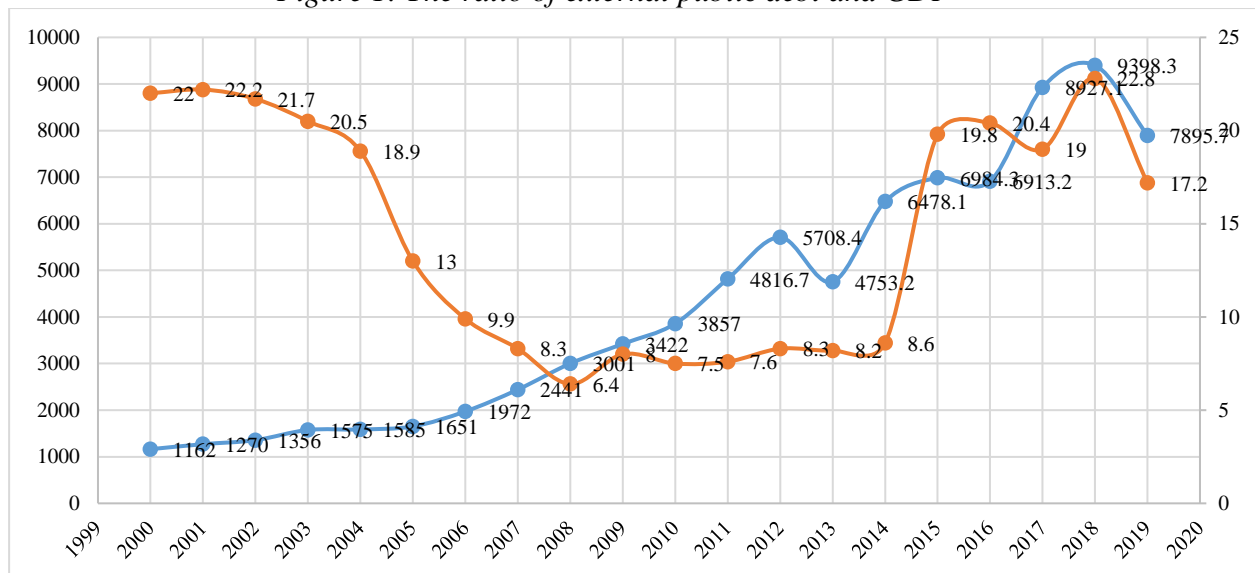
- Replenishment of the state budget deficit;
- maintaining the balance of payments, financing investment projects;
- import of raw materials, energy resources and other products;



- fulfillment of loan obligations related to state guarantees.

Our Republic, in order to transform its economy, after regaining its independence in 1991, first of all, in 1992, began cooperation with the International Monetary Fund and the World Bank, and took its first debt about two years later. After that, as a result of expanding its cooperation with a number of international and regional financial institutions, including the European Bank for Reconstruction and Development, Islamic Development Bank, Asian Development Bank, Japan International Cooperation Agency, over the past 15 years, it has raised funds from external debts for various projects. As in many countries of the world, the problem of debt management has recently begun to appear in our country. In this area, the main problem is related to the targeted use of borrowed funds. External public debt has constantly grown in proportion to economic development. The decrease was observed only in the 2014th year. After that, there was an increase until 2018, and in 2019, it again decreased. The ratio of external public debt to GDP decreased until 2008, in 2009 it increased, until 2014 it was relatively stable, in 2015-2016 it rose sharply and, until it decreased in 2019, decreased slightly in 2017 and increased again in 2018.

Figure 1: The ratio of external public debt and GDP



Million US dollars; The ratio of external public debt to GDP, in percent

However, the relationship of external public debt with a large number of macroeconomic indicators is important. Therefore, over the past 18-19 years, that is, from 2000 to 2018-2019, the dependence was studied and mathematical and economic models were built about this dependence of external public debt on a number of such macroeconomic indicators as: GDP in manats, dollars and euros; GNI in manats, dollars and euros; revenues and expenditures of the state budget; credit deposits in the economy; external and internal investment in the economy; investment in fixed assets.

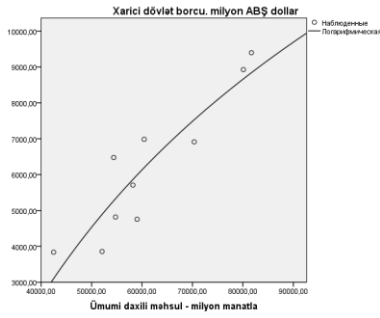
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*Table 1: Azerbaijan's external public debt and some macroeconomic indicators*

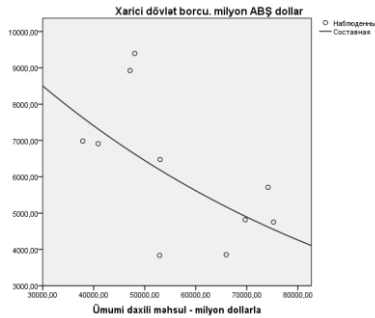
	External public debt, in millions of US dollars	The ratio of external public debt to GDP, in percent	GDP, in millions of manats	GDP, in millions of US dollars	GDP, in millions of euros	GNI, in millions of manats	GNI, in millions of US dollars	GDI, in millions of euros	State budget revenues, in millions of manats	State budget expenditures, in millions of manats	Credit contributions to the economy, in millions of manats	Foreign investment in the economy, in millions of manats	Domestic investment in the economy, in millions of manats	Investments in fixed assets, in millions of manats
2000	1162	22	4718,1	5272,8	5687,2	4633,5	5178,3	5585,2	714,6	764	466,4	829,5	460,3	967,8
2001	1270	22,2	5315,6	5707,7	6373,6	5180,8	5563	6212	784,8	807,5	486,2	1016,8	437,7	1170,8
2002	1356	21,7	6062,5	6235,9	6603,3	5873,9	6041,9	6397,9	910,2	931,8	520,2	2172,8	546,1	2107
2003	1575	20,5	7146,5	7276	6431,9	6899,2	7024,2	6209,3	1220,9	1234,5	670,3	3311	938,3	3786,4
2004	1585	18,9	8530,2	8680,4	6980	8025,5	8166,8	6567	1509,5	1502,1	989,6	4496,3	1324	4922,8
2005	1651	13	12522,5	13238,7	10603,3	11094,2	11728,7	9393,9	2055,2	2140,7	1 440,9	4628,5	2104,9	5769,9
2006	1972	9,9	18746,2	20983	16713,8	16502	18471	14712,9	3868,8	3790,1	2 362,7	4514,2	2901,4	6234,5
2007	2441	8,3	28360,5	33050,3	24126,3	24215,7	28220,1	20600,3	6006,6	6086,2	4 681,8	5727,2	4626,7	7471,2
2008	3001	6,4	40137,2	48852,5	33174	36012,5	43832,2	29764,9	10762,7	10774,2	7 191,3	5625,8	7702,2	9944,2
2009	3422	8	35601,5	44297	31738,9	32973,5	41027,1	29396	10325,9	10503,9	8 407,5	4395,1	6079,9	7724,9
2010	3857	7,5	42465	52909,3	39952	39922,2	49741,1	37559,7	11403	11765,9	9 163,4	6619,7	7499,2	9715,2
2011	48167	7,6	52082	65951,6	47377,4	48519,1	61439,9	44136,4	15700,7	15397,5	9 850,3	6849,8	10199	12776,4
2012	57084	8,3	54743,7	69683,9	54180,2	51644,7	65739,2	51113,1	17281,5	17416,5	12 243,7	8102,7	12148,3	15338,5
2013	47532	8,2	58182	74164,4	55826,1	55288,4	70476	53049,7	19496,3	19143,5	15 422,9	8269,3	13178,9	17872,1
2014	64781	8,6	59014,1	75234,7	56581,1	57322,4	73078	54959,2	18400,6	18709	18 542,6	9175,6	12715	17615,8
2015	69843	19,8	54380	52996,8	47785,6	52641,2	51302,3	46257,7	17498	17784,5	21 730,4	10998,9	9058,5	15957,0
2016	69132	20,4	60425,2	37862,8	34217,8	56794	35587,4	32161,5	17505,7	17751,3	16 444,6	16216,1	6490,3	14903,4
2017	89271	19	70337,8	40867,9	36213,7	67678,6	39322,9	34844,6	16516,7	17594,5	11 757,8	15697,3	8765,2	15550,8
2018	93983	22,8	80092	47112,9	39858,7	75956,3	44680,2	37800,5	22508,9	22731,6	13 020,3	14002,1	11874,9	17238,2
2019	7895,7	17,2	81681	48047,6	42906,4	-	-	-	24398,5	24425,6	15298,2	-	-	17184,3

*Source: www.stat.gov.az**Figure following on the next page*

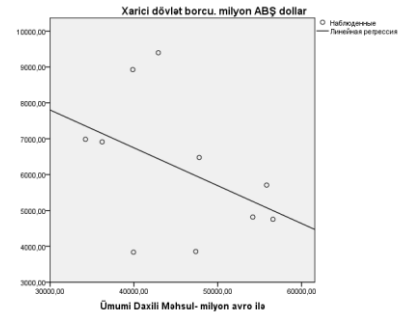
Figure 2: Dependence of external public debt on GDP in manats



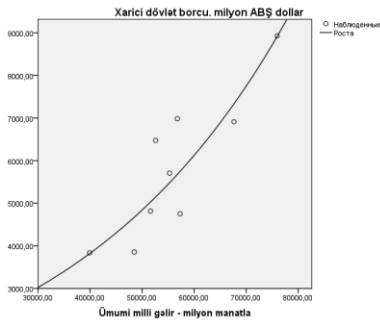
**Logarithmic**  
 $Y = b_0 + b_1 \ln(X)$   
 $Y = -904087,402 + 87748,751 \ln(X)$



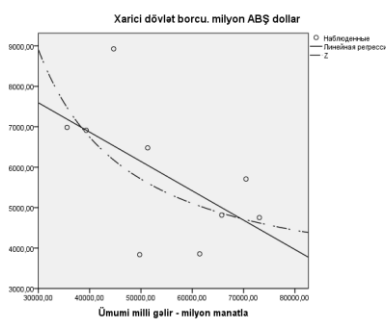
**Covered**  
 $Y = b_0 b_1^X$   
 $Y = 12878,319 * 0,999998^X$



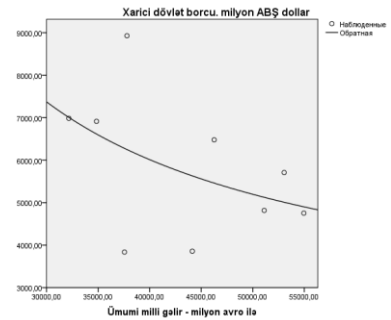
**Linear**  
 $Y = b_0 + (b_1 X)$   
 $Y = 10966,902 - 0,10550X$



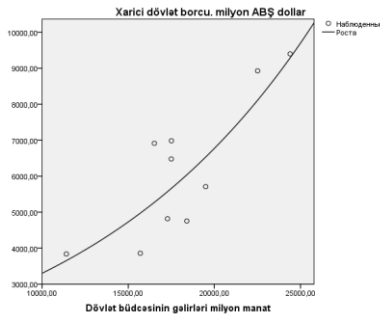
**Growing**  
 $Y = e^{(b_0 + b_1 X)}$   
 $Y = e^{(7,30814 + 0,0000235X)}$



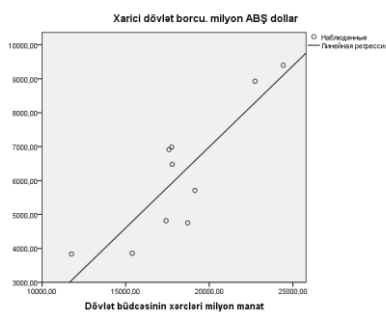
**S-shaped**  
 $Y = e^{(b_0 + (b_1/X))}$   
 $Y = e^{(7,98156 + (33383,727/X))}$



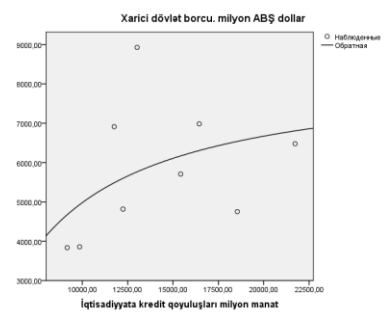
**Reversed**  
 $Y = b_0 + (b_1 / X)$   
 $Y = 1933,771 + (163135373,412 / X)$



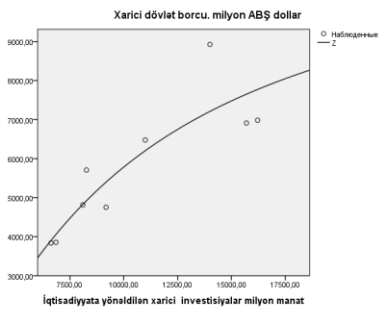
**Growing**  
 $Y = e^{(b_0 + b_1 X)}$   
 $Y = e^{(7,38386 + 0,0000718X)}$



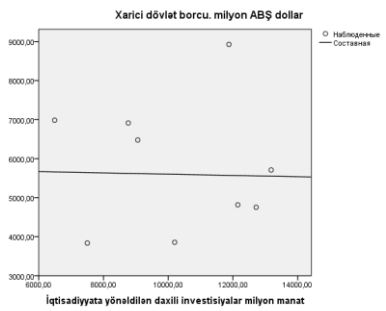
**Linear**  
 $Y = b_0 + b_1 X$   
 $Y = -2565,209 + 0,47792X$



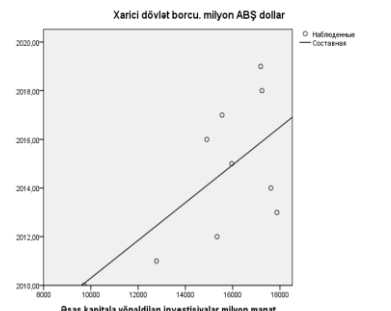
**Reversed**  
 $Y = b_0 + (b_1 / X)$   
 $Y = 8361,127 + (-33798040,032 / X)$



**S-shaped**  
 $Y = e^{(b_0 + (b_1/X))}$   
 $Y = e^{(9,43374 - 7709,090/X)}$



**Covered**  
 $Y = b_0 b_1^X$   
 $Y = 5766,610 * 0,9999970^X$



**Covered**  
 $Y = b_0 b_1^X$   
 $Y = 2002,576 * 1,0000003^X$

The above graphs were built to display the dependence of external public debt on GDP in manats (logarithmic), on GDP in dollars (covered), on GDP in euros (linear), on GNI in manats (growing), on GNI in dollars (S-shaped), from GNI in euros (reversed), from state budget revenues (growing), from state budget expenditures (linear), from credit investments in the economy (reversed), from foreign investments in the economy (S-shaped) ), from domestic investments in the economy (covered), from investments in fixed assets (covered).

#### 4. CONCLUSION AND DISCUSSION

In order to understand the problem of the debt crisis, we turned to many conceptual and theoretical elements. According to researchers, “debt intolerance” and even serial default are a common occurrence. Politicians should be prepared to support debt levels. In order to ensure the maintenance of public debt for a long time at a low level, they must carry out more fundamental structural reforms [Reinhart, Rogoff and Savastano, 2003]. With a focus on political thoughts on countries that do not allow debts, the unsatisfactory conclusion of the study is that as soon as a country becomes a stable payer, it maintains a high level of its debt intolerance. Otherwise, economic growth alone is not enough to allow countries to significantly reduce their debt burden. That is, the number of countries that do not allow debt obligations to arise should decrease. Moreover, limited entry into the international capital market should not be seen as a disease itself, but as one of the symptoms [Reinhart, Rogoff and Savastano, 2003]. On the other hand, the inability of some, especially developing countries, to borrow from abroad in their own currency, implies a lack of adequate opportunities for international risk sharing and makes the world a more financially risky place. An empirical analysis of the authors shows that internal reforms in the direction implied here or even taking into account various approaches, as such, will not be able to eliminate these problems. Thus, they propose creating a synthetic unit of measure indexed in inflation of the currency basket of developing countries, and, along with this, creating institutional mechanisms that stimulate the development of financial instruments related to this accounting unit, and also for this reason create incentives for investors to add this unit to their portfolios. IMF staff, while accepting external debt as a management issue, very accurately assess endurance. In this context, observations, including also a combination of macroeconomic forecasts, provide a wealth of information, such as a baseline scenario. In addition, using sensitivity tests applied to basic scenarios regardless of models, information about previous crisis situations and modeling methods, they offer endless sensitivity tests. At the same time, neither the history of inflation and default, nor the global imbalance play an important role in the analysis of sustainability.

We believe that the following proposals can be put forward:

- limiting the external debts of Azerbaijan; preparing a long-term strategy for the effective management of external debt;
- increased transparency in the use of borrowed loans;
- holding consultations with civil society in the process of preparing loan projects.

#### LITERATURE:

1. Calvo, G. and Reinhart, C. (2002). “Fear of floating”. *Quarterly Journal of Economics*. Vol. 113(3).
2. Chamon, M. and Hausmann, R. (2002). *Why do countries borrow the way they borrow?* Harvard: Harvard University. November 2002.
3. Chamon, M. (2001). *Why cannot developing countries borrow from abroad in their currency? (unpublished manuscript)*. Harvard University.
4. Corsetti, G. and Mackowiak, B. (2002). *Nominal debt and currency crises*. (unpublished manuscript). Yale University: Yale.

5. Eichengreen, B, Hausmann, R and Panizza, U. (2003). *Original Sin: the pain, the mystery*. University of California, Berkeley. August 2003 (unpublished manuscript).
6. Esteves, R. P. (2005). Sovereign debt and bondholder's protection in the European capital market before 1914. *Berkeley, UC. (mimeo)*.
7. Frankel, J. and WEI, Shang-Jei. *Managing macroeconomic crises; policy lessons*. (Draft Chapter for Managing volatility and crises: a practitioner's guide). March 2004. (unpublished manuscript).
8. Hausmann, R. and Panizza, U. (2003). "On the determinants of Original Sin: an empirical investigation". *Journal of International Money and Finance*.22 (2003) 957-90.
9. Holland, M. (2005). *External debt and debt intolerance: an empirical analysis*. Berkeley: University of California, Center for Latin American Studies (Unpublished Manuscript).
10. IMF (2002). *Assessing sustainability*. IMF: Washington, D.C. May 2002.
11. *IMF (2003)*. Sustainability assessments: review of application and methodological refinements. *IMF: Washington, D.C. June 2003*.
12. Jeanne, O. (2002). *Why do emerging economies borrow in foreign currency?* IMF: Washington, D.C. November 2002. (Unpublished Manuscript).
13. Reinhart, C., Rogoff, K and Savastano, M. (2003). "Debt Intolerance". *NBER Working Paper 9908*. Cambridge, MA: NBER. August 2003.
14. Reinhart, C., Rogoff, K (2004). *Serial default and the "paradox" of rich to poor capital flows*. NBER Working Paper 10296. Cambridge, MA: NBER. February 2004.
15. Reinhart, C. (2002). "Default, currency crises and sovereign credit ratings". *NBER Working Paper 8738*. Cambridge, MA: NBER. January 2002.
16. WORLD Bank (2004). *World Economic Indicators*. (On Line). Washington, D.C: World Bank.
17. *WORLD Bank (2004a)*. Global Development Finance: harnessing cyclical for development. *Washington, D.C: World Bank*.

## **DETERMINING THE MAIN METHODS AND EFFICIENCY ISSUES OF ASSESSING A COMPANY'S FINANCIAL CONDITION**

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### **ABSTRACT**

*The article reveals the importance of audit and financial monitoring to assess the financial condition of the company, determines the methods for conducting financial analysis. The possibility of revealing shadow cash flows in the management of the company's value is considered. The main directions of improving the financial condition of the company are proposed and their effectiveness is determined. The financial position of the company can be sustainable, unsustainable and critical. The financial status of the company directly depends on the results of its production, commercial and financial activities. Thus, successful implementation of the production and financial plan has a positive impact on the company's financial position. However, due to the lack of production and sale of the product, revenues and profits are declining, and as a result, company's financial position and solvency are deteriorating. In turn, the stable financial position of the company has a positive impact on the implementation of the production plan and ensures the provision of the necessary financial resources of the company.*

**Keywords:** *financial analysis, audit, financial monitoring, solvency, financial stability, shadow cash flows, company value*

### **1. INTRODUCTION - ISSUES OF ASSESSMENT OF THE FINANCIAL CONDITION OF THE COMPANY**

The concept of financial condition means the provision of the necessary financial resources and their targeted deployment and effective use, the establishment of mutual financial relations with other legal entities and individuals, as well as solvency and competitiveness for normal operation. In production, marketing and financial activities there is a continuous cycle of capital flows. The structure of financial resources and sources of their formation, the need for financial resources and their consequences changes the company's financial status, which is reflected in the company's solvency. The financial position of the company can be sustainable, unsustainable and critical. The financial status of the company directly depends on the results of its production, commercial and financial activities. Thus, successful implementation of the production and financial plan has a positive impact on the company's financial position. However, due to the lack of production and sale of the product, revenues and profits are declining, and as a result, company's financial position and solvency are deteriorating. In turn, the stable financial position of the company has a positive impact on the implementation of the production plan and ensures the provision of the necessary financial resources of the company. Thus, financial activity implies regular input and expenditure of funds, compliance with accounting discipline and the formation of an optimal balance between specific and borrowed funds and their more effective use as an integral part of production and economic activities.

One of the main criteria of the financial state of the company is the solvency of the company, which is the ability to pay long-term obligations. This means that the business entity is solvent, if the assets are larger in comparison with the obligations [1]. Solvency and liquidity are very close to each other, but liquidity is a broader phenomenon. Solvency directly depends on the liquidity of the balance sheet. Moreover, liquidity concerns not only the current situation in payments, but also characterizes the alleged situations. In other words, if solvency is an external financial situation that reflects cash and cash flows, incomes and expenses, cash and sources of their formation, then financial stability is its internal side. To ensure sustainability, a company must have a flexible structure capital and be able to organize movements in such a way that profits exceed costs and support the solvency and normal functioning of the company. Financial stability of the company is an important factor for analyzing the financial situation of integrated corporate structures, which indicates the reliability of investments in the enterprise. Management of the financial sustainability is an important task for top managers since the creation of an integrated structure to date. The main goal of financial sustainability is the formation of the company's behavior, which does not depend on foreign partners and the external environment. External financial sustainability creates the idea of paying off debts and liabilities of the company to various creditors and suppliers. Internal financial sustainability is rational coverage of the assets of integrated structures with sources of financing. Financial analysis, which is an important element of financial management and audit, is critical to the production and operation of the company. Financial analysis is the main method for assessing and forecasting the company's financial position based on an accounting report. Not only entrepreneurs and related service structures, but also investors are engaged in analyzing the financial condition of the company. For example, in order to assess the state of bank lending and determine the degree of risk, the tax inspector uses financial analysis to ensure timely receipt of funds to the budget by senders. One of the modern methods of investigating the causes and consequences of the economic crisis is the diagnostic analysis. Diagnostic analysis is a complex method for identifying the main causes of the disruption of the normal course of economic processes, as well as a tool for justifying management decisions to improve economic actors. It is necessary to provide company information for effective management of production and business activities, and its main component is information about the financial condition. Audit of financial results of production and economic activities of the company in a market environment is a prerequisite for making tactical and strategic decisions. The company's stable financial position is closely linked to tax liabilities and high tax risks, which in turn increases the role of the tax audit. Therefore, stakeholders want to get reliable and real information on the correct calculation of taxes. The purpose of the audit, which is a professional activity, is to provide the public, especially stakeholders, with quality accounting information about the company's activities. Audit is an independent inspection and advisory service for the proper preparation of auditor (financial) reporting by the auditor. The auditor should know the technology of checking the financial activities of the company and should be able to produce reasonable outcomes based on it and make substantiated recommendations for improving its financial situation. Previously, the term "monitoring" in scientific and practical studies was understood as the process of processing information about the environment, a system for monitoring and controlling changes in the economic activities of a person who is part of nature. In the process of developing market relations, the monitoring concept began to be used in the national economy [2]. At that time monitoring was considered as a process of assessing and forecasting the company's financial position in order to minimize the potential of the crisis situation in the economy and improve the efficiency of financial management by business entities. In modern economic research, monitoring is seen as an important tool for managing economic processes at macro and micro levels, including finance. Thus, V.V.Kovalev believes that the financial monitoring of the enterprise can be characterized as the main part of financial

management, and its key feature is the adoption of decisions on optimizing the balance sheet, attracting financial resources and justifying their placement, efficient organization of production activities based on strategic accounting information, flexible provision of information and other issues.[3]. A similar approach to financial monitoring is observed in the studies of M. Bakanov [4] and A. Serme.[5] V.V. Kovalev considers the analysis of accounting in the framework of financial monitoring of accounting and financial reporting, as it is possible to forecast bankruptcy with analytical coefficients and track changes in the company's cash flows. In our opinion, the concept of financial monitoring includes a consistent monitoring of the company's financial condition, an analytical assessment, an operational data collection, an analysis of key indicators characterizing the company's production and operations, and making management decisions on efficiency and improving the financial situation. Financial analysis and financial monitoring are two similar and at the same time different understandings. Thus, the concept of financial analysis, unlike financial monitoring, does not include the adoption of management decisions and an assessment of their effectiveness and simply serves as the basis for the adoption and execution of financial decisions. Thus, financial monitoring can be described as a system of continuous monitoring, analysis and forecasting of key indicators of financial and economic efficiency with a view to developing and adopting optimal management decisions and assessing their effectiveness. In companies there are certain losses and risks when using financial resources from the beginning of financial relations. The main causes of financial risk are unfavorable for the company's conditions, market parameters: the price index, interest rates and exchange rate fluctuations, as well as the fulfillment of financial obligations and repayment of debt on loans, etc. It is especially important to note the existing legislative framework among external factors that affect the level of financial risk. Thus, the regulatory framework, on the one hand, regulates the mutual economic relations between business entities and the entrepreneurial activity undertaken by them, reducing the financial risk. On the other hand, the legislative basis for business and taxation is constantly changing, which increases the risk in the company's production and operating activities. Cash flows are essential resources in the financial management system. The volume of cash flows varies from time to time depending on the volume of sales, accounts receivable, capital expenditures, the level of financing activities of the business entity, investment projects and other factors. The continuous movement of financial flows requires a constant monitoring of their ability to keep them balanced and synchronous. Thus renewing the question of providing quality information, which is also an important element of the financial risk management system [5]. Creation of information support is an important prerequisite for the establishment and functioning of the management system in the business. The indicators of cash flows in financial and operating activities are reflected in the "cash flow statement" which is included in the annual financial statements. The formation of a cash flow statement is beneficial both for entrepreneurs and for creditors. Thus, thanks to this report, entrepreneurs are able to use a profit-based approach to a policy of distribution of profits and use, and lenders have enough money to meet their obligations in a timely manner.

## **2. FINANCIAL MANAGEMENT OF FINANCIAL LOSSES OF COMPANIES**

Financial management of the company uses cost management that covers the wider use of production, marketing, innovation, management and financial methods that are in the process of developing and implementing the company's corporate strategy. It should be borne in mind that the financial method of managing the company's value is complex, integrated and has a direct impact on other methods. Large companies generally conduct commercial, innovative and financial transactions in national and international markets, as well as in markets in countries where their branches and subsidiaries are located. Consequently, large companies in the modern world have the ability to ensure the distribution of cash flows between several



countries. Company's value can not be calculated based on current and future cash flows on these aspects, but there is a synergistic effect between the cash flows in the corresponding direction that appear at different stages of the economic cycles. For example, in the 80s of the twentieth century, in a relatively volatile period of the world economy, its negative character was marked by a combination of various aspects of business development within one company, and the effect was called "conglomerate decline". In the 1990s, when the world economy developed, companies significantly increased their value, taking advantage of globalization [6]. As a result of diversification and development of international business, the synergistic effect was positive. The ability to detect shadow financial flows in the company's financial management is connected with ability to determine the influence of factors that increase the company's economic potential. In our opinion, the implementation of this issue is possible if the increase in the company's value occurs in the conditions of the downturn of the business cycle. The approach to cost management, taking into account the role of shadow money flows in increasing the company's value, should be based on taking into account the cyclicity of the world economy. The evaluation of the synergistic effect should be based on the discovery of factors and the analysis of financial methods that have the greatest impact on these factors. The choice of favorable market conditions for the placement of bonds and the issuance of credit resources on preferential terms, as well as the structure of the share capital and capital structure is determined by the implementation of an effective debt reduction policy through temporary payments of subsidiaries. Dividend policy of the company is crucial for managing the capital structure, so that the interests of its shareholders in the framework of its implementation should be fully paid, and dividends should be distributed among shareholders. From the point of view of offshore business, the parent company and the subsidiary can significantly reduce their profit tax using a scheme such as obtaining a loan from an offshore bank, since the interest rate on the loan goes to the bank without paying a tax. The application of this scheme allows the company to accumulate additional financial resources[8].

### **3. MANAGEMENT OF THE FINANCE COMPANY IN TERMS OF MAXIMIZING THE VALUE OF THE COMPANY**

The redistribution of value between business units of an international company can be considered as an additional factor of synergistic effect. However, it is difficult to assess the significance of this factor directly, since the direct income received from the redistribution of value is received by the subsidiary company. Therefore, in a synergistic effect, taking into account such redistribution results, it is required to subtract their results from the financial results of the subsidiaries. The discovery of the influence of shadow money flows on the formation of the company's value gives us grounds to speak about the existence of a risk of macroeconomic regulation inherent in its activities. This is reflected in the operating, financial and investment activities of the company, which is reflected in the negative impact of macroeconomic measures, as well as in the management of the company in terms of maximizing the value of the company. Regardless of the field of activity, each company seeks to increase the efficiency of productivity and competitiveness of goods, business and services based on scientific and technological progress, using progressive forms of management and production management. Solving this problem requires improving financial and economic activity. As a result, the tactics and strategy of the company's progress are developed, management decisions are made and its implementation is monitored, resources are identified for increasing the economic efficiency of production, the final results of the company's activities and its separate departments are assessed. In order to make effective managerial decisions, it is important for the manager and the entrepreneur to obtain high-quality information about the company's financial resources, their deployment and use, solvency, and receive quality information on mutual financial relations with counterparties and conduct

regular financial analysis. Due to the analysis of coefficients and financial indicators, the entrepreneur (the head of the company) can assess its competitiveness. Methods of analyzing the financial condition of the company allow you to clearly understand the relationship between costs and profits. To analyze and evaluate the financial and economic activities of the company, various types of coefficients are used.

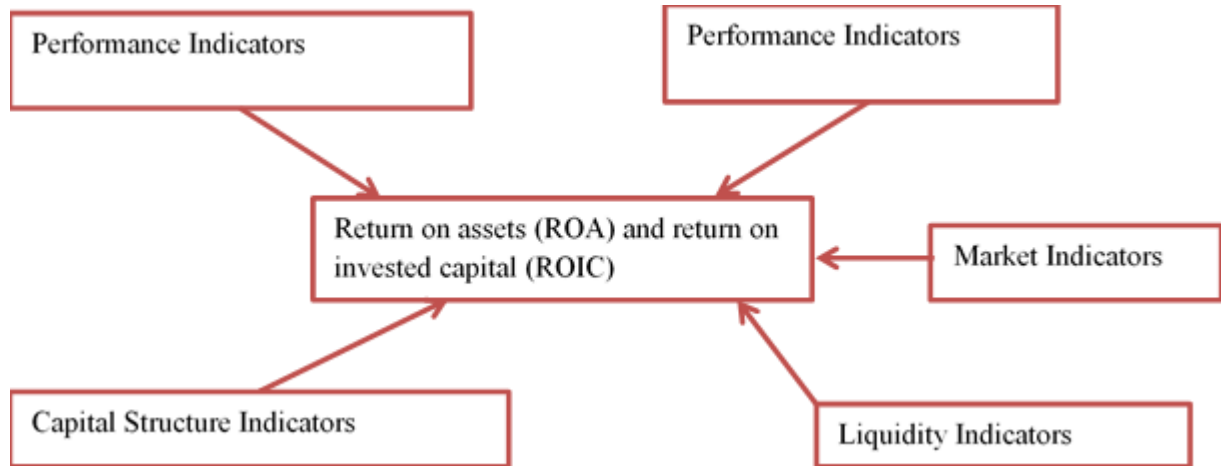


Figure 1: Relationship between financial indicators of the company

It is necessary to manipulate for the liquidity analysis of the balance sheet of the company

1. determine assets in accordance with their level:[7]
  - the most liquid assets;
  - quick assets;
  - slow assets;
  - hard-to-sell assets;
2. determine liabilities due to the urgency of payment:
  - the most urgent liabilities;
  - urgent liabilities;
  - long-term liabilities
  - continuous liabilities;

To determine the liquidity of the balance sheet, it is important to compare the results of the grouping of information on assets and liabilities.

#### 4. RESULTS, CONCLUSIONS AND RECOMMENDATIONS

The financial position of the company largely depends on the optimal ratio between private and debt capital. Studies show that from the point of view of the efficiency of the financial and operational activities of an enterprise, the optimal share of private capital in the total amount of financial resources can be adopted as 55-60%, and the share of borrowed capital as 40-45%. In fact, it is necessary to attract debt capital for more efficient use of private capital. To improve the company's financial position, it is necessary to act in accordance with the long-term development strategy and achieve the set goals. The company's development strategy proposes to solve the following issues step-by-step:

- sell unused fixed assets. Sales costs include commission for the sale of the agent. Sales costs include a commission for the work of a sales agent. In addition, the company is exempted from the cost of the services provided for the equipment, and refuses to rent the premises;
- Effective use of income from sales and debt repayment. Thus, enterprises should be exempt from bank loans and creditors' debts.

- To Identify key areas of the business and prepare and implement specific measures to achieve the goals.

After the sale of unused equipment, repayment of debts and liabilities of creditors, the company becomes a financially sustainable enterprise, has sufficient funds to expand its production and economic activities and significantly increases its profit.

## 5. CONCLUSIONS

- 1) When checking the financial performance of the organization, various methods and prerequisites for analysis are used, and audit information is used in the analysis of the company's production and operational activities. Financial analysis is one of the key areas of audit. One of the key functions of the audit is to provide consulting services on how to properly compile an accounting (financial) report to the firm that applied to it. Analysis of the financial position and financial performance of the enterprise, as well as the provision of consulting services is impossible without a comprehensive analysis of financial indicators.
- 2) Disclosure of information in the financial statements on the state of cash allows them to monitor their quality and manage financial risk. Granting to analysts interested in the activity of an economic entity accurate information about the cash flow situation allows you to understand the policy of managing cash flows and make an informed decision about investing in special funds.
- 3) Using a systematic approach to planning financial and organizational company's activities, it is necessary to predict the actual current situation with the activity, possible financial results and profitability of production on the basis of the amount of a specific debt. It is necessary to develop concrete measures to improve the financial situation, taking into account more effective use of special and borrowed funds.
- 4) The ability to identify shadow cash flows in financial management is due to an assessment of the impact of factors affecting the company's economic potential. If the company's value increases during the downturn of the business cycle, and if the cycle of increase in value occurs in the conditions of development, then this problem can be solved.
- 5) In the strategy for improving the financial condition of the company, it is necessary to take into account the optimal balance between special and borrowed funds and their more efficient use and specific measures to improve financial performance and profitability of production.

## LITERATURE:

1. L. E. Komaeva, M. R. Dzagoeva, Z. L. Dzakoev., Adaptive organizational structures of enterprise management in an unstable business environment: M.: INFRA-M, 2015-p.200
2. Kisalev M.V., Finance. M: Finance and Statistics, 2011-p. 507
3. Kovalev V.V., Financial management. M.: Prospect, 2011-p.504
4. Bakanov M.I., Audit in trade, M: Finance and statistics, 2014-p.416
5. Sheremet A.D., Bakanov M.I. Theory of Economic Analysis, M: Finance and Statistics, 2011-p.818
6. Slepov V.A., Ekimova K.V., Gromova E.I., Financial security of Russia. Bulletin of the Russian Economic University named after G.V. Plekhanov 2012-№3, p. 111-115
7. Journal "Economics and Entrepreneurship" Moscow, 2017, №2, p.1233
8. Damirov Yashar Rafael Oghlu, (ESD 2019): 37TH International Scientific Conference On Economic And Social Development - Socio Economic Problems Of Sustainable Development. Baku, AZERBAIJAN.: FEB 14-15, 2019.pp 295-302.

## IMPORTANCE OF MARKETING RESEARCHES IN FORMATION OF COMMODITY MARKET

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### **ABSTRACT**

*The article dealt with the increased role of marketing researches in formation of products market, also records were made about creation of alternative sale and distribution network in the sale of product and services, progressive methods of sales encouraging, increase of sale capacity and finally increase of profit. Naturally, the purpose of marketing researches consists of learning of existing condition of market and factors influenced to it, conducting of measures on their considering in the activity of company and hereby the decrease of uncertainty and risk level, also preparation of recommendations on coordination of company's opportunities with opportunities of the market and consumer demand. The principal duty of marketing researches is elimination of inexact information allowed in entire marketing activity, risk and all kinds of unproductive costs and losses. The importance of marketing researches is determined with uncertainty in market activity of company and increase of the level of risk factor as a result of aggravation of competition struggle in the market, constant change in consumers' purchase motivations and behaviors, unstable economic and social behavior of other market subjects, etc. Marketing researches are accepted as collection of information on its environment, use, analysis, generalization and preparation of recommendations on marketing activity. Correct preparation and realization of marketing strategy in this direction creates a condition for increase of market portion of company and being as a competitive company. Besides those said in the article, a comparative analysis of strategic and operative marketing is indicated and the information about functions and principles of marketing are stated in both approaches for firm. Also, it was emphasized that, marketing may be formed not only with finding of existing demand and substantial learning in spite of rival companies, but also it may be formed with new demand in consumers by means of integrated marketing communication. Moreover, the importance of this and other marketing researches and serving of these researches to consumer satisfaction was brought to the attention.*

**Keywords:** *marketing researches, consumer satisfaction, risk factor, strategic marketing, operative marketing*

### **1. INTRODUCTION**

Marketing is the activity of the company and separate persons oriented to learning of the customer demands and problems and meeting of these demands in order to obtain profit (benefit) or to achieve other goal. As an economic process, it covers operations such as learning of customer demands, purchase motives and behaviors, preparing of products conforming to them, their sales and organization and implementation of postsale service, also determination of price of the manufactured products. Marketing performs a process such as learning and meeting of the customer demands, including formation and stimulation of the demand. In general, the long-term strategic purpose of the company and marketing is to obtain profit subject to meeting of the customer demands and considering the interest of other market entities. Each company has its own approach and view to conduct and use the marketing researches. Some companies constantly follow the change of marketing environment in order to control over market situation and marketing activity and conduct the marketing researches, and some of

them use marketing researches only when certain problems arise in the marketing activity or there is a need to make important decisions in regard to marketing activity. Therefore, the conducting of marketing researches consists of setting the issues and determining the goals, selecting of research projects and methods, selecting of the methods for collection of information and stages for collection and analysis of information.

## **2. MARKETING AS A MARKET MANAGEMENT CONCEPTION**

- 1) Marketing – is advertising, sales encouraging and delivery of products and services to consumers, in other words, it is a complex of sales instrument used to penetrate existing markets. It is seen as an activity that is more commonly used in the market of consumer products and less applied in the financial services, public and local management, public and cultural organizations in the first approach. As a whole, marketing is interesting for any field of activity [4].
- 2) Marketing is a complex of different means of market's analysis tools - methods for predicting of sales capacity, imitation models and market research applied profoundly to analysis of need and demand in scientific approaches. Most of these methods are expensive and complicated, therefore, it is applied in great companies in the most cases, it is not accessible for small and middle firms.
- 3) Marketing is active advertising, consumer is an architect of the society, i.e. it is management system of market subjecting natural persons to commercial exploitation by sellers. Marketing is establishment of advantageous relations with consumers [1].

In general, we see that, market economy is based on four provisions. Although the provisions are seen simple at the first glance, but their result is large from the standpoint of approach to market:

- Individuals try to get a premium and to be requited: just, it incites the people to achieve to labor and results. This desire is motive force of individual development and ultimately determines the general welfare.
- Individual selection: individual selects the premium. The premium depends on taste, culture, values, etc. Except ethical, moral and social norms, no rules are applied in relation to profitableness or insignificance of this selection or division of demands into “real” and “false” demands.
- Other individuals and organizations, with whom individuals have relation, achieve their goals better by means of free and competitive exchange. The exchange is free when it gives a benefit to both parties: a competitive character of exchange shows itself in the limitation of threat of abuse of market supremacy by manufacturer.
- The basis of the mechanism of market economy is a principle of individual liberties or more precisely, the principle of consumer sovereignty. The moral foundation of the system constitutes the fact that, each individual is responsible for his or her own activities and determines what is good or bad.

Marketing is based on these four principles. Hence, philosophy of action having certain influence force in each organization serving the demand of any consumer group appears. All action fields of marketing may be divided into three spheres:

- Consumer marketing - transactions are performing between company and the last consumers, natural persons or family economies;
- Business-like marketing - here, organizations represent both parts of exchange;
- Social marketing: covers activity of museums, universities and other non-commercial organizations.

It is concluded from this approach that, the main purpose of all activities carried out in the organization shall be securing of consumer demand, provided that, it will be the best method for achieving the purpose in the field of progress and profitability of the company. The application of the above mentioned philosophy of action by company in practice stipulates two approaches (Table 1). The purpose of strategic marketing combines systematic and uninterrupted analysis of needs and demands of the principal consumer groups, preparation and manufacture (rendering of service) of product. It gives an opportunity to consumer groups or segments selected for campaign to serve more effectively than competitors. By achieving this purpose, enterprise provides the priority of self-sustainable competition.

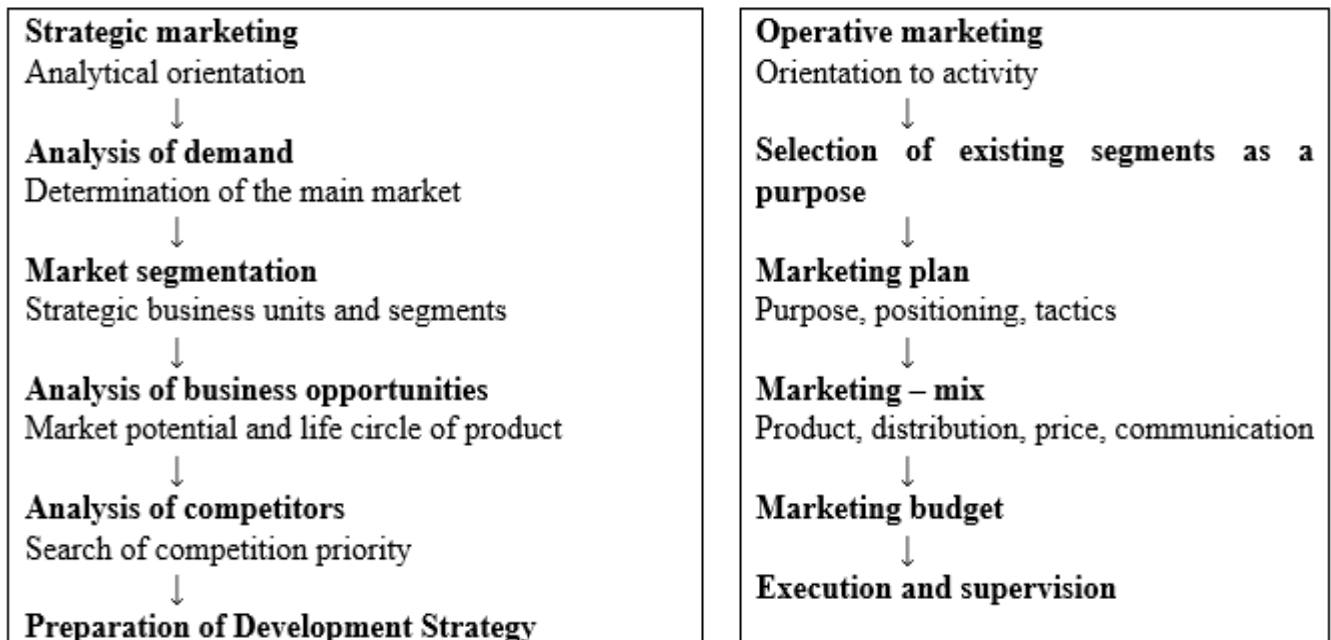


Table 1: Two directions of marketing

The role of *operative marketing* consists of increase of distinguishing features of a product provided to organize distributor, sale and communication policy and decrease of information costs in order to inform the potential consumers. In accordance with those said, we determine the marketing as follows:

- Marketing is a social process oriented to provision of desires of individuals and organizations by means of free and competitive exchange of products and services which form the benefits for buyer.

Three principal conceptions combine in this definition: demand, product and exchange. The concept of demand requests to view the motivation and behavior of consumers, individuals or organizations; the concept of product or service is regarded to reaction of manufacturer for expectations of the market; exchange orients us to market and mechanism providing the mutual relation between demand and offer.

### 3. THE INCREASING ROLE OF MARKETING IN THE ACTIVITY OF COMPANY

The purpose of marketing is to obtain profit subject to the consumer orientation and meeting of the consumer and company's demands and to achieve the main purpose of the company by implementing more effective marketing measures [3].

### 3.1. Operative marketing

Operative marketing is an action-oriented process that is carried out in a short or long period of time and that was directed to the current markets or segments. In essence, it is a classic commercial process that is referred to as 4P (this word are the capital letters of product, place, price, promotion) and that ensures to achieve the certain share in the target market with the help of tactical tools related to the product, distribution (location), price and communication [5]. Operative marketing plan is described the purpose, position, tactics and budget of each company trademark in a specific region over a specific time period. The economic role of marketing in the activity of company was described in Figure 2. Here was shown the interrelation of four main management functions: research and development, production, marketing and finance.

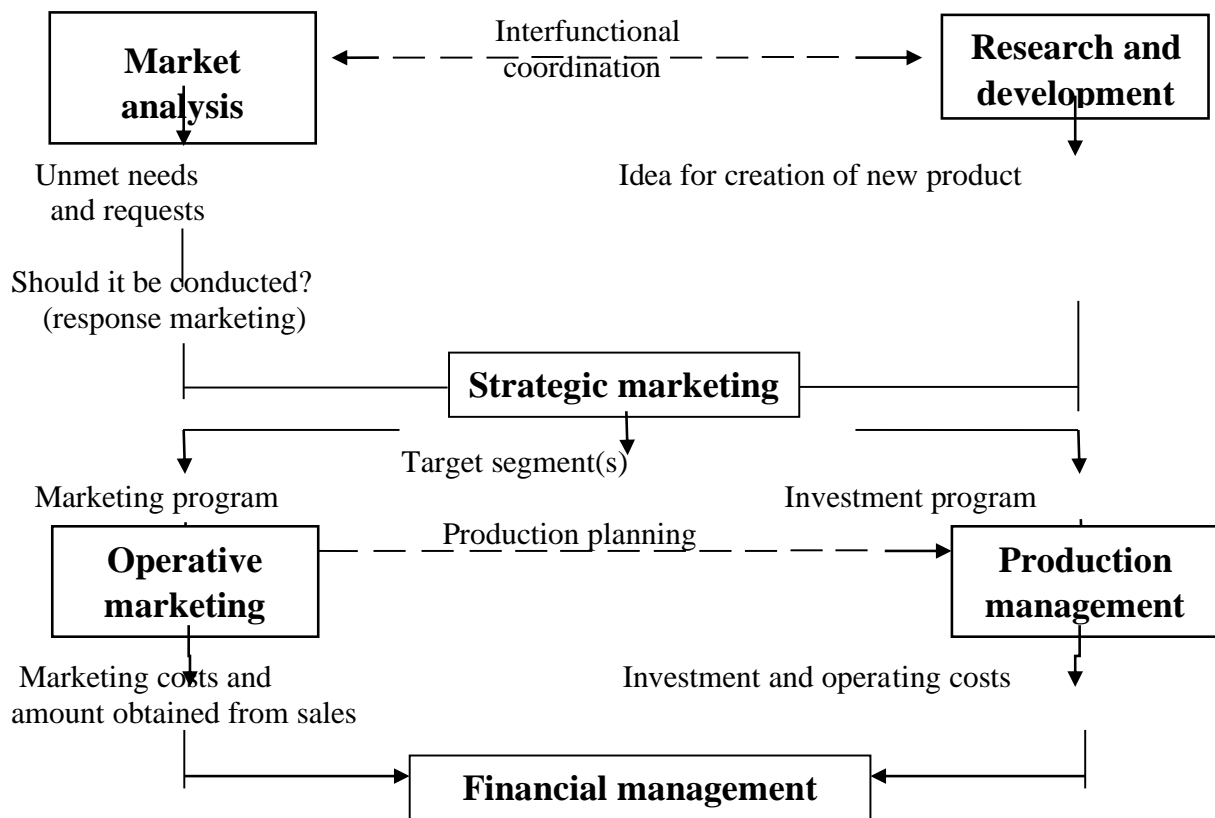


Figure 2: The role of marketing in the firm

The main duty of operative marketing is to obtain profit from sales or to provide the intended commodity turnover. It means that a firm must "sell" by using more effective sales techniques and find orders for procurements and also minimize costs. So, operative marketing is a decisive factor that determines the profitability of a firm in a short period of time. The energy level of operative marketing is a decisive factor for firms, especially firms operating in the markets where competition is intense. Operative marketing is firstly the most noticeable aspect of marketing because of the importance of advertising and sales promotion. Many organizations, for example banks have come to marketing through advertising. So, operative marketing is the firm's commercial tool and even the best plans will not create an opportunity to achieve satisfactory results without it. When operative marketing is only based on strategy and in case that this strategy is developed on the basis of market demand and its development opportunities, then it can allow you to obtain profit.

### **3.2. Strategic marketing**

Strategic marketing is firstly an analysis of needs of individuals and organizations. From the marketing point of view, the consumer needs the product not only as a product, but also to solve the problem. It is possible to achieve it with the help of various constantly changing technologies. The purpose of strategic marketing is to achieve the development of main markets in parallel and the identification of the current or potential product markets or segments by analyzing needs to be met [2]. We can come to such conclusion from it that the role of strategic marketing consists of using existing opportunities or creating of attractive opportunities, i.e opportunities that match the firm's resources and promise the growth and profitability potential. The process for strategic marketing planning covers the medium and long-term period. Its duty is to prepare the firm's mission, determine its purpose, select a development strategy and ensure a balanced product portfolio structure.

### **4. CONCLUSION**

Apparently, sales target can be determined firstly in the expression of volume indicators by comparing the intended share of each product market and the relevant forecast of initial demand, and then in the form of commodity turnover by considering the price policy. The amount of the expected total profit can be found by deducting the direct production costs, fixed costs incurred for the establishment of these or other structures, marketing costs related to the activity of sales personnel and amount allocated to the advertising and sales promotion. Its volume will reflect the amount of money which the firm obtains from that product market. The amount of the expected total profit should be more than the amount of invoice (direct) costs so that the firm can obtain a net profit. The advantage of product market for firm depends on its competitiveness, in other words, its ability to meet better the needs of consumers in comparison with competitors. In case that firm has competitive advantage, it is a competitive ability: firm may also differ from its competitors due to its persistent distinctive qualities, high productivity and as a result of it, lower estimate value. We can come to such conclusion from all this that (a) any product, even the best product shall be sold at a reasonable price in the market, therefore production and sales costs shall be minimized, market segment shall be properly selected and consumer demand shall be accurately predicted (b) it should be accessible in sales locations that are convenient and favorable for consumers, i.e the consumer shall obtain the product he/she wants in the appropriate location and space for him/her (c) and it shall be protected by this or other media that ensure the promotion of products and provision of their distinctive qualities, in other words, consumer shall be regularly notified about company and its product and services. When all these listed marketing measures are implemented in the form of coordinated, proper and systematical, it can cause to more consumer attractiveness, also consumer satisfaction.

### **LITERATURE:**

1. Gari Armstrong, Philip Kotler. Marketing step, 7<sup>th</sup> edition, 2005
2. Jean-Jacques Lambin, Market-Driven Management: Strategic and Operational Marketing, Moscow «Peter Press», 2007.
3. A. T. Mammadov, Principles of Marketing, Baku-2007.
4. Philip Kotler, Kevin Lane Kellerr, Marketing Management China-2012.
5. Marketing Management, Millenium Edition, Philip Kotler, United States of America-2002



# FORECASTING MODEL FOR GROSS DOMESTIC PRODUCT IN AZERBAIJAN

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## ABSTRACT

*One of the indicators of the country's economic growth is the gross domestic product (GDP), and one of the factors of economic growth is capital. The main criteria and source of economic development is economic growth. Economic growth is a sustainable increasing tendency of the main indicators of national theory production (GDP, GNI). Furthermore, absolute value and growth per capita are also considered. In economic and statistics, various indicators are used to measure the volume of national production. The most important of these is gross domestic product (GDP). GDP is expressed by monetary unit of the final products and services produced in the economy. Here should be taken into account the fact that GDP comprises final products and services produced within the particular country. In this work, was created the dynamic model that demonstrates the dependence of GDP on investments in case of Azerbaijan economy. This approach provides an opportunity for strategic planning of GDP for the country. In this work, to achieve the desired level of GDP, the volume of investment is used as the independent variable in the dynamic model. But as indicated above, many other factors affect GDP. We chose one of them: the amount of investment. But even so, the dynamic model of the optimal GDP trajectory yielded good results. Further research will take into account the other most influential factors on GDP. In this case, a dynamic model of the optimal trajectory of GDP will give even more adequate results.*

**Keywords:** *macroeconomics, gross domestic product, investments, dynamic model, model of the optimal trajectory of GDP*

## 1. INTRODUCTION

The main criteria and source of economic development is economic growth. Economic growth is a solid stimulant for the growth of the main indicators of national production (GDP, GNI). Furthermore, Absolute value and growth per capita is also kept in mind. In economic theory and statistics, various indicators are used to measure the volume of national production. The most important of these is gross domestic product (GDP) [4.6]. GDP is an expression in monetary unit of the final products and services produced in the economy. This refers to the final products and services produced within the borders of a particular country. Three main methods are used to calculate GDP:

- Added value method (method of production). With this method GDP is determined by the sum of added values on the cost, wages and income generated in the production process and characterized by the actual share in the final product in this enterprise for all sectors and types of production.
- By expenses. Using this method, the volume of GDP is calculated as the sum of all expenses in society (daily expenses of the population, investments of producers, expenses of the government on goods and services), net exports (balance of imports and exports of the country);

- Calculation of GDP by income - the total amount of all income in the company (excluding the wages of workers being paid from the state budget, as long as their wages are paid from the state budget), property income, income, interest on capital, depreciation, rent payments.

There are objective and subjective factors of economic growth. Objective factors are factors that directly and finally affect the rate of economic growth. Subjective factors are indirect factors affecting the scale and pace of economic growth.

The objective factors of economic growth are the following:

- increase in the volume and quality of fixed capital;
- changes in production technologies;
- increase in the volume of economic resources;
- increase in entrepreneurial activity of the population;
- increase in the quantity and quality of labor resources;
- Activization of the needs of the population, leading to increase in production volumes.

Subjective factors of economic growth are the following:

- expansion of the credit system. Since, the activation of this system allows the population to consume as much as possible. This, in turn, stimulates production.
- Reduction of monopoly in the markets for products and services. This, in turn, activates entrepreneurial activity;;
- Reducing the cost of production resources. This process increases production and prices. This in turn allows for growing demand.
- Tax cuts. Tax cuts lead to an increase in overall economic activity.

At the present stage of economic development, economic growth affects the following factors:

- Natural resources directly affect economic growth. The value of these resources is growing every day, since resource resources are limited;
- Population growth, increase in labor resources;
- increase in capital within the borders of the country. The increase in capital creates opportunities for increasing production and scale, conducting new scientific and technical research and investing in human resources;
- scientific and technological progress, which is the basis of economic growth, as scientific and technological progress contributes to the transition of the quality of economic development to a new level.

The relationship between economic growth factors within the national economy is becoming more complicated. In such a situation, the main goal of the state is the effective use of existing economic factors to promote economic growth to benefit the general populace [11]. As mentioned above, one of the indicators of a country's economic growth is gross domestic product (GDP), and one of the factors of economic growth is capital. In this work, we will build a dynamic model that demonstrates the dependence of GDP on investment in the country's economy.

## **2. THE MODEL OF THE OPTIMAL TRAJECTORY TO ACHIEVE THE DESIRED LEVEL OF GDP**

Consider the following task: how much investment should be allocated in a certain year to achieve the desired level of GDP after a certain period of time?

To do this, consider the following task:

$$J = \sum_{i=0}^N (x_{jel} - x_i)^2 + \sum_{i=0}^{N-1} u_i^2 \rightarrow \min \quad (1)$$

$$x_{i+1} = Fx_i + Gu_i + v, i = \overline{0, n-1} \quad (2)$$

$$x(0) = x_0 \quad (3)$$

Here,  $u_i$  is the volume of investment and  $x_i$  is the volume of GDP in the  $i$ -th year. Since we want to achieve the desired level at the end of the trajectory, we can write (22) as follows:

$$J = (x_{jel} - x_N)^2 + \sum_{i=0}^{N-1} (x_i^2 + u_i^2) \rightarrow \min \quad (4)$$

We can rewrite this problem in the following form:

$$J = \frac{1}{2}q(x_{jel} - x_N)^2 + \sum_{i=0}^{N-1} (k_1x_i^2 + k_2u_i^2) \rightarrow \min \quad (5)$$

$$x_{i+1} = Fx_i + Gu_i + v, i = \overline{0, n-1} \quad (6)$$

$$x(0) = x_0 \quad (7)$$

Here,  $q, k_1, k_2$  are coefficients,  $F, G, v$  was defined in [10],  $x_{jel}$  is the desired level of GDP and  $N$  is the number of years. For this, we construct an extended criterion of quality  $\bar{J}$  [8].

To do this, we add systems of equations with coefficients  $\lambda(i)$ [1, 7] to function  $J$ :

$$\begin{aligned} \bar{J} = & \frac{1}{2}q(x_{jel} - x_N)^2 \\ & + \sum_{i=0}^{N-1} \left[ \frac{1}{2}(k_1x_i^2 + k_2u_i^2) + \lambda_{i+1}(Fx_i + Gu_i + v \right. \\ & \left. - x_{i+1}) \right] \end{aligned} \quad (8)$$

We use the following notation:

$$\Phi(x(N)) = \frac{1}{2}q(x_{jel} - x_N)^2$$

$$H^i = \frac{1}{2}(k_1x_i^2 + k_2u_i^2) + \lambda_{i+1}(Fx_i + Gu_i + v)$$

We can rewrite (8) as such:

$$\bar{J} = \frac{1}{2}q(x_{jel} - x_N)^2 - \lambda_N x_N + \sum_{i=1}^{N-1} \left[ \frac{1}{2}(k_1 x_i^2 + k_2 u_i^2) + \lambda_{i+1}(F x_i + G u_i + v) - \lambda_i x_i \right] + H^0$$

$$\rightarrow \min \quad (9)$$

We get the following problem:

$$\bar{J} = \frac{1}{2}q(x_{jel} - x_N)^2 - \lambda_N x_N + \sum_{i=1}^{N-1} \left[ \frac{1}{2}(k_1 x_i^2 + k_2 u_i^2) + \lambda_{i+1}(F x_i + G u_i + v) - \lambda_i x_i \right] + H^0$$

$$\rightarrow \min \quad (10)$$

$$x_{i+1} = F x_i + G u_i + v, i = \overline{0, n-1} \quad (11)$$

$$x(0) = x_0 \quad (12)$$

To solve the problems (31)-(33), i.e. to find the values  $\lambda_i, (i = \overline{0, n+1})$ ,  $u_i, (i = \overline{0, n-1})$  and  $x_i, (i = \overline{0, n})$ , we need to solve the following system of equations [3]:

$$\frac{\partial H^i}{\partial x_i} = \lambda_i \quad (13)$$

$$\frac{\partial H^i}{\partial u_i} = 0 \quad (14)$$

$$\frac{\partial \phi}{\partial x_N} = \lambda_N \quad (15)$$

From this we get:

$$\lambda_i = k_1 x_i + \lambda_{i+1} F \quad (16)$$

$$0 = k_2 u_i + \lambda_{i+1} G \quad (17)$$

$$\lambda_N = q(x_N - x_{jel}) \quad (18)$$

And from (17) we find:

$$u_i = -\lambda_{i+1} G k_2^{-1} \quad (19)$$

Using (19) in (11) we find,

$$x_{i+1} = F x_i - G^2 k_2^{-1} \lambda_{i+1} + v, i = \overline{0, n-1}$$

In (16) we do the following conversion:

$$F \lambda_{i+1} = -k_1 x_i + \lambda_i$$

Based on these transformations, we obtain the following system of equations:

$$\begin{cases} x_{i+1} = Fx_i - G^2k_2^{-1}\lambda_{i+1} + v, i = \overline{0, n-1} \\ F\lambda_{i+1} = -k_1x_i + \lambda_i \end{cases} \quad (20)$$

$$(21)$$

Here we find:

$$\begin{cases} x_{i+1} + G^2k_2^{-1}\lambda_{i+1} = Fx_i + v, i = \overline{0, n-1} \\ F\lambda_{i+1} = -k_1x_i + \lambda_i \end{cases}$$

We write the final system in form of matrices:

$$\begin{bmatrix} E & G^2k_2^{-1} \\ 0 & F \end{bmatrix} \begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} F & 0 \\ -k_1 & E \end{bmatrix} \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix}.$$

From this we get  $x_{i+1}$  and  $\lambda_{i+1}$ :

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} E & G^2k_2^{-1} \\ 0 & F \end{bmatrix}^{-1} \begin{bmatrix} F & 0 \\ -k_1 & E \end{bmatrix} \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} E & G^2k_2^{-1} \\ 0 & F \end{bmatrix}^{-1} \begin{bmatrix} v \\ 0 \end{bmatrix} \quad (22)$$

From (22) we get:

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = \begin{bmatrix} F + G^2k_1k_2^{-1}F^{-1} & -G^2k_2^{-1}F^{-1} \\ -k_1F^{-1} & F^{-1} \end{bmatrix} \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} \quad (23)$$

We introduce the following notation:

$$A = \begin{bmatrix} F + G^2k_1k_2^{-1}F^{-1} & -G^2k_2^{-1}F^{-1} \\ -k_1F^{-1} & F^{-1} \end{bmatrix}$$

Then, (23) can be written as such:

$$\begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} = A \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} \quad (24)$$

We find:

$$\begin{aligned} \begin{bmatrix} x_{i+2} \\ \lambda_{i+2} \end{bmatrix} &= A \begin{bmatrix} x_{i+1} \\ \lambda_{i+1} \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} = A^2 \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + A \begin{bmatrix} v \\ 0 \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} \\ \begin{bmatrix} x_{i+3} \\ \lambda_{i+3} \end{bmatrix} &= A \begin{bmatrix} x_{i+2} \\ \lambda_{i+2} \end{bmatrix} + \begin{bmatrix} v \\ 0 \end{bmatrix} = A^3 \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + (A^2 + A + A^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \end{aligned}$$

From here we can simply write:

$$\begin{bmatrix} x_{i+k} \\ \lambda_{i+k} \end{bmatrix} = A^k \begin{bmatrix} x_i \\ \lambda_i \end{bmatrix} + (A^{k-1} + A^{k-2} + \dots + A + A^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \quad (25)$$

And so, (25) can be written in the following form:

$$\begin{bmatrix} x_N \\ \lambda_N \end{bmatrix} = A^N \begin{bmatrix} x_0 \\ \lambda_0 \end{bmatrix} + (A^{N-1} + A^{N-2} + \dots + A + A^0) \begin{bmatrix} v \\ 0 \end{bmatrix} \quad (26)$$

We introduce the next notation:

$$A^N = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix},$$

$$\begin{bmatrix} f_1 \\ f_2 \end{bmatrix} = (A^{N-1} + A^{N-2} + \dots + A + A^0) \quad (27)$$

So, (26) can be written as:

$$\begin{bmatrix} x_N \\ \lambda_N \end{bmatrix} = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix} \begin{bmatrix} x_0 \\ \lambda_0 \end{bmatrix} + \begin{bmatrix} f_1 \\ f_2 \end{bmatrix} \quad (28)$$

From this we get:

$$\begin{cases} x_N = a_{11}x_0 + a_{12}\lambda_0 + f_1 \\ \lambda_N = a_{21}x_0 + a_{22}\lambda_0 + f_2 \end{cases}$$

If we add condition (18) here, we obtain the following system of equations:

$$\begin{cases} x_N = a_{11}x_0 + a_{12}\lambda_0 + f_1 & (29) \\ \lambda_N = a_{21}x_0 + a_{22}\lambda_0 + f_2 & (30) \\ \lambda_N = q(x_N - x_{jel}) & (31) \end{cases}$$

The values of  $f_1$  and  $f_2$  are obtained from (27). Considering (29) and (30) in (31) we get:

$$\lambda_0 = (qa_{12} - a_{22})^{-1} (x_{jel}q - (qa_{11} - a_{21}) - (qf_1 - f_2)) \quad (32)$$

$x_0$  is given to us as an initial condition, and  $\lambda_0$  can be calculated from (53). Using this, we can calculate  $\lambda_i, (i = \overline{0, n+1})$ ,  $u_i, (i = \overline{0, n-1})$  and  $x_i, (i = \overline{0, n})$ . Values of  $\lambda_i, (i = \overline{0, n+1})$  and  $x_i, (i = \overline{0, n})$  can be calculated from expression (23), and  $u_i, (i = \overline{0, n-1})$  from expression (19).

This approach was applied for Azerbaijan based on statistical data (Table 1) [10]:

*Table 1: The volume of GDP and investments in the industry of Azerbaijan in 2005-2016.*

Year	GDP (in million manats)	Industry Investment (in million manats)
2005	12522.5	4,176
2006	18746.2	4,297
2007	28360.5	4,591
2008	40137.2	4,249
2009	35601.5	3,225
2010	42465,0	4 276
2011	52082,0	5,370
2012	54743.7	6,040
2013	58182,0	7,500
2014	59014,1	7,640
2015	54380.0	8,500
2016	60393.6	9,950

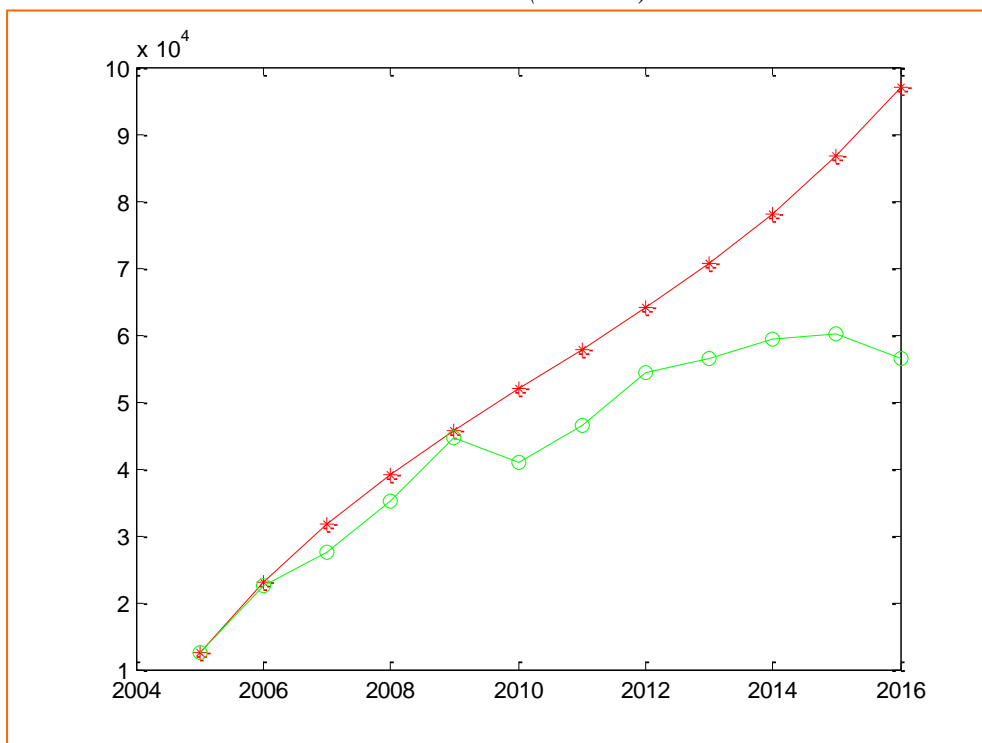
From this data  $x_0$  was found to be 12522.5. Problems (26)-(28) were reworked in MATLAB with coefficients  $k_1=0$ ,  $k_2=4.5$ ,  $q=1000000$ . Following results were found (Table 2):

Table 2: Problems (26)-(28) reworked in MATLAB with coefficients  $k_1=0$ ,  $k_2=4.5$ ,  $q=1000000$

	$x_i=1.0e+004$ , * (in million manats)	Model Values of GDP ((in million manats)	$\lambda_i$ = $1.0e+006$ *	$u_i$ = $1.0e+004$ *	Investment in Industry (in million manats)
2005	1.2523	12522.5	-0.122	0.2841	4176.00
2006	2.2925	22440.13	-0.1672	0.4016	4297.00
2007	3.1632	27455.89	-0.2364	0.566	4591.00
2008	3.9105	35212.37	-0.3332	0.7862	4249.00
2009	4.5735	44659.72	-0.4628	1.0739	3225.00
2010	5.1874	40932.81	-0.6322	1.4445	4276.00
2011	5.7847	46534.33	-0.8504	1.9178	5370.00
2012	6.397	54354.13	-1.129	2.5191	6040.00
2013	7.0568	56546.49	-1.4831	3.2806	7500.00
2014	7.7992	59423.95	-1.9314	4.2429	7640.00
2015	8.6637	60104.01	-2.4979	5.4574	8500.00
2016	9.6964	56441.95	-3.2128	0	9950.00

A visual comparison of the model GDP values and GDP values to achieve the desired level is given in Figure 1.

Figure 1: Comparison of model GDP values (green line) and GDP values to achieve the desired level (red line)



### 3. CONCLUSION

This approach provides an opportunity for strategic planning of GDP for the country. In this work, to achieve the desired level of GDP, the volume of investment is used as the independent variable in the dynamic model. But as indicated above, many other factors affect GDP. We chose one of them: the amount of investment. But even so, the dynamic model of the optimal GDP trajectory yielded good results (see Table 2 and Figure 1). Further research will take into account the other most influential factors on GDP. In this case, a dynamic model of the optimal trajectory of GDP will give even more adequate results. Many parameters of the incoming model are approximate. Therefore, in the future, work can be developed with fluctuations in parameters - in other words, the study of stability with respect to the change in error (see [10]). Another direction for research is the application of pattern recognition methods with predetermined threshold numbers. In this case, the classification problem is obtained (see [11]).

### LITERATURE:

1. Aliev F.A., Larin V.B., Optimization of Linear Control Systems: Analytical Methods and Computational Algorithms, Amsterdam: Gordon and Breach Sci, 1998.
2. Aliyev F.A., Metody resheniya prikladnykh zadach optimizatsii dinamicheskikh sistem, Baku, 1989 (Aliev F.A., Solution methods of optimization dynamic systems applied problems, Baku, 1989) (in Russian)
3. Aliyev F.A., Shafizade E.R. Shikhliinskaya R.Y., Murtuzaliyev T.F., Ekonomiko-matematicheskaya model maksimizatsii pribyli Internet magazina, Aktualnye problemy ekonomiki, ISSN 1993 – 6788, 3(141), 2013, str.210-219 (Aliev F.A., Shafizade E.R. Shikhliinskaya R.Y., Murtuzaliyev T.F., Economic-Mathematical model of maximization revenue of e-store, Actual problems of Economics, ISSN 1993 – 6788, 3(141), 2013, pp.210-219)(in Russian)
4. Aliyev F.A., Niftiyev A.A., Shafizade E.R. Shikhliinskaya R.Y., Murtuzaliyev T.F., Ekonomiko-matematicheskaya model v virtualnom biznese s primeneniym nechetkogo apparata, Desyataya Mejdunarodnaya Aziatskaya Shkola-Seminar “Problemy optimizatsii slojnykh sistem”, Kyrgyzskaya Respublika, 2014, str. 33-39 (Aliev F.A., Niftiev A.A., Shafizade E.R. Shikhliinskaya R.Y., Murtuzaliyev T.F., Economic-Mathematical model in virtual business with fuzzy apparatus, 10-th International Asian School-Seminar “Optimization problems of difficult systems”, Kyrgyz Republic, 2014, pp. 33-39) (in Russian)
5. Aliyev F.A., Niftiyev A.A., Shikhliinskaya R.Y., Shafizade E.R., Murtuzaliyev T.F., Nechetkaya model elektronnoy torqovli, Proceedings of Institute of Applied Mathematics, V3, N1, 2014, pp.23-31 (Aliev F.A., Niftiev A.A., Shafizade E.R. Shikhliinskaya R.Y., Murtuzaliyev T.F., Fuzzy model of e-trade, Proceedings of Institute of Applied Mathematics, V3, N1, 2014, pp.23-31) (in Russian)
6. Aliev F.A., Shafizadeh E.R., Hasanova G.R., Zeynalov J., Fuzzy model and algorithm for solving of e-shop income maximization, The 5-th International Conference on Control and Optimization with Industrial Applications, 27-29 August, 2015, Baku, Azerbaijan, pp.179-185.
7. Brayson A., Kho Yu-Shi, Prikladnaya teoriya optimalnogo upravleniya, Moskva, 1972 (Bryson A., Ho Yu-Chi, Applied Optimal Control, Moscow, 1972) (in Russian)
8. Golichenko O.G., Ekonomicheskoye razvitiye v usloviyakh nesovershennoy konkurentsii: Podkhody k mnogourovnevnomu modelirovaniyu, M:Nauka, 1999 (Golichenko O.G., Economic development under imperfect competition. Approximation to multilevel modeling, M:Nauka, 1999) (in Russian)
9. Gurman V.I., Osnovy makroekonomicheskogo analiza, Tver, 1995 (Gurman V.I., Basics of macroeconomic analyze, Tver, 1995)



10. Shafizade E.R., Hasanova G., Dynamic model for Gross Domestic Product in Azerbaijan, 6th International Conference on Control and Optimization with Industrial Applications, COIA- 2018, 11-13 July, Baku, Azerbaijan (Web of Science)
11. Zang V.B., Sinergeticheskaya ekonomika. Vremya i peremeny v nelineynoy ekonomicheskoy teorii, M: Mir, 1999 (Zang V.B., Synergetic economics. Time and changes in nonlinear economical theory, M: Mir, 1999) (in Russian)

# FINANCIAL AND INVESTMENT ISSUES IN THE STRATEGIC MANAGEMENT OF SUSTAINABLE DEVELOPMENT OF THE ECONOMY

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## **ABSTRACT**

*In the article, financial and investment issues in the strategic management of sustainable development of the economy are researched. The essence, functions and strategic importance of financial services in strategic management are explained. The role of financial and investment issues and resources is analyzed in accelerating sustainable development of the economy and ensuring sustainable economic development. The significance of considering financial stability as an integral part of the state's main economic and financial policy is emphasized. In the context of macroeconomic and macro finance stability of the country's economy, the formation of a higher potential for the deepening of sustainable development of the economy is indicated. The multi-functional importance of the financial and investment strategy in increasing the gross domestic product and the income of the population, and improving the living standards has been researched. Ensuring the intensive development of financial markets and the functioning of the financial and credit system has been considered important. The importance of developing and actively implementing effective and efficient financial and investment mechanisms has been substantiated. In accelerating economic processes, developing, managing new innovations and technologies and applying them in production processes in modern times, the necessity for flexible financial and investment provision has been emphasized. The effects of financial and investment issues on increasing the welfare of the population and strengthening the competitiveness of the national economy through the efficient and targeted use of the country's natural and economic resources, have been taken into consideration. The problems of diversification of insurance services, one of the other important segments of the financial market, have been addressed. Based on global influences and new challenges, the recommendations and suggestions have been made on financial and investment issues in the strategic management of sustainable development of the economy and the problems in this direction and approaches to their solutions have been summarized.*

**Keywords:** *Azerbaijan, finance and investment, strategic management, sustainable development of the economy, financial markets*

## **1. INTRODUCTION**

After Azerbaijan regained its independence in the early 1990s, there were strong transformations in its economic policy and national economic system. It was necessary to solve the tasks of restructuring the country's economy and defining the priorities of economic policy in accordance with the national economic interests. At that time, Azerbaijan lacked financial resources, most importantly, did not have strategic management mechanisms, and moreover, efficient use of the country's natural resources required large investments. There was no political and economic stability in the country, only after the conclusion of the "Contract of the Century" on September 20, 1994 with the participation of the world's leading oil and gas companies, Azerbaijan had the opportunity to establish its investment attractiveness. International financial institutions and organizations have become interested in directing financial and investment resources to the oil sector, which is the main leading sector of the

country's economy. Thus, in a situation of deepening market economy, it is important to activate natural and economic resources that allow growing the country's economy and to involve them in the economy and value added turnover. For this purpose, since the mid-1990s, strategic management mechanisms that will ensure the intensive inflow of domestic and foreign investment into economy in Azerbaijan, including the formation and development of a sustainable and efficient financial market have emerged as a strategic task. Professor B. Kh. Atashov thinks that optimal governance mechanisms are necessary for the functioning and efficiency of the financial market. Thus, financial markets are a set of purchase and sale relations in financial relations sphere, that is, it is a market that provides cash distribution among the participants in economic relations, and this market is very wide, and its main segments are capital market, money market, currency market, investment, insurance and securities markets (Atashov B. Kh. , 2016). Due to ensuring the development and production of the oil industry that is the leading sector of the Azerbaijani economy, and new oil fields, as well as natural gas fields, it has been possible to form the structure of the country's economy and to optimize the economic development model that serves national economic interests. Since the early 2000s, there has been an intensification in the development of the country's financial institutions. The success of energy and transport projects in the region and internationally has created favorable conditions for improving the country's macroeconomic indicators, ensuring rapid economic growth, forming strategic governance mechanisms and increasing financial and investment attractiveness in most sectors of the economy. As a result of these factors, the presence of more than \$ 270 billion in investments in the Azerbaijani economy in 2004-2019 can be assessed as provision of the efficiency of economic processes and a positive result of the financial and investment policy implemented in the country. In general, since the 70s of the 20th century, the importance of some issues such as the solution of globalization problems in the world, the economical and efficient use of natural and economic resources, the application of "green" technologies and formation of economy, the natural and economic processes and their properties that concern humanity, and generally, the active implementation of sustainable and efficiency economic methods and strategic management mechanisms, has increased. Some of these goals and tasks are more focused: 1) New methods should be searched to ensure economic development by reducing production and raw material waste and energy costs; 2) A balanced structure of global demand should be defined in order to maintain the planet for a long time; 3) Development of a policy that encourages the transition to sustainable production and consumption structures and strategic management principles should be ensured; 4) The transfer of environmentally friendly technologies to developing countries should be encouraged and technology transfer in this direction should be intensified. Undoubtedly, financial and investment issues are of strategic importance in solving such global problems, and in our opinion, the role of financial and investment provision is significantly higher in the fulfillment of the tasks facing the economy in the global context, in the assessment and evaluation of new challenges based on objective facts, and it is not difficult to understand in the light of the economic instability and the global financial crisis happen in the world in recent decades. The consequences of the global financial crisis that started in late 2008 are still ongoing and these have not been ineffective for Azerbaijan either. The newly developed financial and investment system and the country's financial market in general, has faced serious difficulties and a significant part of currency reserves formed from the export of oil and gas resources is aimed at maintaining financial stability. But, in 2015, the country's national currency - manat - was devalued twice and lost almost 2. 2 times its value. All this requires the formation of financial and investment mechanisms that meet modern challenges and global financial and investment tendencies, and the creation and strengthening of its strategic management system and its development in accordance with advanced international practice. In recent years, Azerbaijan has entered a new stage of economic and structural reforms, and the main goal is to minimize

the dependence of the country's economy on oil and natural gas and to ensure the main macroeconomic and macrofinance stability. To this end, in order to strengthen financial stability in the country, the development and implementation of more sustainable and efficiency strategic management mechanisms should be considered a prerequisite. Generally. The tasks and targets related to actual issues in finance and investment of Azerbaijan, including renewal of conceptual approaches to strategic management, in short, the current situation in the country's financial market in line with global challenges have been broadly stated in the “Strategic Roadmap for the Development of Financial Services in the Republic of Azerbaijan” approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016 (Strategic Roadmap for Development Of Financial Services in The Republic Of Azerbaijan, 2016). Taking measures to accelerate the process of economic and structural reforms, develop sustainable financial and investment mechanisms, ensure access to credit, simplify access to financial and investment resources for entrepreneurship and business entities and significantly improving related strategic management functions and mechanisms are required. In reality, despite the consistent measures taken for the development of financial institutions in Azerbaijan, it is too early to talk about the full stability of the financial and credit system.

## 2. LITERATURE REVIEW

The problems to be researched in the article are mainly characteristic of the economic development processes and economic development model of each country for the modern period. The optimal organization of economic reforms increases attention to strategic management in all cases. Given the importance of financial and investment issues in the effective organization of economic reforms, it has been necessary to use the scientific works, proposals and opinions of various Azerbaijani and world economists to examine the problems in the research. Actual problems of the state's financial and investment policy and the important role of the financial-investment factor in strategic management in the conditions of reforms have been researched in the scientific works of researchers, such as B. Cointe, A. Nadai (Cointe B. , Nadai A. , 2018), Mc. Flubacher, A. Duchêne, R. Coray (Flubacher Mc. , Duchêne A. , Coray R. , 2018) and others. According to the authors' approaches, The financial and investment policy of each state and the mechanisms and tools related to it should be considered the challenges and major trends of the time. Especially, maintaining a systematic approach to financial and investment issues in the strategic management of economic reforms should be considered as one of the prerequisites. In the scientific works of a group of other researchers, such as I. M. Abbasov (Abbasov I. M. , 2013), E. A. Guliyev (Guliyev E. A. , 2018), Sh. S. Qafarov (Qafarov Sh. S. , 2014), E. B. Mammadova (Mammadova E. B. , 2018), A. Sh. Shakaraliyev, G. A. Shakaraliyev (Shakaraliyev A. Sh. , Shakaraliyev G. A. , 2016) and others, the issues on adequate transformation of fiscal and related public policy and its organizational and economic mechanisms and improvements in this sector have been examined. The strategic role of financial and investment provision in increasing the effectiveness of economic reforms and the sustainability of its management mechanisms is considered to be a decisive factor. In the scientific works of a group of researchers, such as B. Kh. Atashov (Atashov B. Kh. , 2016), P. A. Valiyev (Valiyev P. A. , 2015), M. Gulaliyev, R. Aliyev (Gulaliyev M. , Aliyev R. , 2015), E. A. Ibrahimov (Ibrahimov E. A. , 2018), Y. A. Mammadov (Mammadov Y. A. , 2016), J. B. Namazova (Namazova J. B. , 2011) və Sh. T. Aliyev-in (Aliyev Sh. T. , 2018), the development features of the financial system in Azerbaijan and the problems related to the provision of financial and investment attractiveness have been analyzed more. The authors think that there is a need for more intensive development of financial markets and renewal of strategic management mechanisms for investment attractiveness in the country. In the scientific works of some researchers, such as Sh. T. Aliyev (Aliyev Sh. T. , 2017), B. Kh. Atashov, N. A. Novruzov, E. A. Ibrahimov (Atashov B. Kh, Novruzov N. A, Ibrahimov E. A. , 2014), A.

Chaparlı (Chaparlı A. , 2017), A. Eyvazov (Eyvazov A. , 2018), E. M. Hajizade (Hajizade E. M. , 2018), E. A. Ibrahimov (Ibrahimov E. A. , 2019), P. Munin (Munin P. , 2015), V. N. Myakshin (Myakshin V. N. , 2016), O. E. Ryazanova, L. V. Levchenko (Ryazanova O. E. , Levchenko L. V. , 2014) and T. V. Vashchalova-nın (Vashchalova T. V. , 2018), the multifunctional and multiplier role of financial-investment factor in economic development processes and strategic management of economic reforms have been broadly examined. Moreover, as the world's economic processes are radically transformed in the result of global influences, the need for deeper economic reform organization is growing in the country. In this regard, there is a necessity to research more fundamentally the financial and investment issues in the management of economic reforms and to study the problems of developing effective mechanisms adequate to the challenges of the modern age.

### **3. RESEARCH METHOD**

In the strategic management of economic reforms, it is important to research financial and investment issues more efficiently and optimally, and to choose appropriate methods for this. Thus, the effectiveness of new socio-economic development programs, action strategies and conceptual approaches to the implementation of economic priorities, and most importantly, the establishment and development of strategic management mechanisms for the organization of these processes depends on the results of each selected and applied research and analysis method. Furthermore, the optimality of economic reforms, including economic and structural reforms in Azerbaijan, realized strategic roadmaps, developed new economic programs and concepts, and the problems in order to be effective in achieving the set goals, applied mechanisms and tools should be fundamentally researched, analyzed and evaluated, and appropriate conclusions should be drawn. To achieve this, a group of methods that are more common in economics have been used: 1) observation; 2) analysis; 3) comparative analysis; 4) synthesis and generalization; 5) assessment and forecasting; 6) author's approach, etc. In addition, the opinions, methods and approaches in the scientific works, monographs and other analytical researches of various scientists and researchers, as well as Azerbaijani scientists on more effective organization of economic reforms and financial and investment issues in strategic management in these processes have been indicated. The main objective in selecting economic methods and applying them to the problems discussed in the article, is the issues on ensuring sustainable and dynamic development of the country's economy through the use of available economic and natural resources, strengthening the financial and investment provision of these processes, highly assessing the principles and criteria of strategic management in all cases and its important.

### **4. RESULTS AND DISCUSSION**

In addition to increasing the efficiency of the use of financial resources and the most productive use of available resources, it should be ensured to form new financial sources, identify more productive sources, expand foreign cooperation in this sphere, attract foreign investments and large capital and create a favorable financial and investment attractiveness environment for this purpose. In order to effectively implement the reforms and ensure sustainable growth of the country's economy, it is important to take the necessary measures, implement targeted programs and projects and provide conceptual approaches by state for identifying new productive sources and realizing the processes of development of value-added areas. For sustainable and continuous economic development, a number of factors, including mechanisms and tools that enable economic growth, financial stability and investment incentives and create additional motivation should be more emphasized. For ensuring the development of the country's economy and sustainable economic growth, systematic measures should be taken and an activity strategy should be developed, considering the long-term perspectives (Aliyev Sh. T. , 2018).

In this respect, foreign investment is one of the key factors in ensuring economic development in all countries of the world.

#### 4.1. Approaches to strategic management problems of macroeconomic and financial-investment stability in the context of reforms

In the context of economic reforms, diversification of the country's economy and deepening of reforms emerge as important conditions. In this case, there is a serious need to take additional measures to increase the economy's resilience to global threats and, above all, to develop the non-oil sector. To this end, financial and investment provision should be formed and additional measures should be taken (Ibrahimov E. A. , 2016). In the context of global challenges and trends, the main tasks of Azerbaijan's non-oil sector can be summarized as follows: 1) improving the normative-legal base, technologies and technical standards on certain areas of the non-oil sector; 2) eliminating various discrimination between the service or production sectors operating in the non-oil sector and creating a fair competitive environment; 3) taking incentive steps to streamline processing and sales activities; 4) improving the technical and technological provision of the non-oil sector; 5) expanding marketing research in non-oil areas and determining customer requirements and satisfaction in certain areas; 6) forming stimulating general principles of tariff and tax policy; 7) improving, facilitating and developing insurance services, and ensuring their accessibility; 8) establishing logistics management centers and terminals in order to strengthen the integration of production, processing and sales processes (Ibrahimov E. A. , 2017). As a result of economic reforms and measures taken to strengthen strategic governance and increase the attractiveness of the financial and investment environment in Azerbaijan in recent years, have made it possible to accelerate and increase the efficiency of economic processes. In Figure 1, the dynamics of GDP in the year 2000-2018 has been indicated. As shown in the data, growth has slowed down significantly since the last global financial crisis, but in the following years, this speed has been reinstated in the years 2010-2014 and afterwards, as a result of the devaluation of the national currency and falling oil prices on world markets, the growth rate slowed significantly in 2015 and resumed in subsequent years. At the end of 2018, the country's GDP amounted to about 80 billion manats or 47 billion dollars.

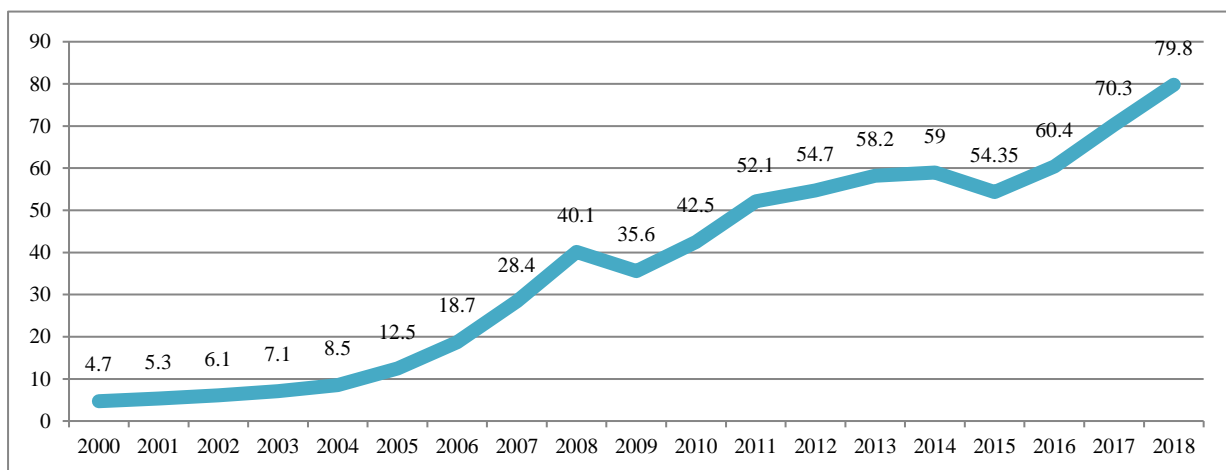
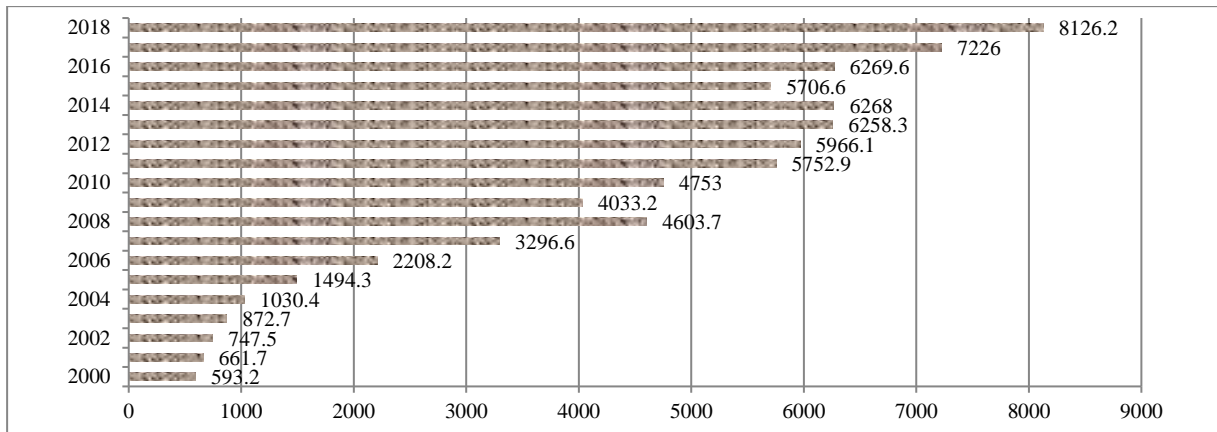


Figure 1: Dynamics of GDP in Azerbaijan, billion manats, 2000-2018 years  
(Source: Designed by author according to the data of the State Statistical Committee of the Republic of Azerbaijan <https://www.stat.gov.az/>)

In Figure 2, The dynamics of GDP per capita in Azerbaijan for 2000-2018 have been indicated. As shown in the data, the GDP per capita amounted to 8126. 2 manats or 4780. 1 US dollars in 2018.



*Figure 2: Dynamics of GDP per capita in Azerbaijan, manat, 2000-2018 years*  
 (Source: Designed by author according to the data of the State Statistical Committee of the Republic of Azerbaijan <https://www.stat.gov.az/>)

It should be noted that systematic approaches to the strategic management of economic reforms have also manifested in the dynamics of gross national income. Thus, these indicators has been 34 billion manats in 2010, and in 2017, it has increased by 98. 2% and amounted to 67. 4 billion manats. While looking at the gross national income dynamics per capita in Azerbaijanin this period, it is seen that this indicator has been 6928. 1 manats or 4075. 4 US dollars in 2017. Moreover, the measures continue to be taken to adapt the financial and credit system and banking sector's activities in the country to modern requirements. However, there are still problems in this area. One of the major issues is the work done to ensure the sustainability of the banking sector. These issues are very important in terms of economic security and the favorable financial and investment environment in the country (Valiyev P. A. , 2015). Thus, Thus, the number of state-owned banks in Azerbaijan has been minimized and a strong network of commercial banks has been established, and by the end of 2018, the total assets of existing banks in the country amounted to 29. 5 billion manats or 17. 4 billion dollars. Strategic measures have been identified in recent years related to the problems of increasing state budget revenues and in this regard, reducing the dependence of the budget on oil revenues has been determined as a key priority. To this end, the issues of expanding the development of the non-oil sector, making efficient use of the potential of productive activities, accelerating economic reforms and regulating the financial and investment provision of these processes in accordance with the new challenges are getting more emphasized.

#### **4.2. Analysis and assessment of strategic management mechanisms of financial and investment attractiveness in Azerbaijan**

Taking comprehensive measures for the development of the financial system and financial market of each country, and adaptation of these processes to the world experience, and furthermore, ensuring the optimal management mechanisms of financial and investment activities are of great importance. Since the early 1990s, the measures to strengthen the legal framework for public investment policy have been taken in Azerbaijan. On January 15, 1992, the “Law of the Republic of Azerbaijan about protection of foreign investment” has been passed and the movement, use and settlement of foreign investment in the country has been legally regulated (Law of the Republic of Azerbaijan “About protection of foreign investment”, 1992). After the adoption of this law, the process of improving the financial and investment environment in our country has intensifiedwith the investment of foreign investors in various sectors of the economy.

In addition, for expanding investment activities and solving the problems of efficiency of the investment environment in our country, another important law, the “Law of the Republic of Azerbaijan about investment activity”, has been passed on January 13, 1995 (Law of the Republic of Azerbaijan about investment activity "About investing activities", 1995). As a result, a solid base has been established to increase the efficiency and attractiveness of the financial and investment environment in Azerbaijan. Therewithal, for more effective organization of the economic and organizational and strategic management mechanisms of investment activity, the “Law of the Republic of Azerbaijan about investment funds” has been passed on October 22, 2010 (Law of the Azerbaijan Republic "About investment funds", 2010). A group of researchers considers that it important to more focus on improving the country's investment environment and creating investment funds in order to accelerate economic reforms in Azerbaijan and increase the efficiency of the economy. In this respect, developing and realizing effective forms of state control over the activities of investment funds and their strategic management mechanisms are important (Atashov B. Kh. , 2016). The efficiency of strategic management elements on investemets should be ensured and the activity strategy should be updated and improved in accordance with the challenges of the time (Abbasov I. M. , 2013). Unfortunately, the distribution of investments in Azerbaijan does not comply with sustainable development requirements. Thus, up to 90% of investments in the country, especially foreign capital, are concentrated in Absheron and mainly in areas related to oil and gas projects. There are also problems with strategic investment management mechanisms. So that, the effective solution of strategic tasks related to increasing the efficiency of investments depends on the adequacy and flexibility of the public administration system. Therefore, the issues of investment attraction and management system should be considered at the level of modern requirements. We consider it appropriate to make a more objective assessment of the situation in this area by analyzing the structure of financial and investment resources, or rather investments, directed to the economy in Azerbaijan and all this has been indicated in Table 1.

Indicators:	2005	2010	2015	2016	2017	2018
Investment by all sources	7118, 5	17591, 4	19547, 2	14228, 0	14213, 3	15221, 7
Internal investments	2225, 3	9343, 6	8828, 1	4066, 9	5092, 8	6985, 2
Foreign investments, including:	2225, 3	8 247, 8	10719, 1	10161, 1	9120, 5	8236, 5
<i>financial credits</i>	698, 4	3405, 9	2210, 2	2197, 8	1783, 3	2880, 0
<i>direct investments, including:</i>	4030, 4	3614, 9	7483, 1	7323, 6	5713, 8	4109, 1
- <i>oil sector</i>	3799, 9	2955, 3	6622, 7	5617, 4	4900, 8	3142, 0
- <i>non-oil sector</i>	230, 5	659, 4	860, 4	1706, 2	813, 0	967, 1
Oil bonus	1, 0	2, 0	2, 0	0, 1	1, 4	450, 1
Other investments	163, 4	1225, 0	1023, 8	639, 6	1622, 0	797, 3
The share of foreign investment in total investment, (as a percentage - %)	31, 26	46, 89	54, 84	71, 42	64, 17	54, 11

*Table 1: Dynamics of investments in the economy in the Republic of Azerbaijan, million dollars (2005-2018 years)*

*(Source: The statistical indicators of Azerbaijan (2019). Baku. Designed and calculated by the author in accordance with page 403.)*

By evaluating the analysis shown in Table 1, it could be stated that the volume of total investments decreased after 2015 and the growth rate was only reinstated in 2018. However, foreign investments continued to decline after 2015, this indicator has been \$ 10. 7 billion in 2015 and \$ 8. 2 billion in 2018, a decrease of 30. 5%. The volume of foreign investment in the non-oil sector is also small, and at the end of 2018, the share of investment in this sector in total foreign investment has been only 11. 7%. The share of foreign investment in total investment in 2018 has been at 54. 1%.



Based on these facts, we could note that Significant improvement of fiscal and investment policy in Azerbaijan and adaptation of strategic management mechanisms to new challenges in the current economic reforms should be ensured.

#### **4.3. Directions of modeling financial and investment issues in the strategic management of economic development processes in Azerbaijan**

Modern approaches to the effective organization of financial activities in the modeling of financial and investment issues in the strategic management of economic development processes in Azerbaijan should be more heeded. Attention should be given to assessing financial sustainability and doing real work (Aliyev Sh. T. , 2017). Thus, in the context of real reforms, there should be a reasoned financial strategy and its working tools. In the current context of structural and institutional reforms, measures to ensure transparency in the financial sector, eliminate double-entry bookkeeping and minimize the "shadow economy" should be accelerated. The problems of financial provision should be in the forefront in accelerating economic reforms (Chaparlı A. , 2017). In order to systematically solve the problems of increasing the investment attractiveness of the country's economy, it is important to research and improve its structure, including the structure of foreign investment (Gulaliyev M. , Aliyev R. , 2015). Measures on maximum renewal of investment activity issues and management mechanisms, regulation of the country in accordance with the characteristics of economic development and strategic goals should be realized (Myakshin V. N. , 2016). Moreover, identifying the real financial sources and investment resources required for effective modeling of economic development and their long-term forecasting are important conditions (Namazova J. B. , 2011). In particular, the development of non-oil sectors with high added value potential should be accelerated. One of the issues to be resolved in this regard is the active attraction of both domestic and foreign investment for the development of the non-oil sector, along with the oil and gas sector and the formation of more flexible and effective strategic management mechanisms (Aliyev Sh. T. , 2018). Development and implementation of optimal strategic management mechanisms to ensure reliable and productive financial and investment resources and their efficient use have a major importance for innovative development of the economy and increasing the efficiency of investment-innovative mechanisms. Strategic management mechanisms should be suitable for all participants in the financial and investment environment and create incentives to expand economic activity (Ryazanova O. E. , Levchenko L. V. , 2014). Furthermore, The issues of analyzing the structure of foreign investment in the economy, research of factors affecting the investment environment and determining the investment demand should be thoroughly examined and important measures in this direction should be encouraged. On the basis of strategic management mechanisms of the process of attracting foreign investment to the country's economy, there should be reasoned decisions and approaches (Shakaraliyev A. Sh. , Shakaraliyev G. A. , 2016).

#### **5. CONCLUSION**

In order to more systematically consider financial and investment issues in the strategic management of economic reforms in Azerbaijan in the coming years, to increase the efficiency of the investment environment, to solve problems in this area, to attract investment and their movement and ensure their use, a group of strategic issues and problems should be more heeded:

- Renewal or significant improvements of the current mechanisms of the country's financial and investment policy and the applied fiscal instruments, including strategic management structures that provide control over the use of financial resources in accordance with the challenges of modern times should be ensured;

- The existing financial and investment concessions in the country, state support mechanisms, other protectionist mechanisms and tools applied other protectionist mechanisms and tools applied should be considered in accordance with the modern challenges, and, improved, mainly in the context of economic efficiency, in other words, strategic goals of economic reforms;
- Measures should be taken to adapt the current economic and organizational components of management mechanisms of financial and investment resources to the level of mechanisms and standards arising from international experience and to include more effective and productive strategic management elements in the operational turnover;
- An attractive environment for foreign investment should be created in the country and measures should be taken to increase the motivation of foreign investors, especially, more effective strategic management mechanisms should be developed and implemented in order to actively attract foreign investment in the non-oil sector

### LITERATURE:

1. Abbasov İ.M. (2013). Audit. Baku. - 544 s.
2. Aliyev Sh.T. (2015). Foreign economic policy of Azerbaijan. Sumgait. – 185 p.
3. Aliyev Sh.T. (2017). Problems of ensuring financial stability in Azerbaijan and modern aspects of the development of the financial and credit system // Audit, № 03. -P. 26-40.
4. Aliyev Sh.T. (2018). Economics of Azerbaijan. Sumgait. - 376 p.
5. Atashov B.Kh, Novruzov NA, Ibrahimov EA (2014). Financial theory. Baku, "Cooperation" publishing house.– 648 p.
6. Atashov B.Kh. (2016). Financial markets. Baku, "Cooperation" publishing house.– 456 p.
7. Azerbaijan 2020: look into the future concept of development (2012). Approved by the Decree of the President of the Republic of Azerbaijan dated December 29, 2012. Baku, 39 p.
8. Chaparlı A. (2017). Financial stability in Azerbaijan: challenges and prospects. Center for Economic Reform Analysis and Communication. <http://iqtisadiislahat.org/>.
9. Cointe B., Nadaï A. (2018) The Politics of Some Policy Instruments. In: Labussière O., Nadaï A. (eds) Energy Transitions. Energy, Climate and the Environment. Palgrave Macmillan, Cham. - Energy Transitions P. 143-190.
10. Decree of the President of the Republic of Azerbaijan on the establishment of the Credit Guarantee Fund (2017). Baku, September 15, 2017.
11. Eyvazov A. (2018). İqtisadiyyata investisiya qoyuluşunun həcmi daha da artacaq.– <http://economics.com.az/index.php/kitabxana/bizim-s-rl-r/meqaleler/item/1176-izhtisadiyyata-investisiya-zhoyulushunun-haedzmi-daha-da-artadzazh.html>.
12. Flubacher MC., Duchêne A., Coray R. (2018) The Politics of Investment and Employability in the Public Employment Service. In: Language Investment and Employability. Palgrave Macmillan, Cham. Language Investment and Employability, P. 33-54.
13. Gulaliyev M., Aliyev R. (2015). Dynamics and sectoral structure of foreign investments directed to the economy of Azerbaijan / Donbass Economic Gazette, № 3 (41) .- S. 67-74.
14. Guliyev E.A. (2018). Global food security: realities, challenges and perspectives, Baku, "Cooperation", 479 p.
15. Hajizade E.M. (2018). World economy and Azerbaijan. Letterpress publishing house. Baku. - 912 s.
16. Ibrahimov E.A. (2019). Innovation and modernization as a prerequisite for sustainable economic development in a globalized environment // "Economy and business". International scientific research, Moscow, № 9 (18974). – P. 50-54.

17. Ibrahimov E.A. (2019). The role of efficient use of investments in ensuring sustainable economic development // "Cooperation" scientific-practical journal. Baku. №2 (53), pp. 176-184.
18. Ibrahimov EA (2017) Analysis of economic dynamics in Azerbaijan in terms of sustainability // UNEC Scientific News. № 5, vol. 5, S.119-128.
19. Ibrahimov EA (2018). Problems of financial and budgetary regulation and stimulation of sustainable economic development. "Cooperation" publishing house, Baku.– 320 p.
20. Qafarov Sh.S. (2014). The dictatorship of money. Baku: University of Economics Publishing House. - 552 s.
21. Law of the Azerbaijan Republic "About investing activities" (1995). Baku, January 13, 1995. № 952.
22. Law of the Azerbaijan Republic "About investment funds" (2010). Baku, October 22, 2010. № 1101-IIIQ.
23. Law of the Azerbaijan Republic On Protection of Foreign Investments (1992). Baku, January 15, 1992, No 57.
24. Mammadov Y.A. (2016). Formation and development directions of the stock market in the Republic of Azerbaijan. Baku.– 162 p.
25. Mammadova E.B. (2018). Finance. "Cooperation" publishing house, Baku. - 464 s.
26. Munin P. (2015). Theory of sustainable development. Moscow, Lenand.- 312 p.
27. Myakshin V.N. (2016). Management of cross-sectoral financial flows through an investment self-administration mechanism. Diss.doc.of econ. sciences. Arkhangelsk. - 435 p.
28. Namazova J.B. (2011). Analysis of the investment climate and the role of tax policy in its formation. Autoreferat of the diss.doc.of econ. sciences. Baku.– 49 p.
29. Ryazanova O.E., Levchenko L.V. (2014). Investment climate as a condition for development of innovative economy//Economic Sciences, № 5 (114) .- C.14-28.
30. Shakaraliyev A.Sh., Shakaraliyev G.A. (2016). Azerbaijan's economy: realities and prospects. Baku: "Turkhan" NPB. -536 s.
31. Strategic Roadmap for Development Of Financial Services in The Republic Of Azerbaijan (2016).Approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016.
32. Strategic Roadmap for Development of Heavy Industry and Machinery Manufacturing in the Republic of Azerbaijan (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016.
33. Strategic Roadmap for the National Economy Perspective of the Republic of Azerbaijan (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016.
34. The main directions of public investment policy (2019).  
<https://www.economy.gov.az/article/investisiya-siyas%C9%99ti/21347#>.
35. Valiyev P.A. (2015). Financial and investment sources of ensuring economic security. Baku, East-West.– 214 s.
36. Vashchalova T.V. (2018). Sustainable development. Moscow, Yurait.- 169 p.

# **SOME ECONOMIC AND LAW PROBLEMS ABOUT TRANSPORTATION SECURITY OF STATES FROM THE ASPECT OF THE INTERNATIONAL TRADE RELATIONS DEVELOPMENT**

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## **ABSTRACT**

*In this article, the topicality and importance of problems about transportation security of states in international trade relations, as one of the components of economic law, are reviewed. The problems, significant for the formation of a new international economic law, are also referred.*

**Keywords:** *economic safety, international economic relations, international economic law, Azerbaijan Republic, transportation security*

## **1. INTRODUCTION**

In modern science, the state security issues from the economic point of view continue to be of the most relevant and discussed concepts. Despite the economic security concept takes various shapes, however, many authors agree that it should contain provisions related to the corresponding state of the national economy. I.e., a) when national interests are protected and immunity to external and internal threats and risks is demonstrated, b) as the ability to develop and protect the most important interests of people, society, and the state, c) when there is a unanimity of needs under which the state, society, and individuals are progressively developing. It is also generally recognized that economic security is not only a national security component encompassing military and environmental security but also tasks and interests of paramount importance for the state.

## **2. RESEARCH**

In our opinion, there is a wide range of quite interesting and important economic security definitions, e.g., those proposed in the textbook edited by V. Senchagov (1) and offered by some other authors. Thus, this author rightly believes that for Russia, inter alia, the economic security issue is one of the most important for the development and existence of Russia as a unified sovereign state. We consider that this approach is typical for not only the Russian state but also, essentially, any country in the post-Soviet space, including the Republic of Azerbaijan, due to the universality of the security concept, which is the key link between economy and security. Herewith, according to the fair point of L. Goncharenko (2), the economic security category should be considered as the economic conditions of power institutions, in which the level of defense, political, and social development of the Russian Federation is sufficiently ensured and is progressive. The independence and invulnerability of the economic interests regarding possible external and internal threats and impacts are guaranteed. It is noteworthy that meeting these requirements is very important for the solution and perspectives of this issue and its relevance both for the interests of the Russian Federation and any sovereign post-Soviet state. It is also obvious that the primary objectives of the economic security of contemporary states, especially those developing which have gained independence relatively recently, are ensuring the continuous and balanced economic growth, control over unemployment and inflation, and creating an effective economic structure and developed security market. It is also important to reduce public debt and budget deficits, ensure social protection, and raise the living standards of the population. The national currency is supported at a stable level like other ones that determine the economic security strategy as the formation and justification of the strategic

plan priorities, national interests, as well as mechanisms and means for resolving issues. In economic security and its macroeconomic analysis, components such as economic independence, national economic stability and sustainability, and the ability to progress and self-development should be highlighted. As for economic independence, it implies the ability to ensure governmental control over the use of resources of state significance and competitive national advantages. Thereby, the equitable participation of states in international trade will be ensured. The stability and sustainability of the national economy imply the reliability and strength of all economic system elements, the protection of all proprietary forms, and the control over destabilization factors. The ability to progress and self-development is understood as the ability to independently implement national interests, create a favorable environment for new investments, and develop intellectual potential. Herewith, it is important that the constantly developing economy be able to not only demonstrate immunity to external and internal threats but also mitigate the consequences of destabilization. It is also generally recognized that economic security addresses primarily the state, society, citizens, enterprises, institutions and organizations, territories, and special-purpose objects. In short, the main subject of economic security is a state exercising its functions in this area through the relevant legislative, executive, and judicial bodies. In the economic security system, national economic interests and their priorities play a decisive role. To determine the national interests, in turn, the current economic conditions should be analyzed and the development trends identified, socio-economic development simulated and forecasted, the governmental regulation measures adjusted to achieve the desired goals, etc. Among these actions, the development of an economic data system that would include a quantitative estimation of the country's socio-economic development, which, of course, requires reflection in current statistics, and other measures are of importance. It is generally recognized that the priority economic interests of the state are the creation of a self-sufficient socially oriented economy, preservation and development of intellectual and scientific-technical potential, ensuring economically safe living conditions for society, building equitable and mutually beneficial economic relations with other states, and some other priorities. The country's economic security is threatened by a combination of conditions and factors that create a danger to the vital interests of the individual, society, and the state and make it difficult or impossible to realize national economic interests. Thereat, there are both internal and external threats to the country's economic security. The internal threats to the state's economic security include: 1) the uncertainty of the state scientific and technical policy, 2) the reduction in leading industries' production, 3) breaking economic ties, the economy monopolization and the society criminalization, 4) structural imbalances, large domestic debt, high depreciation of fixed assets, 5) energy crisis, 6) low labor productivity and investment activity, etc. External threats to the state's economic security are: 1) economic dependence on imports and a negative foreign trade balance, 2) an untenable export structure expressed in the excessive export of raw materials, 3) loss of foreign market positions and an increase in foreign debt, 4) misuse of foreign loans, 5) uncontrolled outflow of currency, placing it in foreign banks, and other threats. As can be seen, to ensure the country's national security in its entirety, the state economic security policy measures covering scientific, technical, economic, social, political, military, environmental, and informative spheres should be determined considering the priority national interests and threats to the country's economic security. However, the today's world is moving towards global trade and transport projects or preferential trade agreements of an institutional type, which should include contractual obligations on facilitating and reducing the border passage time for finished and intermediate goods and services, on the one hand, and institutional economic reform abroad, on the other hand. Thus, currently, the timeline of the implementation of the President of Russia decree to increase the cargo turnover of the Northern Sea Route (NSR) to 80 million tons annually by 2024, which will require 905.6 billion rubles, attracts attention (3).

Of them, according to the same source, 235.9 billion rubles should go to merging the Northern and Sverdlovsk railways and extending the transport system to the Northern Sea Route, and 169 billion rubles are allocated to the Sea Routes federal program. The list of measures attracts a certain trade and economic interest, among them, e.g. building several icebreakers, including one to be built under a mixed financing scheme, or extending the useful life of some atomic marine plants or liquid radwaste storage facilities, and some others. Naturally, the objective of the relatively distant economic prospect measures is the orderly development of a special main trade and transport route - the Northern Sea Route. The Arctic zone is of critical significance for Russian economic interests, since about 20% of the state gross domestic product and more than 25% of its exports come on this area quite apart from the fact that not only its main raw material base is located but also more than 90% of nickel and cobalt, more than 80% of gas, 25% of oil, etc. have already been mined and produced here. The total investment in projects for the Arctic raw material base and the logistics potential development until 2050 is estimated at 13.5 trillion rubles. Herewith, 5.5 trillion rubles should be assimilated by 2024 (4). Among the NSR advantages as compared with the Suez Canal is the absence of ship journey queues and payments, while the northern route is safer. The traditional southern route passes through the pirated Strait of Malacca and Somali waters, which means higher costs to ensure sea passage safety. Due to the aggravated situation in the Middle East, the risks of stopping traffic through the Suez Canal also occur. Indeed, in practical terms, the Arctic area differs significantly from other parts of the globe and the World Oceans by geographical and climatic features. The ice massif connected with the territory of the Arctic states - "the land" - blocks the Arctic waters for more than three hundred days a year that makes them essentially unsuitable for both inland and certainly international shipping. However, the fact that the Arctic nations have been developing "their" territory for a long time allows considering them as the most interested in and at the same time possessing special rights to the Arctic (5)<sup>1</sup>. Returning to these days, it can be noted that the lack of a quite accurate climate forecast is an important problem. Despite the rapid Arctic ice melting in response to global warming, in 30-40 years, according to some reports, the situation may change dramatically. Cooling may significantly affect operating conditions, which causes indefiniteness in whether it is worth investing in building ships for the Northern Sea Route. According to some experts, if in the autumn months the journey takes 10-12 days, then later, it reaches up to 40 days that may undermine the economy and make the shipowners and shippers unable to build business plans, etc. Another significant shortfall, according to relevant experts, is the lack of consolidated data on the maximum Northern Sea Route throughput capacity and a common operator for this route, as well as infrastructure and a regular cargo base throughout its length. E.g. in the summer of 2018, the Maersk container ship in a trial trip along this route could not even load fish. This became impossible due to the lack of reefer sockets commonly used to connect refrigerated containers, and other technical appliances. In these and other circumstances, the listed problems hinder popularizing and monetizing the Northern Sea Route. For comparison, it can be noted that the transit of goods through the Suez Canal exceeds one billion tons, whereas for the Northern Sea Route, it balances at about 200 thousand tons. In other words, the actual situation is that the number of transit ships passing along this route during a year and those passing through the Suez Canal per day is equal.

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<sup>1</sup> The basis for the current legal regime of the Arctic was laid back in the first half of the 19th century, after concluding a number of bilateral agreements and treaties such as the Russian-Swedish treaties of 1806 and 1826, the Russian-American Convention of 1824, the Russian-English Convention of 1825 g., and other acts. Moreover, the Arctic areas were annexed to Russia by the right of first discovery, which was in line with the international doctrine of the time concerning the acquisition of sovereignty for newly discovered territories. Nevertheless, there are historical facts of the recent past, when these Russian regions have been repeatedly assaulted, to say the least, without any success by some neighboring Arctic nations, e.g., when the Canadians raised the British flag on the Wrangel Island in 1921, etc.

On the other hand, the goals and objectives of Russia are mainly very ambitious; thus, in 2017, the NSR cargo carriage volume amounted to about 10 million tons and by only 2024, it can reach 52 million tons a year. It is quite possible and is not unlikely that provided all the measures announced for the route and the related infrastructure development are implemented, this seaway may eventually become not only the main national route but also one of the world shipping leaders, since there are an opinion and intention of China, in particular, to direct up to 15 % of its foreign trade turnover with Europe through this path after 2020. As for transportation security as a component of the economic one, it can be emphasized that in the modern age, ensuring it, inter alia, in international traffic is also one of the key issues of today's economic relations. Its solution is not only an important task for international transport agencies but is also considered an integral part of the state policy in the transport sector. Transportation security is one of the factors required for international carriage between two or more states based on the terms and conditions specified by the contracts (agreements) concluded. Despite the derivativeness of transportation security principles from the general principles of transport law, it is consistent with the requirements of peremptory international legal norms, specifically, with the provisions of the 1969 Vienna Convention on the Law of Treaties. Article 53 states that "a peremptory norm of general international law is a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted." It is also characteristic that considering the importance of the above principles, the Republic of Azerbaijan (6) has fixed its adherence to them in the Constitutional Law like other countries of the post-Soviet space. It can be noted that implementing the principle of arranging carriages and ensuring their safety has become the constitutional objectives for the activities of the government agencies in charge of transport. Herewith, the generally recognized principles and norms of modern international law have a great impact on the transportation security of states, which determines the possibility of ensuring it when carrying passengers, cargo, and baggage, as well as the nature of relevant measures implemented in this area. This circumstance acquires significance to the effect that in the international transportation of dangerous and hazardous goods, not only the overriding duty to establish mutually beneficial economic relations but also their equitable regulation has been predetermined. As can be seen, in our times, transportation security has become one of the main (domain) principles of modern international transport law and acquired special significance for the states, inter alia, for carrying passengers and goods in the course of their transport activity. As for any type of security, human life takes priority in the international carriage in strict compliance with transportation security. Transportation security (7) should be ensured by not only international legal means and measures but also legal regulation and enforcement in relation to any international transport operations. Herewith, it is required not to cause any damage to the environment or the interests of entities and to avoid the adverse effects for them. It is obvious that the above and other significant factors created a stable basis for both the implementation of energy transport projects of paramount importance and the national and economic security of Azerbaijan. It is noteworthy that large-scale strategic work has been paid off due to not only advancing national and economic interests but also using the opportunities of economic diplomacy and a successful combination of economic and political efforts. Herewith, it can be noted that thanks to the efforts of our state in recent years, its transport links with many other countries, including the EU member nations have expanded (8). The Baku-Tbilisi-Ceyhan (BTC) and the Baku-Tbilisi-Erzurum export oil pipelines have made a worthy contribution to ensuring global energy security. Signing the final investment decision on the TANAP and TAP projects that are an integral part of the Southern Gas Corridor, which is of exceptional importance in ensuring the energy security of the region and Europe, as well as on the Shah Deniz-2 project can also be noted. A significant part of the work on these projects has already been completed.

### 3. CONCLUSION

Large investments in the transport sector allowed implementing large-scale projects aimed at unlocking the transit potential. Thus, the Europe-Caucasus-Asia transport corridor (TRACECA) activities have intensified, the Baku-Tbilisi-Kars railway has been commissioned, a terminal in the complex of the Baku International Sea Trade Port opened, and projects are underway to build trunk routes along the North-South and East-West transport corridors. Currently, a new stage of economic liberalization and structural reforms is beginning in our country. At this stage, the main task is to create an effective economy, implement an effective social policy based on a healthier economic base. It should be noted that Azerbaijan, which had taken the thesis “The best social policy is the right economic policy” as a basis like many countries of Eastern Europe, successfully completed the period of economic transformation. The new stage of economic development in Azerbaijan is characterized by the development of the non-oil sector and entrepreneurship, a reduction in poverty, and the creation of a wide range of jobs. Simultaneously, our regions are developing which is accompanied by increased economic activity in the provinces. Our infrastructure facilities are being upgraded due to public investment. As potential fields of the non-oil sector, the service industry, construction, communications and information technology, transport, tourism, and the processing industry are developing. The state support policy for agriculture is sustainable. To ensure the sustainability of the successes achieved in the socio-economic development of our country, the Development Concept ‘Azerbaijan 2020: A Look into the Future’ has been adopted. Under the Concept, 53 documents have been approved and are being implemented, including the development of the non-oil sector and the improvement of transport, transit, and logistics infrastructure. Provision has been made for the balanced development of the regions, the transition to the information society, the development of human capital and building an effective social protection system, the strengthening of institutional capacity, the development of civil society, environmental protection, etc.

### LITERATURE:

1. For more details, see The Economic Security of Russia: General Course: Textbook. Ed. V. Senchagov, 2nd ed., Moscow: Delo, 2005.
2. Goncharenko, L.P. Security Management. Textbook. M., 2005, and other sources
3. Internet resource: Lenta.ru. Material "Russia is Building a Trillion Route for the Whole World" dated 1/24/2019.
4. See the same source
5. Encyclopedic Marine Reference. V.1. "Sudostroenie". Leningrad. 1987, pp. 43-45; Modern International Law of the Sea. The Regime of Water and the World Ocean Bottom. "Nauka". Moscow. 1974, pp. 184-19.
6. Efendiyev, O., Aliyev, E. Foreign Economic Activity of Modern Azerbaijan. Zardabi LTD LLC. Baku. 2007, and other sources
7. Aliyev, E.A., Efendiye, v O.F. International Transport Law and its Institutions. Textbook. "Gunesh-B". Baku. 2016, pp. 168-208, and other sources
8. Efendiyev, O.F. Some International Legal Issues of Cooperation and Partnership of Azerbaijan with European Countries in the Field of Economic Security // Russian Yearbook of International Law. 2013. St. Petersburg. 2014, and other sources



# **AZERBAIJAN'S SUSTAINABLE DEVELOPMENT MIRACLE: INFORMATION-COMMUNICATION TECHNOLOGIES AND INTELLECTUAL PROPERTY INDUSTRIES AS THE DRIVER, ENGINE AND CATALYST FOR INNOVATIVE DEVELOPMENT**

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## **ABSTRACT**

*Information-communication technologies (ICT) and intellectual property industries play a crucial role in promoting Azerbaijan's efficient transition to innovation, technology and knowledge-based economy. According to the UN, Azerbaijan's development cost of being landlocked equals to 11.24%. Taking into account the country's geographical disadvantage due to the landlockedness, ICT and intellectual property industries have been identified as key priorities in non-commodity sector development, economic diversification, balanced development of the country's regions, promotion of "Make in Azerbaijan" concept and "Made in Azerbaijan" brand. ICT and intellectual property matters have been included in "Azerbaijan 2020: The Vision to the Future" development concept, as well as strategic roadmap of the national economy and its key sectors. Azerbaijan's strategic geo-economic location at the crossroads of international corridors, as well as transport and logistics potential enables the country to emerge as a digital bridge and ICT hub, in the immediate region and beyond, by offering competitive and favorable opportunities. Enhancing the role of small and medium-sized enterprises (SMEs) in global trade is pivotal for Azerbaijan. The country's policy is directed towards better integrating local SMEs into global value chains. Industrial and techno parks established in the country are aimed at promoting digital economy and increasing the global competitiveness of the small and medium-sized enterprises. Azerbaijan is uniquely located and has built international digital marketplace to become a digital hub for business growing in the region. The rate of internet, electronic and mobile services usage in the country, as well as Industry 4.0 and digitalization offer necessary potential and tremendous opportunities for Azerbaijan's innovative development. According to the United Nations Development Programme, Azerbaijan was put on high human development category.*

**Keywords:** *creative economies, information-communication technologies, innovation, intellectual property, multilateral cooperation*

## **1. INTRODUCTION**

The fluctuations in oil prices in the world markets have accelerated economic diversification and reforms in the non-oil sector of our country. The structural reforms were undertaken and serious actions were implemented to improve the business environment in the country. As a result, Azerbaijan was recognized as a top business-reformer country in the World Bank's Doing Business 2019 report. In 2019, the GDP grew by 2.2% and growth in non-oil sector equaled to 3.5%. Industrial production increased by 1.5% and its growth in non-oil sector was 14%. Agricultural growth was almost 7% and non-oil export grew by 14%. Foreign currency reserves accounted for USD 51 billion and foreign trade turnover surplus was USD 6 billion. Minimum wages increased twice and minimum pensions grew 70%. Almost 100000 new job places were created. Inflation was 2.6% and foreign debt was around 17%. Azerbaijan has attracted approximately USD 111 billion in foreign investment since 2007, which has contributed to the development of all sectors of the economy. As the participant of the EU Eastern Partnership Initiative and holder of almost 70% share in the GDP of the South Caucasus

region, Azerbaijan continues its efforts in economic diversification, non-oil sector development, increasing competitiveness and improving export structure. In this context, intellectual property (IP)-based industries may play an exceptional role to promote country's smooth transition to innovation, technology and knowledge-based economy. Azerbaijan pays a special attention to the innovation, digitalization and creativity. During recent years, innovative development of the country accelerated. The rate of internet, electronic and mobile services usage in the country offers a favorable environment for innovative development. Significant results have been achieved, in recent years, in the use of IP for the economic, social and cultural development in Azerbaijan. Azerbaijan attaches importance to the promotion, protection and enforcement of intellectual property rights (IPR). The issues related to the development of IP have been included in "Azerbaijan 2020: the vision to the future" development concept, as well as strategic roadmap of national economy and key sectors of economy. Azerbaijan is one of the most successful performers and reformers in the region. Many international structures (International Telecommunication Union, Broadband Commission for Sustainable Development, UN Development Programme, World Bank, World Economic Forum and others) acknowledge and appreciate Azerbaijan's economic achievements. Referring to the recent international economic reports, Azerbaijan was well-ranked on a number of economic indicators, especially in ease of doing business and getting a credit, internet usage, as well as skilled labor force and literacy rates. In this context, Azerbaijan expands its international cooperation to effectively integrate into global value chains and multilateral trading system, as well as achieve the UN Sustainable Development Goals.

## **2. CREATIVE INDUSTRIES IN AZERBAIJAN**

According to the conducted analysis (based on Robert Solow model) by the Copyright Agency of the Republic of Azerbaijan (currently, Intellectual Property Agency of the Republic of Azerbaijan), it had been identified that the share of copyright-based (creative) industry had significantly increased (around 5.1% in 2019) in the GDP. During recent years, information system in the field of copyright has been further improved, application of electronic database on registered copyright objects and right holders has been ensured. Since the application of registration system, several thousand works and related rights objects have been registered. Taking into account legal importance of registration, electronic database called "Registration" related to the registration of works created, digital online registration system has been improved and digital library on folklore has been enriched. Several hundreds of musical folklore samples and architecture works are being kept in digital folklore library. With the aim of strengthening the fight against piracy, electronic smart system on identification of control marks stapled to copies of copyright objects has been formulated in Azerbaijan and educational training smart-classes has been held. In order to protect copyrights on internet, "one-stop-shop" based principle encompassing collective management system has been established and it is planned to integrate its database with the relevant system to be launched by the WIPO. As a result of monitoring conducted by Business Software Alliance, the level of piracy in book printing, audio-video products markets and software was substantially reduced.

## **3. IP COMMERCIALIZATION IN AZERBAIJAN**

Azerbaijan's geostrategic location at the crossroads of international corridors and its strong logistics potential has enabled the country to become an important trade hub and digital bridge in global and trans-regional trade by offering competitive and favorable opportunities. Furthermore, the numbers of start-ups are continuously increasing in the country. This will further increase FDI inflows to Azerbaijan and boost the exports of the country, including IP products. Moreover, Azerbaijan's very liberal foreign trade regime will further stimulate the growth of IP-based industries.

According to the WIPO Statistical Country Profiles, in 2018, patents in force in Azerbaijan equaled to 253. Furthermore, in 2018 in relation to Azerbaijan, Patent Cooperation Treaty (PCT) and Madrid System international applications equaled to 10 and 15 respectively. National Aviation Academy was the top PCT applicant in 2018. The commercialization of IP may result in substantial revenue for the Azerbaijani economy, including promotion of “Made in Azerbaijan” brand. In this context, Azerbaijan has a great potential with respect to geographical indications such as “Zira” tomato and olive, “Sirab”, “Badamli” and “Vaykhir” mineral waters, “Goychay” pomegranate and others.

#### **4. INDUSTRIAL AND TECHNO PARKS**

A number of industrial and techno parks have been established in Azerbaijan, offering concessional terms and conditions, covering diverse fields of economy. Industrial and techno parks (e.g. “Sumgayit Chemical Industrial Park”, “Balakhani Industrial Park”, “Garadagh Industrial Park”, “Mingachevir Industrial Park”, “Pirallahi Industrial Park”, “Mingachevir High-Tech Park”, as well as “High-Tech Park” of Azerbaijan National Academy of Sciences) established in the country are aimed at promoting digital economy and increasing the global competitiveness of the small and medium-sized enterprises. Furthermore, the very parks will enable the transfer of cutting-edge technology, know-how and expertise. Tax and customs incentives are provided for the residents of industrial and techno parks for a period of 7 years. Moreover, business procedures are simplified and registration process is electronically realized in one-stop-shop. In this regard, the task of High-Tech Park is to use scientific, entrepreneurial and innovative potential of Azerbaijan to advance innovation, research and technology commercialization. Therefore, High-Tech Park enables the favorable environment to generate science and technology-based ideas that may lead to innovative products, as well as promote and commercialize potentially-marketable inventions and business models developed by innovators.

#### **5. TRANS-REGIONAL ICT CONNECTIVITY**

Azerbaijan promotes trans-regional ICT connectivity through perspective implementation of the UN-supported Trans-Eurasian Information Super Highway (TASIM) project which will enhance broadband connection, development of ICT infrastructure and e-commerce across Eurasia. TASIM is a regional initiative aimed at creation of trans-national fiber-optic backbone targeting countries of Eurasia and envisages building a new transit route from Germany to China. The activities are being continued in the framework of the TASIM Consortium and, once operational, this route will connect the biggest internet exchange points in Europe and Asia, namely Frankfurt and Hong Kong. Trans-Caspian Fiber Optic project will establish a digital telecommunication corridor between Asia and Europe. The cable will connect Azerbaijan and Kazakhstan via subsea link which will traverse the seabed of Caspian Sea. This project will formulate a digital telecommunication corridor between Europe and Asia through Azerbaijan, as well as advance the development of Azerbaijan’s ICT sector, connect Azerbaijan to the internet hubs of Europe and provide diversified internet supplies to other countries of the region.

#### **6. SUCCESS CASES OF AZERBAIJAN**

As the only satellite operator in the region, AZERCOSMOS is keen to become one of the leading actors of the international space club. Data Center, being the largest in the region, will intensify the country’s integration into global information environment. Digital Trade Hub portal has been established with the aim of further developing infrastructural base of e-commerce and offering a range services for regional economic and trade facilitation.

Azexport.az, integrated with leading e-trade portals, provides information about “Made in Azerbaijan” products and acts as a platform for their sales in foreign and domestic markets. National Nuclear Research Center develops nuclear technologies for peaceful purposes and expands scientific research. High-Tech Research Center pursues the goal of importing cutting-edge technologies to Azerbaijan and fostering digital transformation. Internet of Things Laboratory has been launched to develop various ICT solutions and expand innovative activities by attracting young professionals and start-uppers. Azerbaijan Innovations Export Consortium has been jointly established by 10 leading Azerbaijan ICT companies to export innovative and competitive products and services to the foreign markets. Annually-held BAKUTEL – Azerbaijan International Telecommunications, Innovations and High Technologies Exhibition, is a business platform to showcase global ICT achievements to shape the digital future. Cyber Security Service conducts relevant activities in the field of cyber security to counter cyber threats and attacks. As the holder of the UN Public Service Award, ASAN Service – a structure providing various public services for the citizens and residents of Azerbaijan, applies the most sophisticated ICT and renders its services in an innovative manner. "INNOLAND" Incubation and Acceleration Center is aimed at developing private sector, promoting innovation, supporting start-ups and producing world-class competitive products.

## **7. HUMAN CAPITAL DEVELOPMENT AND CAPACITY BUILDING**

Azerbaijan is in the process of integration into multilateral trading system, as well as strives to increase the efficiency of its engagement in world economy and global value chains. In this regard, there is a demand to enhance the capabilities and capacity of the experts on economic, ICT and intellectual property matters. Besides, in order to ensure the sustainable socio-economic development and maximize the benefits of the integration into the multilateral trading system, measures are continuously being taken to further increase the effectiveness of capacity building and human resources development. Azerbaijani universities and research institutions play a crucial role in human capital development. As a matter of fact, during recent years, in close collaboration and cooperation with international organizations the following structures were established at the Azerbaijan State University of Economics (UNEC): WTO Reference Centre, WIPO Depository Library, WIPO Technology and Innovation Support Centre, World Bank Social Information Centre. Moreover, UNEC has become a member of Virtual Institute of the United Nations Conference on Trade and Development (UNCTAD), participates in the WTO Document Dissemination Programme and its collaborators has joined to the UNECE Roster of Public-Private Partnership Experts. Furthermore, UNEC has signed a number of cooperation agreements with several foreign universities and implements dual degree programs. As a result, UNEC was highly ranked, regionally, at the relevant international ratings (e.g. Webometrics, Google Scholar, Web of Science and others).

## **8. CONCLUSION**

Volatilities and turbulences in global energy markets have presented Azerbaijan with an opportunity to further concentrate on the development of non-commodity sector, introduction of structural reforms aimed at facilitating trade, investment and business climate in the country and elimination of possible impediments to the economic growth. As the result of successful reforms, during recent years, the number of Azerbaijan’s trading partners exceeded, the country signed, a number of bilateral trade and economic partnership agreements, the country’s external trade increased several times. Azerbaijan, as the initiator of large-scale trans-regional projects and enabler of regional connectivity, will continue to mobilize more resources to increasing its share in the global and regional trade, improving logistics and soft transport infrastructure. According to the UN, TASIM could position the country as a transit hub for the region and, among the landlocked developing countries, Azerbaijan has the most robust cross-border

connectivity. Referring to the UN studies, Azerbaijan's development cost of being landlocked equals to 11.24%. Hence, taking into account country's geographical disadvantages due to landlockedness, Azerbaijan highly appreciates the Vienna Programme of Action for landlocked developing countries, as a strategic guidance for successful realization of its long-term economic sustainability objectives and further ensuring country's efficient integration into the global economy. Azerbaijan attaches importance to trade facilitation, simplification of customs formalities and liberalization of foreign economic activities. As a party to the revised Kyoto Convention on Simplification and Harmonization of the Customs Procedures, Azerbaijan is constantly working towards harmonizing its national legislation with the best practices available. The country is committed to an international trading system promoting sustainable and inclusive development which is based on fair and equitable rules. Azerbaijan is keen to establish a diversified free-market economy that will increase Azerbaijan's competitiveness in relevant economic sectors, reduce its vulnerability that is due to the dependence on the oil and gas sector, and attract more foreign direct investment. Azerbaijan recognizes the contribution of intellectual property in achieving sustainable, balanced and inclusive growth and cooperates with its international partners. Azerbaijan is keen to continue its efforts to further conduct reforms in the field of intellectual property promotion, protection and enforcement. The country is also focused on ICT development to become a hub for the region. The advancement of the development of the intellectual property system in Azerbaijan might be also a positive step towards integration into the multilateral trading system aimed at diversifying the economy, developing non-oil sector, attaining high standards of living and ensuring sustainable socioeconomic development. Multilateral intellectual property cooperation opens new horizons and perspectives to further advance ICT and intellectual property-intensive industries, in Azerbaijan. Furthermore, such cooperation might contribute to country's efficient and effective integration into the global economy and value chains, as well as achieving SDGs.

#### **LITERATURE:**

1. Broadband Commission for Sustainable Development, The State of Broadband 2018: broadband catalyzing sustainable development, Geneva, 2018, page: 84.
2. International Telecommunication Union, Measuring the Information Society Report 2017. Volume 2. ICT Country Profiles, Geneva, 2017, page: 14.
3. United Nations Economic and Social Commission for Asia and Pacific, Bridging information-communication technologies, transport and energy infrastructure gaps for seamless regional connectivity, Bangkok, 2014; page: 27.
4. United Nations Economic Commission for Europe, Promoting Green Innovation: Policy assessment and recommendations – Azerbaijan, Geneva, 2013, page: 15.
5. United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, The development economics of landlockedness: understanding the development costs of being landlocked, New York, 2013; page: 65.
6. World Bank, Doing Business 2019: Training for reform, Washington, 2019, page: 155.
7. World Economic Forum, The Global Competitiveness Report 2018, Geneva, 2018, pages: 83-85.
8. World Economic Forum, The Global Information Technology Report 2016: Innovating in the Digital Economy, Geneva, 2016, page: 62.
9. World Intellectual Property Organization, Global Innovation Index 2019: Creating healthy lives – the future of medical innovation, Geneva, 2019, page: 224.
10. World Intellectual Property Organization, Statistical Country Profiles: Azerbaijan [https://www.wipo.int/ipstats/en/statistics/country\\_profile/profile.jsp?code=AZ](https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=AZ).

# ENVIRONMENTAL SAFETY AND INTERNATIONAL TRANSPORT CORRIDORS

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## **ABSTRACT**

*The article is devoted to the environmental issues of the formation of international transport corridors at this stage - to reflect environmental problems and plans for the development of the transport industry. In the context of expanding international cooperation and deepening integration processes, the formation of international transport corridors plays a leading role in solving transport problems associated with ensuring interstate economic, cultural and other ties, with the advisability of creating an international transport infrastructure that has agreed technical parameters and ensures the use of compatible transportation technologies, as the basis for the integration of national transport systems. The strategic function of international vehicles and its own form of export services are of particular importance to international transit countries. Important is the development of international economic relations between Europe and Asia, which have a tendency for future growth. A comprehensive analysis of the issues addressed in this study allowed us to identify opportunities for enhancing the environmental components of the transit potential. A model of the process of strengthening environmental components of the countries' transport and transit potential is proposed. The model incorporates key international identifiers, implementation areas, government challenges, greening targets and strategic guidelines, and measures necessary to strengthen the environmental component of some countries' transportation and transit potential. The need for the creation of surface transport corridors is being updated.*

**Keywords:** *greening, safety, environmental safety, international transport corridors, transit traffic, transport infrastructure, integration*

## **1. INTRODUCTION**

In recent decades, the pace of global industry integration has become much higher due to continuous economic growth and innovative development in such areas as technology, science, industry, energy, transport and communications. A modern infrastructure is being created, new complex economic and technical systems are emerging. Under these conditions, the transport component is a system-forming vector of national development and structural and functional integration into the international transport infrastructure, the functioning and development of which is accompanied by a negative impact on the natural environment. Therefore, an important feature of the current stage of economic development of a society is its dependence on the quality of functioning of various technical systems. Currently, the development of the transport industry is characterized by significant growth, which plays an important role in the modern economy. The role of the transport system of the some countries in the global economy is becoming an important part of the global system of international transport corridors (ITC), providing global commodity markets, uninterrupted movement of the flow of goods and passengers, labor and production resources, finances and services. In the context of continuous growth in the volume of trade between Western Europe and Asian countries, the development of the ITC passing through the territory of countries as Kazakhstan, Azerbaijan, Russia, Turkey and etc., is of particular importance. An analysis of current trends in the functioning of the transport complex, including the realization of the transport and transit potential, indicates the decisive importance of this sector for the sustainable development of the national economy.

## 2. ICT AND ENVIRONMENTAL

Within the framework of the complex problem of increasing the efficiency of the functioning of the transport complex of this countries with the aim of developing new conceptual approaches to the formation of transit transport highways of continental importance, we consider the main environmental and economic aspects of the creation of the ITC, safety and security of goods. We will also define some strategic guidelines for the ecologization of transit traffic across the countries, and the possibility of strengthening the environmental component of the transport and transit potential of them. The main work on the formation of the ITC begins with the preparation and subsequent signing of an international agreement with the participation of the states on whose territory it is planned to lay a transport route, as well as countries interested in using it. It is known that the functioning of road, rail, sea, water, air and pipeline transport has a significant impact on the environment, poses an increased threat of accidents and technological disasters, accompanied by a large economic damage. In this regard, one of the most important problems of the creation and functioning of new ICTs is the problem of ensuring their environmental safety. The environmental issues of transport and safety make it necessary to reduce its harmful effects on the environment, and, as a result, create high-quality living conditions for the country's population. Particular importance should be given to ensuring the safety of transported goods, preventing emergencies and accidents, losses from them, combating terrorism in transport and other global security measures, which is extremely important for the further development and organization of the normal operation of all types of transport involved in the ITC. The strategic function of the ITC is to ensure international transit. Like any other activity related to the transportation of goods, the implementation of warehousing and temporary storage operations, loading and unloading operations, etc., this is also inevitably associated with various kinds of risks. Throughout the supply chain, there is always the possibility of emergency. A course that is gaining momentum on the ecologization of transport, the development of containerization technologies for transit freight flows, the rapidly growing production and consumption segment, as well as other macro trends in international relations and world trade, dictate new requirements for the quality of transport services. The term “greening” has found wide application in the concepts of various spheres and types of human activity. It is not enough to understand this term only as a set of measures aimed at caring for the environment. Greening is also commonly understood as the process of the steady and consistent implementation of systems of technological, managerial and other solutions that enhance the efficient use of natural resources and conditions, increase the level of safety and reduce risks at the local, regional and global levels. States participating in international transport processes have in their legislation the relevant regulations and regulations governing the infliction of minimal damage to the environment. However, such laws indicate conditions that are acceptable only for each individual country, and completely do not take into account the legislation of neighboring territories. Features of the impact of the transport industry on the environment can be reduced to the following:

- pollution of the atmosphere, water bodies and lands, changes in the chemical composition of soils and microflora, generation of industrial waste;
- consumption of natural resources and heat in the environment;
- the creation of high levels of noise and vibration;
- the possibility of intensifying adverse natural processes, such as water erosion, waterlogging, landslides, landslides, etc .;
- injuries and deaths of people, animals, causing great material damage in accidents and disasters.

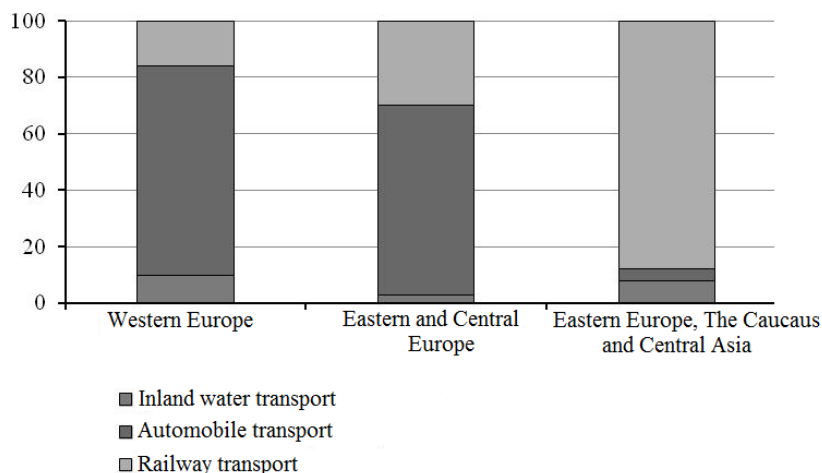
Within the borders of the ITC, urbanized territories, locations of large transport hubs, as well as corridor sections passing through the border territories of various states will be negatively

affected. The experience of creating the ITC in the countries of the European Union shows that the development of recommendations that have an integrated approach to addressing environmental issues, as well as integrating environmental issues into the development of transport policy and reflecting these issues in the development plans of states involved in the transport process, significantly reduce some types of industry impact to the environment. Thus, the countries of Europe, the Caucasus and Central Asia were divided into three groups by the Economic Commission for Europe at the United Nations (UNECE) taking into account established political associations:

1. Western Europe - Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, Great Britain, Iceland, Liechtenstein, Norway, Switzerland, including the small states of Andorra, Monaco, San Marino.
2. Central and Eastern Europe - Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia, Cyprus, Malta and Turkey, Albania, Bosnia-Herzegovina, Croatia, Macedonia, Serbia and Montenegro .
3. Eastern Europe, the Caucasus and Central Asia - Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova, the Russian Federation, Ukraine, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan.

### 3. ENVIRONMENTAL STANDARDS AND REGULATIONS

For practical reasons, it was recommended to introduce environmental standards and regulations regarding modes of transport, types of vehicles and fuel used. However, these standards and regulations in the field of environmental efficiency were not significant enough and could not reduce the overall negative impact on the environment, which is associated with the rapid development of the transport industry and its infrastructures. In connection with the emerging and ongoing trend, the negative aspects of the environmental situation in the field of transport will manifest themselves even more noticeably than before. It should be noted that the groups of countries differ significantly from each other in such indicators as the volume of transport traffic, as well as in the distribution of the number of transport operations between road, rail, water and air modes of transport.



*Figure 1: The proportion of different modes of transport in freight traffic by groups of countries (%)*

*(Source: according to the European Agency Environment (EEA))*

Currently, in Western Europe, road transport predominates in the general structure of transport transportation, as in the countries of Central and Eastern Europe. At the same time, the share of railway transport in the total volume of traffic is slightly more significant than in Western



Europe. In the countries of the third group, including the Russian Federation, rail transport plays a leading role and there are no signs of a decrease in the volume of transit freight by rail. Since the progress of these territories is due to their individual economic development, the development of individual industries, including transport, the successful environmental results noted in the European Union cannot be sustainable. Due to significant variations in environmental indicators, the opening of the new ITC should fully include the technical modernization of the corresponding highways, taking into account all environmental standards and requirements for their environmental safety, as well as legal and organizational and technical harmonization of transportation. The transition to modes of transport that cause the least damage to the environment will help to reduce the overall negative impact on nature. In addition to the threats of emergencies during the transportation of goods associated with a negative impact on the environment, violation of environmental rules and norms of transportation, another component of the issue being considered is becoming increasingly relevant - ensuring transport safety. The concept of "security" in relation to the transport industry is quite multifaceted and involves the implementation of a whole range of measures related to the forecasting of possible threats and counteraction to their implementation. Recently, it is relevant to create the most effective from a technical and economic point of view of emergency prevention and response mechanisms. The key problem facing the international trading system is ensuring the safety of people and the safety of goods in the global supply chain. Another equally important issue is the issue of ensuring safety during the transport of dangerous goods. On these issues, international law adheres to the ISO28000 series of standards developed by the International Organization for Standardization and the recommendations on the transport of dangerous goods for all modes of transport prepared by the Committee of Experts on the Transport of Dangerous Goods and the globally harmonized system of classification and labeling of chemicals of the Economic and Social Council United Nations. Based on these documents, international organizations and governments of various states are developing regulatory documents governing the transport of dangerous goods by various modes of transport. The following safety aspects are provided for in accordance with model regulations:

- a list of dangerous goods that are most often transported;
- classification and definition of cargo classes by categories depending on the type of risk associated with their transportation;
- cargo dispatch procedures: labeling, labeling and preparation of transport documents;
- emergency measures;
- packaging standards, test procedures and certification;
- standard requirements for containers for transportation by various modes of transport, test procedures and the issuance of relevant documentation;
- reporting of accidents, incidents, etc;
- The following documents are mandatory for the implementation of the international transport of dangerous goods through the territories of states that have ratified the relevant conventions and agreements;
- European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR – ADR);
- European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (WOPO – AND);
- Convention on Civil Liability for Damage Caused during the Carriage of Dangerous Goods by Road, Rail and Inland Water Transport (CRTD);
- Agreement on the international transport of perishable foodstuffs and on special vehicles intended for such transport (ATP);

- Rules for the Safe Transport of Radioactive Material (IAEA);
- International Code for the Carriage of Dangerous Goods by Sea (MK RID – IMDG CODE);
- International Convention for the Safety of Life at Sea (SOLAS-74);
- International Convention for the Prevention of Pollution from Ships (MARPOL);
- Code of Safe Practice for the Carriage of Non-Grain Bulk Goods;
- Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI);
- IATA Dangerous Goods Regulations (IATA - Rules for the transport of dangerous goods);
- Rules for the transport of dangerous goods by rail, enacted at the 15th meeting of the Council on Rail Transport of the CIS Member States, Minutes No. 15 dated 04/05/96 (as amended on May 7, 2013);
- Rules for the transport of dangerous goods (Appendix 2 to the Agreement on International Freight Traffic (SMGS));
- Rules for the transportation of liquid cargo in bulk in tank cars and bunker-type cars for the transportation of oil bitumen, agreed at a meeting of authorized representatives of railway administrations (protocol of March 17–18, 2009);
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal;

At the present stage of the development of a market economy, ensuring the safety and security of goods for some countries is becoming significant. The course towards containerization of international freight flows requires changes both in the material and technical base of transport, and in the organization and commercial practice of international transport. The transition to an integrated multimodal transportation system, which will ensure close interaction between various modes of transport combined into logistics chains, will contribute to the development of Euro-Asian transport corridors. The transportation in containers prohibited for trafficking of goods by sea, rail and road is one of the common ways of smuggling, which is facilitated by the increase in cargo flow through the customs border of the countries. For example, The State Customs Committee of the Russian Federation is taking special measures to stop violations of customs legislation, ensuring thorough customs inspection of containers moving across the border. When carrying out container transportation, risk criteria such as the presence of explosive, radioactive, poisonous and potent substances, weapons, ammunition, drugs, other items and materials of increased danger, items with significant material, cultural or scientific conditions are taken into account in the container value. Particular attention is paid to the state of the operational situation in the transportation zones, including the criminal situation. An important component of maintaining safety during international transport is the reduction in accidents. Taking into account the experience of other economically developed countries, it is necessary to develop international communication away from large industrial enterprises and residential areas, despite the fact that the fulfillment of this condition is not always economically feasible. This fully applies to the transport of dangerous goods by rail and (or) mixed transport. Another problematic issue in the development of the ITC is the protection of transport from terrorist threats. Under the current system for ensuring traffic safety, container transport safety issues are controlled by the some governmental divisions. In addition, internal affairs bodies in transport patrol railway lines, territories of freight and sorting stations. In matters of security during the development of the ITC, it is necessary to take into account the state of the transport infrastructure, its features, and the ability to proactively counter the threats of illegal entry into containers. In Russian Federation government is taking other steps towards ensuring the environmental safety of the ITC. Because this country is biggest in te world and basic state on the Euro Asian transport systems. So, in the framework of international global integration, taking into account the development of railway transport in Eastern Europe and Central Asia, on November 23, 2012 Azerbaijan, Armenia, Belarus, Kazakhstan, the Kyrgyz

Republic, the Republic of Moldova, the Russian Federation, Tajikistan and Ukraine as part of the Inter-Parliamentary Assembly member states of the Commonwealth of Independent States adopted a model law "On Rail Transport", which sets the basis for state regulation, legal, organizational and economic conditions operation of railway transport. This law determines the provision of environmental and fire safety in public rail transport, as well as the sanitary and epidemiological welfare of the population:

1. On public railway transport, work to ensure environmental and fire safety, as well as to ensure sanitary and epidemiological welfare of the population, is carried out by railway transport organizations in accordance with the law.
2. State fire supervision in public railway transport, with the exception of state supervision of railway rolling stock, is carried out by the state executive body authorized to solve problems in the field of fire safety. Fire safety control and fire supervision at infrastructure facilities and railway rolling stock are carried out by the departmental security of the state executive body for the implementation of state policy in the field of railway transport.
3. State control (supervision) over ensuring environmental safety, as well as over ensuring the sanitary and epidemiological well-being of the population in public railway transport, is carried out in accordance with the law.

At the present stage of the development of a market economy, ensuring the safety and security of goods is becoming significant. The course towards containerization of international freight flows requires changes both in the material and technical base of transport, and in the organization and commercial practice of international transport. The transition to an integrated multimodal transportation system, which will ensure close interaction between various modes of transport combined into logistics chains, will contribute to the development of Euro-Asian transport corridors.

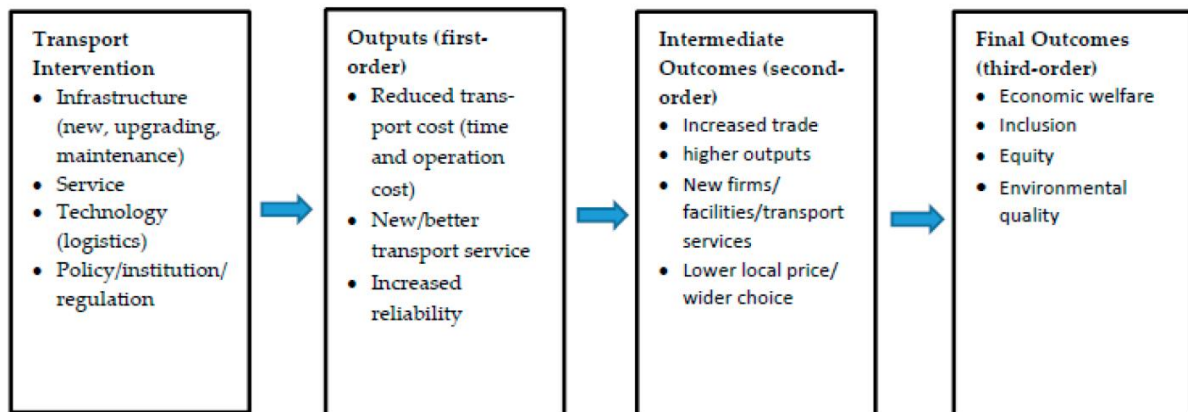


Figure 2: Effects of transport improvement/intervention  
(Source: Adapted from Asian Development Bank)

The transportation in containers prohibited for trafficking of goods by sea, rail and road is one of the common ways of smuggling, which is facilitated by the increase in cargo flow through the customs border of the country. The State Customs Committee of the Russian Federation is taking special measures to stop violations of customs legislation, ensuring thorough customs inspection of containers moving across the border. When carrying out container transportation, risk criteria such as the presence of explosive, radioactive, poisonous and potent substances, weapons, ammunition, drugs, other items and materials of increased danger, items with significant material, cultural or scientific conditions are taken into account in the container value.

Particular attention is paid to the state of the operational situation in the transportation zones, including the criminal situation. An important component of maintaining safety during international transport is the reduction in accidents. Taking into account the experience of other economically developed countries, it is necessary to develop international communication away from large industrial enterprises and residential areas, despite the fact that the fulfillment of this condition is not always economically feasible. This fully applies to the transport of dangerous goods by rail and (or) mixed transport. Another problematic issue in the development of the ITC is the protection of transport from terrorist threats. Under the current system for ensuring traffic safety, container transport safety issues are controlled by the Traffic Safety Department of Russian Railways OJSC, and the relevant cooperation agreements are concluded between the Federal State Unitary Enterprise Departmental Guard of the Russian Railways and Trans Container divisions. In addition, internal affairs bodies in transport patrol railway lines, territories of freight and sorting stations. In matters of security during the development of the ITC, it is necessary to take into account the state of the transport infrastructure, its features, and the ability to proactively counter the threats of illegal entry into containers. The Russian Federation is taking other steps towards ensuring the environmental safety of the ITC. So, in the framework of international global integration, taking into account the development of railway transport in Eastern Europe and Central Asia, on November 23, 2012 Azerbaijan, Armenia, Belarus, Kazakhstan, the Kyrgyz Republic, the Republic of Moldova, the Russian Federation, Tajikistan and Ukraine as part of the Inter-Parliamentary Assembly member states of the Commonwealth of Independent States adopted a model law "On Rail Transport", which sets the basis for state regulation, legal, organizational and economic conditions operation of railway transport. Article 30 of this law determines the provision of environmental and fire safety in public rail transport, as well as the sanitary and epidemiological welfare of the population:

1. On public railway transport, work to ensure environmental and fire safety, as well as to ensure sanitary and epidemiological welfare of the population, is carried out by railway transport organizations in accordance with the law.
2. State fire supervision in public railway transport, with the exception of state supervision of railway rolling stock, is carried out by the state executive body authorized to solve problems in the field of fire safety. Fire safety control and fire supervision at infrastructure facilities and railway rolling stock are carried out by the departmental security of the state executive body for the implementation of state policy in the field of railway transport.
3. State control (supervision) over ensuring environmental safety, as well as over ensuring the sanitary and epidemiological well-being of the population in public railway transport, is carried out in accordance with the law.

All legislative acts, norms and standards, conventions and agreements, conceptual and programmatic developments touch upon the issue of greening and safety of the transport and transit complex more often than not completely and declaratively, given the determination of priorities in ensuring the environmental safety of individual links of the transport chain. In the context of the problem of increasing the efficiency of the functioning of the transport complex, one of the most relevant and significant should be the task of greening transit traffic through the country, strengthening the environmental component of the transport and transit potential. The proposed model contains the main international determinants, areas of implementation, state problems, guidelines for setting goals and strategic directions for greening, the necessary measures to strengthen the environmental component of the country's transport and transit potential. The model is an integral part of the development concept of the transport complex developed by the authors, providing for the priorities and socio-economic guidelines of national

strategies, development programs, as well as the adaptive features of the ITC component to the conditions of geopolitical and geoeconomic variability of the world economy.

#### 4. CONCLUSION

In addition to decisions of a legal and organizational-technical nature, a reliable mechanism for ensuring biocommunications at the intersection of transport corridors with natural migration corridors of animals and plants and buffer zones must be integrated into the environmental safety system. Relevant measures to ensure the environmental safety of the ITC should be carried out both at the stage of their justification and design, as well as in the process of construction and operation. The development of a generalized comprehensive strategy, simultaneously covering the problems of transport development, including the creation of the ITC, and the imperative of complying with environmental requirements, will make it possible to ensure reliable environmental protection and fulfill the tasks of industry integration and guarantee sustainable development of territories. Considering that the logistics chain is always a zone of increased risk, the safety and security of goods should be given considerable attention in the development plans of the ITC, while it is important to clearly define the tasks and solutions, identify and identify real tools and mechanisms for prevention, detection and counteraction to deliberate unauthorized actions, including planning, implementation, monitoring and improvement of ongoing activities, covering legal, organizational, technical, technological and environmental economic aspects.

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#### LITERATURE:

1. Venables, A.J.; Gasiorek, M. The Welfare Implications of Transport Improvements in the Presence of Market Failure—Part 1 Report to Standing Advisory Committee on Trunk Road Assessment; DETR: London, UK, 1999
2. Graham, D.J.; Gibbons, S. Quantifying Wider Economic Impacts of Agglomeration for Transport Appraisal: Existing evidence and future directions. *Econ. Transp.* 2019, 19, 100121.
3. Asian Development Bank; Department for International Development; Japan International Cooperation Agency; World Bank. *The WEB of Transport Corridors in South Asia*; World Bank: Washington, DC, USA, 2018; ISBN 978-1-4648-1216-3.
4. Гурьева М.А., Руднева Л.Н. Оценка устойчивого развития региона на основе индикатив-ной системы оценки уровня экологизации экономики // *Вестн. УрФУ. Серия «Экономика и управление»*. 2013. № 3. С. 104–116
5. Чумляков К.С. Стратегическая роль транспортных коридоров в развитии международных транзитных перевозок // *Рос. внешнеэкономический вестн.* 2013. № 11. С. 62–67

## SOME CONSIDERATIONS ON FREQUENCY ELECTRONIC DICTIONARIES OF THE AZERBAIJANI LANGUAGE

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### **ABSTRACT**

*The article deals with dictionaries that reflect the lexical base of the Azerbaijani language, especially the frequency or frequency e-dictionaries. Although the history of lexicography in Azerbaijan goes back to ancient times, the compiled dictionaries have their own specific requirements and criteria for each period. In our modern age, the rapid development of science, technology, and especially computer technologies has caused the necessity the creation of a new field, electronic forms of new lexical events. The most noteworthy of such dictionaries as machine dictionaries are electronic dictionaries. The essence of these types of dictionaries is disclosed here, and their importance is highlighted. Frequency electronic dictionaries are ideal for quick access to any information. By typing the word you want in a specific search engine, we can get the frequency of that word or all of the relevant words. In general, electronic dictionaries are not only the most useful source in search engines, but also act as a valuable source in teaching of foreign languages.*

**Keywords:** *Azerbaijani, lexicography, electronic dictionary, frequency dictionary, internet, computer linguistics, machine dictionaries*

### **1. INTRODUCTION**

The history of linguistics and vocabulary in Azerbaijan has a long and rich tradition. Even in the eleventh century, Mahmud Kashghari has made a primary significant contribution to the formation and development of our vocabulary and comparative-historical linguistics by his famous “Divani-lughat-it-Turk” (Turkish dictionary compilation). Following a well-known dictionary, several dictionaries have been historically developed and each has its own specific goals and functions, and it still exists today. The dictionaries that were developed in the past centuries had different and distinctive principles. However, the rapid development of science and technology in the course of further historical development has also influenced the language, contributing to the change and enrichment of its lexical content. Thus, since the second half of the twentieth century, the emergence, formation and rapid development of computing technologies, the beginning of the Internet age, have required some innovative innovations in linguistics, especially in linguistics, which is a practical area of linguistics. Such a necessity, or the requirement of time and time, has placed important tasks before linguists in this regard. Favorable preconditions and conditions for the emergence of a new linguistic field, such as computer linguistics. Thus, “With the advent of computers and the development of cybernetics, the demand for statistical data on language has increased. Frequency dictionaries in modern information systems, automated preparation of abstracts, obtaining statistical lists of linguistic units, reading ancient, encrypted texts and forensics. Frequency dictionaries are also the basis of machine dictionaries. They are widely used in information retrieval systems”. For the purpose of theoretical and practical implementation of the above-mentioned issues, in 2013, the Department of Computer Linguistics was established at the Institute of Linguistics named after I.Nasimi of ANAS. Certainly, the creation of such a department was irrefutable in the decree of the President of the Republic of Azerbaijan dated April 9, 2013. The main task of the State Program on the use of the Azerbaijani language in the context of globalization and the development of linguistic development in the country is to ensure the participation of linguists

in the creation of modern information and communication technologies in the context of globalization. In the aforementioned order, the issue investigated hereby was specifically mentioned. For example, the order “Creation of a common database of the Azerbaijani language as a state language” (6.4.1), “Development of improved new orthographic, explanatory, phraseological, translation, encyclopedic and frequency electronic dictionaries of the Azerbaijani language” (6.4.2), “Strengthening activities pertaining creation of Internet resources, electronic and interactive textbooks in Azerbaijani” (6.4.3) are presented in relevant paragraphs.

## **2. ELECTRONIC DICTIONARIES OF THE AZERBAIJANI LANGUAGE)**

In the modern information society, the emergence, improvement and development of new technologies has become the most important requirement of our time. Taking this into consideration, the President Ilham Aliyev has set significant tasks before linguists by signing the Decree “On a number of measures to ensure greater use of the Azerbaijani language in the electronic space” on July 17, 2018. The decree emphasizes that “Today there is a favorable basis for the use and fundamental research of the Azerbaijani language and the improvement of the situation in the field of linguistic science in the country. At the same time, the rapid globalization of science and technology calls for a new level of work to enrich and enrich the Azerbaijani language”. Thus, this process has led to the development of lexicographical theory and vocabulary to a new level, stimulating the development of different cultures or languages, enhancing their technical capabilities and modernizing the needs of society. In the process of establishing and developing interstate multilateral relations, dictionaries in the present era play an important role in the communication process, linking them to a number of aspects. Internet, which is the main source of information technology or the source of modernity, is widely used in any business, especially in the production of a variety of electronic dictionaries. The main problem in electronic dictionaries, not unlike the previous dictionaries, is not only the alphabetical order of words, but also the interpretation of words in the dictionaries, as well as the provision of detailed dictionary articles with multimedia elements. In addition, words, word combinations, formulas and expressions must be systematically presented, followed by alphabetical order, and the sequence should be based on all letters that make up the word, rather than the first letter of the dictionary. It should also be noted that in our globalized world, humanity, which has created an impression of a countryside, has the need for information more quickly and easily than in previous generations. Formation and rapid development of information technologies have become a special requirement. Therefore, in order to keep up with such innovations, scientists working in relevant fields have put forward a number of new and innovative suggestions for the rapid acquisition of any information by means and methods, and without delay. Thus, electronic dictionaries or frequency dictionaries have emerged according to the requirements of the time. A citation by M.Mahmudov regarding frequency dictionaries follows: “Frequency dictionary is a list of words, word forms or word combinations that are observed in the text (sampling) of the study. The dictionary shows numbers that indicate how often units are processed in texts. Frequency dictionary allows you to compare words by word processing speed. In this regard, the scope and scope of frequency dictionaries are very wide. Frequency dictionaries show a number of features that are defined by the ratio of any text to the vocabulary and to individual words in the text”. Remarks by N.Alakbarova concerning frequency dictionaries include: “Frequency dictionaries are types of vocabulary where the frequency of words, word forms and word combinations is expressed in figures. Depending on the type, some vocabulary forms the word form (for example, from, to and of foot), in some dictionaries only simple words (feet) without the form, and in some complex words or word combinations (legends).

The frequency dictionaries represented by the painters at present are not a rarity”. Apparently, this type of leverage can be characterized as machine dictionaries in general. The study found that the main database of machine dictionaries is frequency dictionaries. However, it should be noted that frequency dictionaries have both print, paper and electronic versions. The first non-electronic dictionary in the world is Kedingger’s German dictionary, published in 1898. The main vocabulary of the dictionary is about 11 million words. In 1953, Josselson compiled the first electron frequency dictionary on a computer and released it to users. Subsequently, electronic frequency dictionaries covering a number of different languages were developed. A comprehensive statistical analysis of the present English written speech is also reflected in the studies by G. Kucera and U. Francesi in the United States. In Azerbaijan, a “Frequency dictionary of the Azerbaijani language” was developed and put into use as part of the dilmanence project. All existing styles and styles of the Azerbaijani language were taken into consideration when compiling the existing electronic frequency dictionary, and texts containing more than fifty million words and words have been the object of linguistic analysis. Cambridge Dictionary, Azerbaijani Explanatory Dictionary, Webster, Oxford Dictionary, Polyglot, Azer.Dict, Multilex Deluxes 6.4, Dilmanc, Abbyy Lingvo 12, Context 7.0, VER-Dict 2.0 Qigant, Multitran 3.44, Poliglossum 3. One can specify a number of vocabularies, such as google translate. Such electronic dictionaries also have a number of advantages that are different from the paper versions. As such, combining dictionaries on the basis of written texts is often time-consuming, as well as when the dictionary is printed, all available material can be left out of date and out of date, and out of use. In this sense, we can note that the role of e-dictionaries is undeniable, as dictionaries that are available online can always be updated and edited, and this is an important issue to use. One of the advantages of speed e-dictionaries is that they can restore access to other electronic dictionaries. We can even look at the information or explanations associated with any other keyword(s) that we are looking for. It is advisable to systematically organize electronic dictionaries of frequency as follows:

1. Explained frequency electronic dictionaries

This type of electronic dictionary can be referred to, in particular, the four-volume explanatory dictionary of the Azerbaijani language. The dialectological dictionary of the Azerbaijani language may include the dictionary of synonyms, pronouns and antonyms of the Azerbaijani language. These dictionaries are also dictionaries that are printed in book form and subsequently electronic. The purpose of their electronicization is frequency, that is, you don’t have to spend time learning the meaning of a word or go to a library or buy a dictionary. By searching for any technical vehicle, electronic machine (phone, computer, tablet, etc.) as soon as possible, we can have the requested information.

2. Translational frequency electronic dictionaries

The importance of electronic translation of translation dictionaries is also important. Such dictionaries are often needed when learning any foreign language. In this case, there is no need to waste time translating a translation dictionary. Any word, regardless of location is subject to translation, using “Dilmanj” and other similar custom electronic translation dictionaries.

3. Encyclopedic frequency electronic dictionaries

These types of dictionaries include electronic encyclopedias. Although a lot of time is spent on developing such dictionaries, they are important. This is because every Internet user, including those involved in specific research or other field representatives, can quickly search for google information through the encyclopedic data stored in electronic space. In general, it should be noted that the theoretical and practical bases of the principles of electronic system development and frequency electronic dictionaries, as well as other modern lexicographic information, have been published in the “Development of the Azerbaijani Language Dictionary”, the creation of integrated electronic systems and



dictionaries for public monitoring of language norms and the development of language data cores “(see: 9). One of the key issues in this project is the creation of an online portal called “Electronic Language Corps of the Azerbaijani Language”, where if you enter any phrase in the search field and click on the search button, all words that begin with that phrase will appear on the screen. That is, the search is conducted on all dictionaries included in the Azerbaijani Corps, and all words that match the search phrase are provided with references to the relevant dictionaries. Using these references, you can continue searching for the selected dictionary by going to the appropriate dictionary.”

#### 4. Terminological electronic dictionaries

Such dictionaries are generally taken by researchers in any field of science. That is, a system of definite scientific terms has been made accessible only by electronic terminological dictionaries. However, it is a new direction in the field of electronic lexicography and it does not cover all areas of science. The implementations being done in this direction continue. Thus, in the State Program on the use of the Azerbaijani language in the conditions of globalization and development of linguistics in the country, approved by the Decree of the President of the Republic of Azerbaijan dated May 23, 2012, a number of important tasks in the area. Many important measures have been envisaged for the implementation of these tasks. These tasks include the development of new orthographic, explanatory, phraseological, terminological, translation, encyclopedic and frequency electronic dictionaries of the Azerbaijani language, the creation of a unified national terminological information system based on international standards, information and internet technologies, machine translation systems for greater use of the Azerbaijani language. and the creation and development of other modern linguistic technologies, as well as the creation of a more complete system of antiplagiarities that test the authenticity of scientific research, thesis and articles performed in the Azerbaijani language.

Let us also note that we can systematize frequency electronic dictionaries for another feature:

- a) dictionaries in book form and subsequently electronic;
- b) dictionaries available only in electronic form.

Finally, we can conclude that frequency dictionaries, such as the statistical model of lexicon, are an indispensable source for the solution of many problems of theoretical and applied linguistics, general lexicology, and language teaching. We can use the frequency dictionaries in the process of developing minimums, handouts, and the selection of teaching materials. Frequency electronic dictionaries are also very important in terms of exploring the types of word-spelling, vocabulary, and improvement of spelling and graphics. Frequency electronic dictionaries, as a linguistic model of applied vocabulary, provide important material for solving many problems of general lexicology, especially the core of our vocabulary, active or passive vocabulary, etc. As such, mastering the lexicon faster, faster, or easier is a matter that depends on the quality of the original material and the correct definition of the dictionary-minimum. That is, the vocabulary-minimum content should consist of the most relevant words, and should be complemented by material from other sources, for this or that purpose. In addition, the use of frequency vocabulary is also used in the study of individual monuments and authors' styles, based on the registration of word processing and the development of different code systems of verbal and written language. In 2004, the Newspaper Frequency Dictionary was developed for this purpose (1). In general, lingual and statistic parameters of frequency electronic dictionaries are also used successfully in automation of printing, automatic reading and interpretation of texts.

### 3. CONCLUSION

Frequency electronic dictionaries are used as a very important source in the learning process, especially in teaching foreign languages to students. Thus, when teaching foreign languages, teachers must first identify the vocabulary in the electronic frequency vocabulary or frequency vocabulary by identifying the active vocabulary according to the specified frequency sequence. Such a learning process will enable any foreign citizen to learn the language more quickly and communicate more quickly with the people whose language they are learning, which will enable him to easily and quickly establish the relationship he wants.

### LITERATURE:

1. Azərbaycan qəzet dilinin tezlik lüğəti. Bakı: Nurlan, 2004, 264 s.
2. Ələkbərova N. Müxtəlif sistemli dillərdə tezlik lüğətlərinin struktur xüsusiyyətləri // Filologiya məsələləri, № 7. Bakı: Elm və təhsil, 2019, s. 60-70
3. Mahmudov M. Ə. Kompüter dilçiliyi. Bakı, Elm və təhsil, 2013, 352 s.
4. Vəliyeva K. Kompüter dilçiliyinə giriş. Bakı: Elm və təhsil, 2018, 384 s.
5. Чумарина Г.Р. Теория и практика составления электронных словарей (на материале татарского языка), Дис. канд. филол. наук. Казань: 2010. 120 с.
6. Azərbaycan dilinin elektron məkanda daha geniş istifadəsinin təmin edilməsi ilə bağlı bir sıra tədbirlər haqqında Azərbaycan Respublikası Prezidentinin Sərəncamı. 17 iyul 2018-ci il. <https://president.az/articles/29492>
7. Azərbaycan dilinin qloballaşma şəraitində zamanın tələblərinə uyğun istifadəsinə və ölkədə dilçiliyin inkişafına dair Dövlət Proqramı. 09 aprel 2013-cü il. <https://president.az/articles/7744>
8. Lew R. Online dictionary skill. Journal Proceedings of E-Lex 2013, p. 16-31. <http://www.researchgate.net/publication>
9. [http://www.sdf.gov.az/development/uploads/grantlar\\_uzre\\_meqale\\_eif-ketpl-2015-1-25/hesabatlar/53-\\_azerbaycan\\_dilinin\\_luget\\_yekun\\_hesabat.pdf](http://www.sdf.gov.az/development/uploads/grantlar_uzre_meqale_eif-ketpl-2015-1-25/hesabatlar/53-_azerbaycan_dilinin_luget_yekun_hesabat.pdf)

# FACTORS OF SUSTAINABLE DEVELOPMENT OF REGIONAL CITIES

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## **ABSTRACT**

*The purpose of the work is to identify factors of sustainable development of regional cities, their connection with the development of tourism, as well as to determine the conditions that influence the development of tourism in small towns of the Republic of Azerbaijan. In the work, methods of expert evaluations were used: in-depth individual interviews and questionnaires. The study showed that tourism can have a positive impact on the sustainable development of regional cities. Factors affecting tourism development were identified. It is shown that the “appearance of the city” and the transport infrastructure are important factors affecting the attendance of the destination. The historical and cultural heritage of settlements can be used both to create new attractors, and to form the image of tourist destinations. Brands of a place have high potential as attractors.*

**Keywords:** *regional cities, sustainable development, tourism, historical and cultural heritage, brands of the territory, tourism infrastructure*

## **1. INTRODUCTION**

Small cities, accumulating a significant part of the population of the Republic of Azerbaijan, currently have limited resources for sustainable development. This is due to a number of economic and socio-demographic problems inherent in most small towns (the closure of industrial enterprises, the outflow of youth, labor immigration, aging populations, etc.). Many of them are on the verge of extinction. At the same time, small cities often have unique cultural, historical and recreational potential that can be used to develop tourism. Tourism is currently the most powerful global industry, and its impact on the economy (multiplier effect) is able to create favorable conditions for the employment of most of the population of small cities.

## **2. OVERVIEW**

UN-HABITAT methodological recommendations consider sustainable development of human settlements as a combination of economic development, social and cultural progress and environmental protection “with full respect for all human rights and fundamental freedoms, including the right to development, while it provides a means to achieve greater stability and world peace based on ethical and spiritual values” [19]. At the same time, urban development should ensure “a balanced development of the social and industrial sphere in the territory of the urban settlement, providing for an improvement in the quality of the living environment without causing irreparable damage to the natural elements of the environment based on the saving of energy, territorial and other types of resources” [19]. The following factors were identified as the basic characteristics affecting the sustainable development of human settlements:

- demographic problems of settlements;
- land and urban planning;
- environment and urbanization;
- management and legislation;
- urban economy;
- housing and basic services.

To determine the level of development of UN-HABITAT settlements, the City Prosperity Index (CPI) was proposed, which integrates 230 indicators of 17 sustainable development goals [20]. Due to the large number of parameters included in the CPI, separate indicators are most often used to study the stability of territorial entities [1;2;4] or the integrated CDI (City Development Index) [1] based on five sub-indices:

$$II = 25(Wc + S + E + T);$$

$$WI = 50(Wt + Gc);$$

$$HI = (Le - 25) \times \frac{50}{60} + (32 - Cm) \times \frac{50}{31,92} ;$$

$$EI = 25(Lt + Pe + Se) + \frac{Gt}{350} ;$$

$$PI = \frac{\left(\frac{Pp}{PPP} - 100\right)}{(40000 - 100)}.$$

Where, II - infrastructure; Wc - water supply; S - sewerage; E- is electricity; T - communication (landline phone); WI - waste management; Wt - wastewater treatment; Gc - solid waste disposal; HI - public health; Le- is the average life expectancy; Cm– infant mortality; EI - education of the population; Lt, Pe, Se - coverage by primary, secondary and higher education; Gt– adult literacy rate; PI - urban product; Pp -is the total volume of production of basic sectors of the economy per capita; PPP– purchasing power parity. In a number of scientific studies [1-3;5-7;12;13] it is indicated that tourism can ensure the sustainable development of regional economies, which is especially important for small cities with limited resources [1;6;9-12;14]. Tourism has an impact on the economy and employment of the population of a small city [1;3;6;9;10;12], and also contributes to the preservation of the ecological framework of the territory [14;15]. The competitiveness model of tourist destinations of Crouch and Ritchie takes into account 36 factors that influence the development of tourism, representing 7 groups: main resources and key attractors; tourist services; common infrastructure; determining and supporting factors; territory policy, planning and development; destination management; demand factor. All these factors are also usually divided into 3 levels [16]: objects, events, services that attract tourist flow (generating component); concomitant and limiting factors (implementing component); information environment (localizing component). Despite the small number of indicators included in the CDI integrated index, its calculation, due to the lack of relevant and reliable statistical information for small settlements, causes difficulties [1]. In addition, the development of tourism in small cities is influenced by many other factors, and small cities with successful development usually have significant specifics [6; 10], which makes it difficult to use mathematical methods to compile a model of sustainable development. However, under such conditions, it is possible to use expert assessment methods [18].

### 3. DATA AND METHODS

In the work, to study the factors of sustainable development of small cities, their connection with the development of tourism, as well as to identify conditions that influence the development of tourism, we used methods of expert assessments: in-depth individual interviews and questionnaires. The main data processing methods were descriptive statistics and graphical analysis.

### 3.1. Study model

The study was conducted in two stages. Stage 1. Identification through in-depth interviews with experts of the key factors affecting the sustainable development of small cities, the conditions that have a positive and negative impact on the development of tourism, as well as the main trends in tourism development at present. At this stage, people who were involved in the development of tourism in small regional cities of the Azerbaijan Republic and engaged in entrepreneurial and public activities in this area for at least 10 years were involved as experts. The data obtained were used later for conducting a questionnaire survey of experts. Stage 2. Conducting a questionnaire of experts to identify the nature of the impact of tourism on the sustainable development of small settlements, the main factors affecting the development of tourism and ensuring the sustainable development of the territory. The experts of the second stage represented two groups: 1) persons conducting scientific research in the field of tourism and related to its development, and 2) people engaged in entrepreneurial activities in the field of tourism.

## 4. RESEARCH RESULTS

Interviews with experts directly related to the development of tourism in small cities revealed the following factors that have a significant impact on the choice of consumers of tourism services, as well as on the attendance of small cities for tourism or recreational purposes.

**Transport accessibility:** remoteness from the consumer, the availability of federal highways, the condition of roads, transport logistics (which routes can be used, which objects can be visited along the route, the effectiveness of travel planning for time and financial costs, etc.), the ability to use alternative transport. According to experts, this factor primarily affects the choice of small towns by tourists. In terms of transport accessibility, small cities can have a significant variation in parameters (in contrast to large cities, which are transport hubs), which will affect the tourist flow and the nature of the visit: sightseeing routes or multi-day tours.

**Accommodation infrastructure:** collective accommodation facilities, individual (apartments, private houses, etc.), campsites, etc. Most of the small cities are not able to accommodate a group of tourists from a sightseeing bus. The construction of accommodation facilities with such a number of rooms is associated with the risk of underloading, although, for example, in the same regional cities where the study was conducted, there was a steady tendency to supplant one-day tours with two to three-day trips.

**Food infrastructure:** local cuisine, catering facilities. An important element that attracts tourists at present is the local cuisine - travelers collect tastes. Local food products are also a welcome souvenir for tourists. The appearance of the city. A person leaving a metropolis strives not only for physical relaxation: a tourist wants to “relax with his eyes and soul”, see beautiful, comfortable cities. There is a sharp increase in attendance ("jumps") after the improvement of settlements. The influence of the appearance factor of the city on tourist flow is also due to the development of social networks, booking services or sites specializing in reviews, where visitors can upload photos taken during the trip. The uniqueness of the place, key attractors, display objects. All the experts interviewed identified this factor by significance after factors related to transport accessibility, accommodation and food infrastructure, and the appearance of the city. According to experts, such attractors as display objects or events can be created for “legend” using the rich cultural and historical heritage of small towns. As the results of the survey showed, brands of places known at the national level have a high potential as attractors [17]. So, for example, the settlements of Khinalig and Lahich are the main generators of tourist flow to Cuba and Ismayilli, respectively [14]. A factor related to the safety of tourists - travelers should feel safe in the place of stay, know where to turn in case of unforeseen circumstances. Reviews and information support. Tourists are guided by reviews in the specialized resources of Online Travel Azerbaijan, Azterra Travel. First of all, tourists are interested in accessible information about opportunities: attractors, accommodation

and meals, transport, etc., and secondly, the availability of alternatives and the completeness of these opportunities. Most of the small towns have poor information support: of the total flow of tourists (and so small in volume), only a small portion leaves feedback. As factors affecting the sustainable development of small towns, experts identified:

- transport infrastructure - bus, rail and other communication with the village: the presence of state and regional routes, the condition of roads, etc.;
- urban infrastructure - water supply, sewerage, equipped multifunctional urban spaces where you can spend time;
- the involvement of local residents in tourism related activities.

The last factor reflecting the involvement of local residents in tourism activities is taken into account in the urban product indicator both in the total volume of production of the basic industries of a small city and in the purchasing power parity of the CDI index. As experts noted, in the development of tourism in small towns, the main role is played either by local entrepreneur-enthusiasts or visiting figures. Moreover, tourism, as a rule, is not their main source of income. It should be noted that due to the small scale of small settlements, the role of even one person in the development of the city can be significant. The main population is most often passive and “pulling up” at the stage when there is already a tourist flow. Local residents often not only have no idea about the needs of tourists, but may not even know about the resources of their territory. The problem of personnel is also acute, for example, sometimes it is impossible to find a specialist for a city tour. Other aspects identified by experts related to the participation of local residents in tourism activities were used during a questionnaire survey of the second stage of research. The current state of tourism in small towns, according to experts, is characterized by high competition for visitors, the growth of the two-three-day tours sector and the expansion of such a consumer segment as “strong families”. Tighter rules for transporting children significantly affected attendance in some areas by reducing school group trips by 2–3 times. Some experts noted the need to support traditional crafts at the federal level. The main problems with the crafts are the lack of continuity and their replacement with non-traditional types of souvenir production. At the second stage, a questionnaire was conducted of experts representing the scientific community and participating in the development of tourism (group 1) and experts directly involved in tourism in small towns: owners of local museums, organizers of festivals, tourist trips (group 2). The experts of the first group had experience in scientific and consulting activities related to tourism from 15 to 30 years, the second group - experience in practical activities in tourism from 10 to 20 years.

Indicator / Factor	Group 1			Group 2		
	weak	medium	strong	weak	medium	Strong
Infrastructure(plumbing / sewage / electricity / communication)	-	-	D/İD	-	D/İD	-
Transport infrastructure	-	-	D	-	D	-
Other urban infrastructure	-	-	Π/K	-	D/İD	-
Sewage treatment	-	İD	-	İD	-	-
Solid waste management	-	İD	-	İD	-	-
Public health (life expectancy / infant mortality)	İD	-	-	İD	-	-
The total volume of production of basic industries per capita of a regional city	-	D/İD	-	D/İD	-	-
The purchasing power parity of the population of a regional city	-	D/İD	-	D/İD	-	-

Table 1: Answers of experts to the question “What impact can tourism in regional cities have on these factors”

Legend: D - direct effect, İD - indirect effect

Experts were asked to answer a question revealing the nature of the impact of tourism on the sustainable development of small towns. In the table where the parameters included in the urban development index were given, it was necessary to indicate the nature of the influence of tourism on each of the parameters: “direct” or “indirect”, “positive” and (or) “negative”, as well as the degree (“weak”, “medium”, “strong”) of this influence. In the absence of influence, the questionnaire could not fill in the corresponding cells. Additionally, the factors “transport infrastructure” and “other urban infrastructure” were given that are not taken into account in the urban development index. All interviewed experts noted that tourism has only a positive impact on the presented parameters. Averaged responses by expert groups are given in table 1. Experts of the two groups unequivocally noted that tourism has a direct positive effect on transport infrastructure. According to experts, tourism can have both direct and indirect influence on the communal infrastructure (water supply / sewage / electricity / communication), other urban infrastructure, the total volume of production of basic sectors of the economy per capita of a small city and the purchasing power parity of the population of the population. On other parameters included in the urban development index, tourism has only an indirect effect. Experts in the scientific community attach more importance to the impact of tourism on sustainable development than experts involved in practical activities. Also, experts of the second group note that tourism has a greater effect on the infrastructure of a settlement than on such an indicator as an “urban product”. Respondents were asked to evaluate the influence of the factors identified during the interview on the development of tourism in small towns on a scale from 0 (no effect) to 10 (very strong effect). According to the experts of the two groups, all the factors identified during the interview are weighted and got a rating of 5 to 10 points. The average values of the influence of the factor on the development of tourism in small towns (in points), by expert groups are shown in figure 1. According to experts, the factor that has the greatest impact on the development of tourism in regional cities is the “appearance of the city”. Persons engaged in entrepreneurial activities in the field of tourism attach great importance to the factors of “transport accessibility” and “food infrastructure”. The following factors are significant: “accommodation infrastructure” and “information support”. Regional cities are more often visited in transit, so the food infrastructure, according to experts of this group, has a greater impact on tourist flow. The loyalty and friendliness of local residents and the provision of security, expert practitioners attach less importance. A group of experts representing the scientific community attaches great importance to ensuring the safety of tourists, as well as the uniqueness of the place, the food and accommodation infrastructure.

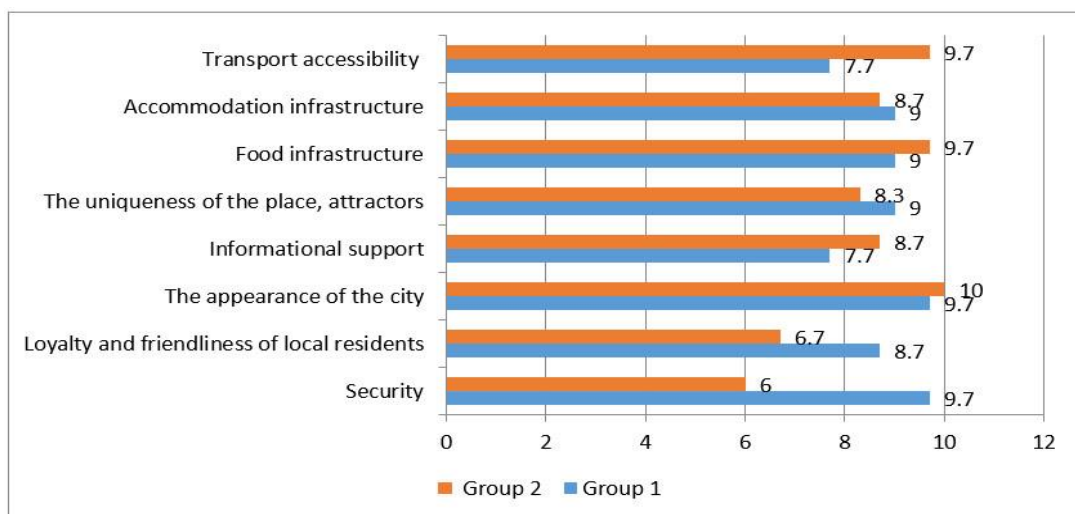


Figure 1: The results of the answer to the question “Assess the impact of the factor on the development of tourism in small towns”

In addition, experts were asked to indicate the degree of influence of the problems identified during the interview on the involvement of local residents in tourism-related activities (table 2).

No.	Problem (factor)	Group 1	Group 2
1.	The population does not see the benefits of tourism a strong average	A strong	Average
2.	Tourism benefits significantly delayed	average	A strong
3.	Involvement in tourism creates psychological and physical problems	weak	Average
4.	The population has little idea of what set of services or goods may interest tourists	average	A strong
5.	Do not represent legal restrictions or are afraid of the legal consequences of such activities (taxes, penalties for illegal business activities, etc.)	A strong	Average

Table 2: Experts answers to the question “Assess the impact of the factor on the involvement of local residents in tourism related activities”

According to practitioners, the involvement of local residents in tourism-related activities is most influenced by the factors “the benefits of tourism are significantly delayed” and “the population has little idea which set of services or goods may interest tourists”. According to experts representing the scientific community, the main factors are “the population does not see the benefits of tourism” and “do not represent legal restrictions or are afraid of the legal consequences of such activities (taxes, penalties for illegal business activities, etc.)”. The experts did not use the opportunity to offer their factor. During the interview, the following areas of involvement of local residents of small towns in tourism activities were identified: legal clarifications and simplifications for conducting activities on types of services and goods; acquaintance with successful case practices; allocation of places reserved for trade, as well as work with young people (volunteering) and educational projects (figure 2).

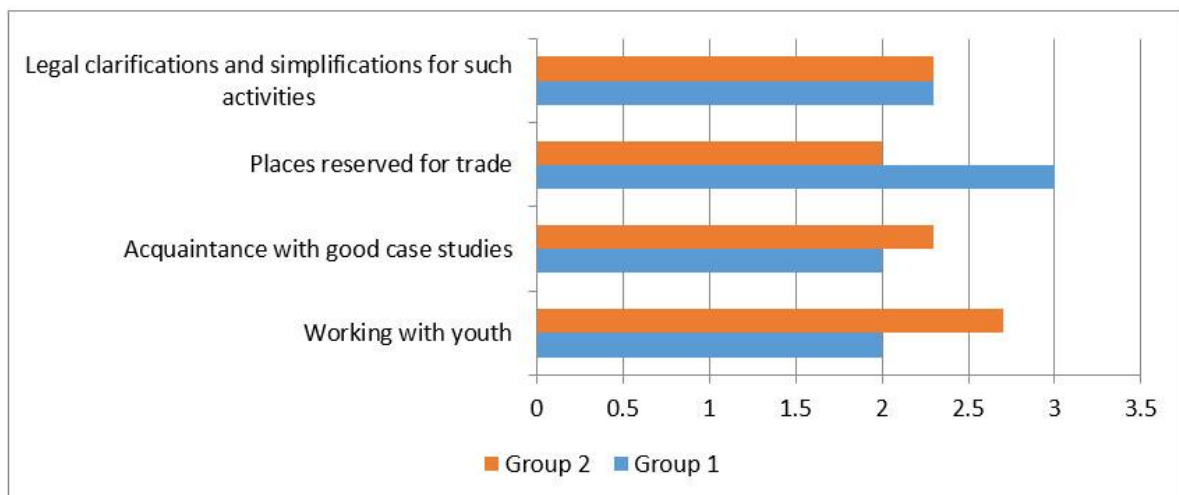


Figure 2: Results of the answer to the question “What measures can be effective for involving local residents in tourism activities” (0 - ineffective, 4 very effective).

According to respondents, all of the above areas involving local residents in tourism activities can be effective. Business experts consider working with young people to be the most promising, which could solve the problem of personnel in small settlements and involve the



younger generation in tourism. Experts noted that modern tourists prefer rich tourist products, including both the cognitive aspect and the opportunity to participate in interactive programs, therefore, for the development of tourism in small cities, it is necessary to create or open new display facilities that use the cultural and historical potential of the territory and modern interactive technologies. In addition, for the development of tourism in small towns, experts noted the need to restore the historic city center and the availability of catering establishments with authentic cuisine.

## 5. CONCLUSION

The study showed that tourism can have a positive impact on the sustainable development of regional settlements. According to experts surveyed, tourism currently affects the development of the infrastructure of a settlement more than the urban product — the total production of basic sectors of the economy per capita and the purchasing power parity of residents. The main factors affecting the sustainable development of small towns are: transport infrastructure, urban infrastructure and the involvement of local residents in tourism-related activities. During the interview, the following factors that influenced the development of tourism were identified: transport accessibility, accommodation infrastructure, food infrastructure, the appearance of the city, the uniqueness of the place, key attractors, display facilities, ensuring the safety of tourists and personal property, reviews about the place of stay and information support. An important factor affecting the attendance of the destination is the “appearance of the city”. According to experts involved in entrepreneurial activity, the transport infrastructure has a significant impact on the flow of tourists - bus, rail and other communications with the village, the presence of federal and regional routes, and the condition of roads. The historical and cultural heritage of settlements can be used both to create new attractors, and to form the image of tourist destinations. Survey results showed that place brands have high potential as attractors. The problem of involving local residents in tourism in small regional cities requires further research.

## LITERATURE:

1. Alekhin Y.I., Tikhiy V.I. The search for guidelines for sustainable development of cities in the region [Search for guidelines for sustainable development of cities in the region]//Regional Economics: theory and practice. 2014.No. 36 (363). p. 10-22.
2. Bobylev S. N., Porfiriyev B. N. Sustainable development of the largest cities and megacities: a factor of ecosystem services [Sustainable development of major cities and megacities: ecosystem services factor] // Moscow University Herald. Series 06. Economics, No. 6, 2016. p. 3-21
3. Rassokhina T.V. Monitoring technology for the sustainable development of tourist destinations through the assessment of management and status indicators [Technology for monitoring the sustainable development of tourist destinations through the assessment of management and status indicators] // Service plus. 2018.V. 12. No. 2. p. 54-64.
4. Zhukov R.A., Polyakov V.A., Vasina M.V. Some aspects of the economic assessment of sustainable development of the regions of the Central Federal District. Bulletin of the TulSU. Economic and legal sciences. 2018.No. 3-1. p. 3-11.
5. Kotler F., Asplund K., Reyn I., Khayder D. Place marketing: attracting investments, enterprises, residents and tourists to cities, communes, regions and European countries [Marketing mest: attraction of investments, enterprises, residents and tourists to cities, communes, regions and countries of Europe]. St. Petersburg: Stockholm School of Economics in St. Petersburg, Peter, 2005.382 p.
6. Cucculelli M, Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from the Italian Destinations of Excellence, Journal of Cleaner Production (2016), 370–382. doi: 10.1016 / j.jclepro.2014.12.0.069.

7. Tugcu C.T. Tourism and economic growth nexus revisited: A panel causality analysis for the case of the Mediterranean Region//Tourism Management. 2014.No. 42. Pp. 207-212. DOI: 10.1016 / j.tourman.2013.12.007.
8. Webster C., Ivanov S. Transforming competitiveness into economic benefits: Does tourism stimulate economic growth in more competitive destinations?//Tourism Management. 2014.No40. Pp. 137-140. DOI: 10.1016 / j.tourman.2013.06.00.00.003.
9. Sheresheva M.Y., Savelyev I.I., Oborin M.S. Synergy of active and educational tourism: opportunities for small Russian cities [Synergy of active and educational tourism: opportunities for small cities] // Modern problems of service and tourism. 2017.Vol. 11. No. 3. p. 71-83.
10. H.Soltanova “In the Republic of Azerbaijan tourism and development”//Baku-2015//p.161-350/
11. Sheresheva M.Y., Oborin M.S., Berezka S.M. Last chance ... Or can tourism save the small historical cities of Russia? The experience of the participants of the project “Real Russia” in the study of the tourist potential of the cities of the Central Federal District [Marketing of small towns as a factor in the sustainable development of the region] // Modern problems of service and tourism. 2017.Vol. 11. No. 2. p. 125-130.
12. Butova T.G., Mutovin S.I., Sudin K.N. Tourism as a factor in the sustainable development of the northern territories [Tourism as a factor in the sustainable development of the northern territories] // Service in Russia and abroad. 2013.No3 (41). p.65-73.
13. Minayev V.A. Modeling of sustainable tourism development processes [Modeling sustainable tourism development processes]//Service in Russia and abroad. 2014.No9 (56). p. 140-149.
14. Karayev A.M.“Tourism development in azerbaijan: what do the doctors do?” <http://etsim.az/upload/Image/2015-1/4>.
15. Dzhandzhugazova E.A., Maksanova L. Z., Bardakhanova T. B., Ponomareva I.Y., Blinova E. A. Ecotourism development in Russia: analysis of best regional practices // Ekoloji. 2019.Vol. 28. No. 107. p. 411-415.  
A. Q. Alirzayev “Economy of tourism and management” Baku-2010//p-171-173//
16. B.A. Bilalov and Ch. G. Gulaliev "Basis of tourism" Baku-2105//p.-219-220//
17. Alekhin Y..I., Tikhii V.I. On the issue of the sustainability of classifications in economic research [On the issue of sustainability of classification in economic research] // In the collection: Selected Works of the Physics and Mathematics Faculty of Oryol State University Physics and Mathematics Faculty of Oryol State University Turgenev. Orel, 2016.p. 20-25.
18. UN-HABITAT Methodological Center [Metodicheskiy tsentr OON-Khabitat] // UN-HABITAT in Russia 2019: [site] URL: <http://unhabitat.ru/programs/metodcenter> (accessed: 09/25/2019).
19. Agenda for Sustainable Development [sustainable development agenda] //UNITEDNATIONS:[site].URL:<https://www.un.org/sustainabledevelopment/ru/about/development-agenda/> (accessed: 10/01/2019).

## **AZERBAIJAN'S FOREIGN TRADE STRATEGY IN THE WORLD MARKET**

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### **ABSTRACT**

*The article discusses the foreign trade activities of the Republic of Azerbaijan. Zavaeva's economic freedom Azerbaijan for this historical period has formed its worthy place in the system of international economic and trade relations. In the article, carrying out specific facts in the ongoing balanced multivariate structure, Azerbaijan's place in the international division of labor, analyzes trade relations at the global market level. Today it has trade economic and diplomatic relations with more than 182 countries of the world economy. As a result, the economic integration of the national economy into the world economic system is based on quantitative and qualitative change. Trade relations are based on legal, economic, administrative acts, at the global market level. Azerbaijan conducts its foreign trade policy independently in the regional and business sphere. This policy expresses economic interest, which is based on balanced and multi-vector cooperation, because such a policy is aimed at consolidating the economic strategy in the international sphere of Azerbaijan. The conceptual basis of this strategy is a way out of the isolation of the community in the world, an effective providence that will balance foreign policy: the direction of economic potential in strengthening the position in international politics, the development of a stronger organization of the Azerbaijani diaspora and will turn into one of the strong economic centers of the region, which is a conceptual strategy. It should be noted that, in modern conditions on the world market, the difficult economic situation, especially the blow that the microeconomics of receiving the virus's crown from the country, will make it difficult to provide such a policy. The geopolitical weight, dynamics and incentives carried out in all areas, especially the non-oil sector and the confidence of the ways the entire world market out of this situation, gives confidence in the implementation of a stimulating economic strategy. But again it is clear that, this does not reduce its complexity and difficulties. As you know, international trade is a means by which countries develop and simultaneously develop economic relations in the field of specialization, increasing the productivity of economic resources, and increasing the total volume of production. The main mission in modern international conditions is that there is world trade in that, it acts as an international resource mobility. Important in modern conditions is, in our opinion, the concept of international trade. Foreign trade activities are divided by product specialization into trade in finished products, machinery and equipment, raw materials and services. Foreign economic relations of the state, based on interstate agreements, become part of the reproduction process, contributes to the development of cooperation in science and technology, production, trade, in all areas, as well as tourism and culture, etc.*

*It should be noted that, cultural, linguistic is attractive for solving these problems. The article analyzes what is on the problems of further growth of international trade in the economic development of Azerbaijan.*

**Keywords:** *political interference, foreign trade relations, trade balance, commodity circulation, geopolitical position, trade relations, multi-vector cooperation, conceptual strategy, equal relations, diplomatic relations, economic potential, regional market, product specialization, international structures*

## 1. INTRODUCTION

Having gained economic freedom, the Republic of Azerbaijan, in a market economy, has taken its rightful place in the system of international relations. During this period, Azerbaijan was one of the small states that pursues an independent economic policy in the regional and business sectors. It expresses economic interest, which is based on balanced and multi-vector cooperation, equal treatment and the principles of a power of attorney for cooperation. Such a foreign trade strategy will strengthen our position in the international sphere. The conceptual basis of this strategy is a way out of the isolation situation in the world of the community, the implementation of which will balance foreign policy, the direction of economic potential in strengthening the position in international politics, the development of a stronger organization of the Azerbaijani diaspora and will turn into one of the strong economic centers of the region, which is a conceptual strategy. It should be noted that the re-emerging global system of such an independent foreign policy is difficult. But the geopolitical weight and its complexity softens the implementation of such an economic strategy, but does not reduce its complexity and difficulties. 2017 is the year of 25 years of our integration into the system of the international economic system. Forming for the first time its diplomatic relations with Turkey, Azerbaijan in the world arena has formed its diplomatic relations with many states. As we have stated, Azerbaijan's foreign policy is the totality of Azerbaijan's economic relations with other states and international structures. As of 2019, Azerbaijan is expanding the range of diplomatic relations through 182 UN member states, CIS countries, the Central African Republic, the Republic of Congo, Equatini, New Guinea, Saint Kit and Nevis, Gong, etc. The main form of international economic relations is the international trade in goods and services, capital migration, scientific and technical cooperation, labor migration, currency relations. Therefore, the most developed form of international economic relations is foreign trade. Foreign trade is a means by which countries develop economic relations in the field of specialization, increase the productivity of economic resources, and increase the total volume of production. International trade is entering as an international resource mobility. Foreign trade activities are divided by product specialization into trade in finished products, machinery and equipment, raw materials and services. International trade refers to paid aggregate trade between all countries of the world. However, the concept of "international trade" is also used in a narrower meaning. It means, for example, the total commodity turnover of developing countries, the total commodity turnover of countries of any continent, region, for example, countries of Eastern Europe, etc. In modern conditions, the country's active participation in world trade allows more efficient use of available resources, joins the world achievements of science and technology, in a shorter time frame to carry out structural adjustment of the economy. Therefore, for Azerbaijan, which has embarked on the path of creating a developed market economy, participation in world trade is of particular importance. It should be noted that the foreign trade activity of Azerbaijan has specific features, which are characterized by the rich natural resources and geographical location (location on the transport corridor of Europe and Asia). The problem of foreign trade relations, foreign trade strategy and the international division of labor, international specialization and production cooperation in the field of foreign economic activity was investigated in the works of such domestic scientists as A. Shakaraliev, Sh. G.

Godzhieva, E.T. Ibadova, S.T. Askerovai, etc. This problem was also developed from various positions by foreign economists R. Vernon, J. Daning, A. Marshall, B. Olin, P. Samuelson. It should be noted that the theory of foreign trade relations in the context of globalization is one of the important problems of the world economy. Foreign economic relations of the state, based on interstate agreements, become part of the reproduction process, contribute to the development of cooperation in the field of science and technology, production, trade, in all spheres as well as cultural tourism, etc. The economic integration of the national economy into the world economic system is quantitative and qualitative changes in the world economic system of Azerbaijan, in trade and economic relations, in the field of legal, economic, administrative, as well as adopted legal acts that positively influenced the formation and effective functioning of the market infrastructure. An important role in this direction, in our opinion, was played by the expansion and deepening of the trade and economic relations of the republic with many economic developed countries of the world, its participation in many international, economic, and also regional trade organizations. In this, the trade agreements concluded by the republic and transactions with different countries are of particular importance.

## **2. ANALYSIS**

As we noted, the traditional and most developed form of various economic relations as we have outlined is foreign trade. According to some estimates, trade accounts for about 80 percent of the total volume of international economic relations. Modern international economic relations, characterized as it is known by the active development of world trade, which bring a lot of new and specific to the development of national economies. It is a form between producers of different countries, arising on the basis of the international division of labor and expresses their mutual economic dependence. The structural shifts taking place in the economy under the influence of the scientific and technological revolution, specialization and cooperation of industrial production, strengthen the interaction of national economies. This helps boost international trade. International trade, mediating the movement of all intercountry commodity flows, is growing faster than production. It should be noted that international trade is subject to political interference and control, which differ in the nature and degree that applies to domestic trade. Foreign trade is connected by two circumstances. This is the first such economic resources as natural-human and investment goods distributed between states are extremely uneven, the second is the difference in technological level, the combination of resources in the process of efficient production of various goods. Active participation in international trade necessitates the search for strategic solutions in this direction, the potential for participation in the international division of labor. In this an important place belongs to the strategy of international trade. International trade closely interacts with the economy, which specifically provides its reactions to the changes occurring in international trade. Here it is also necessary to take into account the cultural and social differences of countries that can be predicted, the proximity of culture and language, favorable conditions for conducting trade policy. An international strategy strengthens trade relations and geographical locations of countries. Cultural, linguistic affinity is attractive for solving trade relations. This connection in many countries has contributed to the formation of trade unions. Azerbaijan carries out its foreign policy on the basis of the norms and principles of international law, the UN Charter. In interstate relations, Azerbaijan also adheres to the principle of the rule of law and the observance by states of their obligations. As a result, Azerbaijan is perceived in the world as a reliable partner with whom it wants to cooperate more and more states. Azerbaijan's joining the generalized system of preferences of the Union of Europe, the USA, Norway, Canada, Turkey, and Switzerland has enabled Azerbaijan-made goods to enter these markets with understated customs duties. Along with this, Azerbaijan has signed a free trade agreement with countries of independent states.

Therefore, in the strategic roadmap for the period until 2020, it is important “For the economy to achieve stabilization of the Azerbaijani economy in the short term, in order to overcome the situation that has developed under the influence of external shocks, then restore the direction of the economy through diversification and new incentives in the medium term, and it will increase competitiveness through further integration into the global economy. ”[1] Due to economic growth, it will increase real annual GDP growth, create new jobs, increase the share of foreign direct investment in non-oil sector GDP from the current 2.6 percent to 4 percent. Reducing the dependence of the state budget on oil sector revenues and remittances from the state oil fund. In this direction, an equally important moment for the economy is to increase the efficiency and effectiveness of operations of the financial and budgetary sector by maintaining fiscal rules, medium-term planning of expenditures, drawing up a budget that is focused on the result and medium and long-term strategy for resolving the debt problem. It should be noted that, in recent years, the rating of Azerbaijan has grown thanks to reforms and improving the economy in all areas of the material, intangible and infrastructural spheres. In the World Bank’s Doing Business 2018 report, Azerbaijan was recognized as the most reforming country in Europe and Central Asia in terms of the number of reforms that were implemented and, in general, the best reformer country in the world [2]. Particular attention for expanding exports, in the economy, as we have indicated, is given to the development of the non-oil sector, which makes it possible to increase the export structure, which at present is an important factor for the overflow of foreign currency into the economy. The main thing in this direction is government measures to stimulate investment in all areas of the economy, especially in the non-oil sector. This is an exemption from income tax in the amount of 50% for a period of 7 years, exemption from import tax for 7 years (taxes and duties), exemption from tax on property and land for 7 years. Also, support for exports in the non-oil sector - the payment of 3% of the commission from the state budget in order to stimulate exports, improving the legal framework for creating access to foreign markets. To achieve these goals, it is also important to take measures taken from the country to promote the agricultural sector, stimulating free trade agreements with 9 countries, bilateral investment agreements with 48 countries, etc. It is also important for foreign trade relations as we noted its geographical location and region, which is available to 50 countries with a range but flight of 4 hours from almost 50% of global consumers, Azerbaijan has free trade access to 270 million consumers in the CIS countries, with VP volumes of 1.6 trillion. Logistics hub in the Caspian region with the largest airports, seaport, railway network and free trade areas. This will lead to becoming a regional logistics hub. This is the development of infrastructure, which plays an important role in export-import relations of each national economy, which makes it possible to turn Azerbaijan into a regional logistics hub fiscal of higher value and volumes of transit trade by completing planned major projects, improving logistics operations, creating a hub in Baku trade-oriented and logistics centers. “Digital Trade Hub of Azerbaijan” is an electronic platform designed to support local, regional and international trade. Then become the leading country in the development of information and communication technologies, which serves the further development of the digital economy, the widespread use of electronic services. According to the forecast of IMF analysts, in 2019, the economy of Azerbaijan amounted to 2.7 percent, and in 2020 it will slow down to 2.1 percent. In 2017, Azerbaijan exported products totaling \$ 14.3 billion. Oil accounts for about 82% of all exports from the republic; in addition, natural gas, oil products, products of the engineering industry, fruits and other food are exported. The main buyers are Italy 33%, Turkey 8.5%, Canada 5.5%, Czech Republic 5.4%, Germany 4.9%, Russia's share 1.4%. According to the Federal Trade Service (FCS) of Russia, according to the results of 2014, the level of trade between Azerbaijan and Russia amounted to 6702.5 million dollars, increased by 39.3% since 2013 and this growing pace will continue by one of the main partners of Azerbaijan with Russia. Trade and economic relations between Azerbaijan and Kazakhstan are developing every year.

The two states have great prospects in the formation of a new area of cooperation: energy, grain, various goods through our countries using oil pipelines, roads and seaports. For Azerbaijan, this is a short way to the republics of Central Asia, China and the eastern regions of Russia, for Kazakhstan it is access to the European and world markets. In this direction, cooperation has gained momentum. A grain terminal has been erected in Baku, which will accompany the reduction in the cost of Kazakhstani grain and an increase in its supply through transit Azerbaijan to world markets. In the near future, a special mill complex will also be commissioned. In turn, Azerbaijan is working on a vegetable terminal in the western part of Kazakhstan. The industry differences in the economic structures of Azerbaijan and Kazakhstan make it objectively necessary to increase the development of foreign trade, specialization and division of labor. The supply of mineral resources for the Azerbaijani industry from Kazakhstan, as well as wool and grain, can be combined with the mutual supply of Azerbaijani oil engineering, agricultural products, drawing attention to international contacts. Today, 18 companies with the participation of Kazakhstani capital operate in the fuel and energy complexes, transport, and construction; six joint ventures, three with 100% Kazakhstani capital, the remaining branches and representative offices. Great opportunities for long-term economic cooperation between Azerbaijan and Kazakhstan are opened by the UN SPECA Program - a special \* program for the economies of Central Asia. By the measure of strengthening ties between the countries of the Central Asian and Caspian region, the development of integration of their economies in Asia and Europe, this is known to be one of the most important for the whole world. This is a solution to a number of issues in the energy sector that have not yet been resolved. Today, Russia, which owns the Caspian, one tenth of the world's oil and gas reserves is the main energy suppliers to Europe and the Caspian countries. So today, Russia is a leading Euro-Asian energy market. And for Azerbaijan in this region, Kazakhstan and Turkmenistan have free access to a buyer for investment, a sales market. Our economic union is mainly based on energy security, we are the guarantor of the energy security of the region and Europe. The gas industry in the republic was not in the foreground; today a great demand for this industry requires an effective gas policy. As part of gas exports, the republic is considering such a priority as selling fuel at the most effective price and exporting gas to Europe. One of the real resource base for the gas pipeline is Nabuco. The analysis of Azerbaijan's foreign trade turnover shows the leading role in this sector: Azeri-Chirag-Guneshli, Shahdeniz, which in 2008 reached 44.5 million tons, and gas production 163 billion cubic meters. The largest export pipelines "Baku-Tbilisi-Ceyhan" and "Baku-Tbilisi-Erzurum", "Baku-Novorossiysk", "Baku-Supsa" are important pipelines in foreign economic relations and have a huge impact on the further expansion of trade relations. A successful foreign economic policy predetermines the development of international trade infrastructure between countries. Rail transport in all is the main means of transporting goods in the direct trade in goods of various countries, as well as passenger transportation in the field of tourism development. The development of railway transport, an increase in the share of trade, as well as the trade balance between countries participating in trade operations. Azerbaijan is at the center of international traffic in the North-South direction. Azerbaijan's integration into the world community brings enormous benefits for economic development and export expansion. In this, the transport corridor Europe-Caucasus-Asia is relevant. Due to the increase in foreign trade relations through the territory of the republic, located on the international transport corridor, the volume of freight traffic compared to 2015 in 2016 increased by 80% incl. by rail of maritime transport and road transport. The development of international trade, as we noted, is aimed at ensuring economic growth, accelerating the process of changing the material and technical base of production, and increasing the employment of the workforce. Excessive oil trade will overwhelm its resources, so it should become unreasonably greater. Having examined the geography of foreign trade, it favors the strengthening of economic, political, technical, and cultural ties with countries.

In our opinion, the principle of natural selection must be observed in foreign trade. In modern conditions, the global market is already divided. It is difficult to get into the Western market, everything indicates that today the inter-trade relations with the countries of the East are more acceptable for the republic. The state of production, the structure of exports and imports are economically beneficial with countries of the East like Turkey, Pakistan, Iran, Central Asia, Kazakhstan, China, etc.

### 3. CONCLUSION

The increased growth of international trade in economic development, increasing the political image of the country obliges us to develop state programs for its development in order to improve investment activity. The developed foreign trade programs will provide an opportunity to stimulate and control the effectiveness of funds allocated for the development of the economy of the republic. Therefore, the implemented oil and gas strategy has influenced the economy and the arena of world leaders in ensuring energy security, becoming a pillar forming a new economic model for the region, expanding trade and economic cooperation at the global level. In the manufacture of this article, we stalked with countries with the COVID-19 virus, which was distributed from China. And as you know, the Chinese economy itself received the first blow from this virus. The Organization for Economic Co-operation and Development disseminated information that COVID-19 is affecting global economic growth, the projected growth from 2.9 percent will be halved to 1.5%. This virus has affected global financial markets, as more than 3 trillion stocks and bonds in developing countries have fallen to \$ 1.1 trillion. Due to the reduction in demand for oil and oil products in China in January, the price of oil on the world market fell 26% and the price of 1 barrel of oil was \$ 51.37. The International Air Transport Association informs that by 2020 the demand for services of this transport will decrease, which will result in losses of 29.3 billion dollars. It is also expected to lose 1 billion dollars in the European market from the tourism sector. From this point of view, we also think that the sector we are exploring will also suffer from the influence of coronavirus on Azerbaijan's trade balance in 2020. The Central Bank of Azerbaijan expects a temporary but significant decline in economic activity in the coming months, an analytical commentary says. Which is also one of the factors for the country's trade balance. But in parallel with negative forecasts, there are aspects of positive expectations. In his speech, Turkish Minister Runsar Peksan stated: "The Baku-Tbilisi-Gars Railway (BTG) can double cargo delivery by half, which will make it possible to remove the shortage in this direction. The BTG highway has all the possibilities of safe cargo delivery in Euro-Asia. Therefore, in order to reduce the negative impact of a new type of coronavirus on the trade balance, "the intensity in this area is under the supervision of the Turkish state" [3]. The current state of the economy, which is an integral part of the global economy, is looking for ways to regulate commodity exports and merchandise imports in all spheres. How to balance the balance of the service sector - especially in the tourism sector, which ranks second in the economy of Azerbaijan after the oil sector in the receipt of foreign currency. The states and economists of Azerbaijan should think about putting into operation modern enterprises, find all possible ways of development of the non-oil sector - agriculture, tourism, transport and freight transportation. The focus of our opinion is the main attraction of goods from different countries of the East and East Asia to Europe through the Trans-Caspian International Transport Route passing through Azerbaijan. Opened sales offices in different countries. Finally, Azerbaijan must act together with countries to deal with the common negative factors of COVID-19.

### LITERATURE:

1. Стратегическая Дорожная Карта. Баку. 6 декабря, 2016
2. Всемир Банк. Годовой отчет. 2018



3. Годовой отчет МВФ. 2019 г
4. Бабкин Е.В. Россия и всемирная торговая организация. М.2012 г.
5. V.Qasimli. Reduce the impact of the coronavirus on the economy.  
[www.iqtisadiislahat.org.news](http://www.iqtisadiislahat.org.news)

# PERSPECTIVES ON THE SUSTAINABILITY OF THE ECONOMIC GROWTH OF THE NATIONAL ECONOMY

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## **ABSTRACT**

*A key problem of our time is the achievement of economic growth. Reducing the resources available to the state makes it difficult to solve strategic problems, as a result of which most countries are reducing their investment activity and lowering their accumulation rates to the detriment of current consumption. This trend makes it difficult to solve structural problems, because without a fundamental change in structural relationships the prospects for economic growth are significantly limited. The article shows that, despite certain improvements in the social-economic dynamics that have occurred in the republic due to the holding of state measures in recent years, problems of eliminating macroeconomic imbalances and optimizing the structure of the economy still remain. While maintaining the existing imbalances, the achievement of sustainable economic growth is transferred to the distant future. The analysis carried out in the article showed the dependence of economic growth on the results of the functioning of extractive industries and on the need to diversify the economy of the republic in order to use innovative development factors.*

**Keywords:** *sustainable growth, structure of the economy, balanced development, factors of economic growth, growth period, growth prospects, diversification of the economy*

## **1. INTRODUCTION**

The problems of economic growth currently occupy a central place in the discussed issues of the economies of many countries. The growing volume of real production allows to some extent to solve the problem that any economic system faces: limited resources with unlimited human needs. The multidimensional problem of economic growth is connected with questions of a sociological, political, historical nature and is studied along with questions of the sectoral structure of the economy, innovative orientation, and living standards of the population. At the same time, a growing economy has a greater ability to achieve sustainable development.

## **2. THE IMPORTANCE OF SUSTAINABLE GROWTH IN THE MODERN PERIOD**

The possibilities of ensuring sufficiently high rates of economic growth have especially expanded in connection with the application of the achievements of the scientific and technological revolution. There is a close connection between scientific inventions and industrial innovations. The study of economic growth should cover a sufficiently long period of time, as short-term deviations cannot characterize the direction of development, and the trend line connecting the cycles shows that the result of cyclical fluctuations is the growth of the economy. Usually, the study period covers a ten-year period of time and in the process of our analysis we have applied the last decade. The production growth achieved through the use of qualitative factors ensures a stable nature of growth, and the mass basis for the transition to a higher level is the massive renewal of fixed capital. The most important task of the state's economic policy is to make economic growth sustainable, to create conditions for balanced economic growth, based on overcoming the existing economic imbalances. Sustainability of economic relations in society, the general economic equilibrium achieved across the entire economy and its sectors, they are feasible provided that aggregate demand is satisfied and sellers realize their supply.

Economic growth occurs on a balanced basis when the coordinated development of economic processes in the country is observed, which, of course, has a relative nature.

### **3. POTENTIAL OPPORTUNITIES OF SUSTAINABLE GROWTH**

The potential of economic growth in the country persists if imbalances do not accumulate and are timely overcome. Balanced economic growth presupposes a coordinated dynamism of its structural parts, subordinate to the development of a coherent economic system, in order to ensure a steady increase in the standard of living of the population and reduce social inequality, which is noted in a number of state programs. The structure of the economy of the republic, despite some improvements, characterized by the persistence of imbalances and backwardness from developed countries. The correlation between the dynamics of population incomes, savings and investments are essential for ensuring economic growth and achieving its increasing pace. (1) The insufficient income level of the population does not ensure their effective use for financing capital investments. Economic growth factors are interconnected and intertwined, and a clear definition of the influence of each factor is quite arbitrary. The country's economy, developing during the period of globalization, incorporating all the positive and negative trends inherent in modernity thereby reflects the possibility of sustainable growth in the future. The significance of economic growth is that it expands the possibilities for increasing the level of well-being. Achieving the quality of economic growth of the national economy is possible only through mobilization of internal forces, combined with the effective use of all types of resources and the advantages of the international division of labor. At the same time, it is economically obvious that in the modern period not one, even the most powerful state, can in principle develop in a regime of absolute self-sufficiency. (2) Economic growth is a complex, ambiguous concept that has its sources, factors, conditions, structure, consequences. Economic growth has several types that differ in specific features. It can be characterized by the growth rate of basic economic indicators, by the degree of use of economic resources, by the nature of the interaction of the national and world economies, in relation to the current legislation (3). Economic growth, reflecting the process of translational movement in socio-economic activity and expressing the process of continuity, at the same time inevitably conflicts with manifestations of economic uncertainty and cyclicity. So, G.B Kleiner considers sustainability as predictability and partial adjustability of the duration of the stages of the life cycle, achieved through the adoption of relevant strategic decisions in accordance with economic reality [4]. It is economic growth that can provide the resources necessary to solve socio-economic problems, which will allow the country to take its rightful place in the world community and increase its economic potential. Many countries seek to accelerate economic growth, but all countries are not in the same conditions. Some countries want to start economic growth, the second seek to restore economic growth, and the third seek to prevent the negative effects of economic growth. The issues of sustainable economic growth are the subject of research by many authors. World economic experience shows that achieving economic growth in the long run is impossible only by using the practice of developed countries. Here it is necessary to take into account features in the level of development of the national economy. As noted by the authors, with limited natural resources, the trend of accelerating growth must be replaced by balanced sustainable development (5). It should be noted that the scale, effectiveness, pace and quality of economic growth of any country depend on several factors. Criticizing economic growth, a number of authors question the justification of economic growth in developed countries and argue that in recent periods it does not lead to an increase in the well-being of society (6). Economic growth increases the country's production capacities and allows solving the problem of limited resources. At the same time, economic growth does not solve all emerging economic, social and environmental problems.

Along with significant positive characteristics, economic growth has a number of drawbacks. These include, first of all, opportunity costs due to the need to reduce current consumption in order to ensure economic growth in order to increase future consumption.

#### 4. ANALYSIS OF THE DYNAMICS OF ECONOMIC GROWTH

Economic growth, economic stability, economic security and economic justice are related concepts. If economic growth means a quantitative increase in products and services, then economic stability means maintaining the stability of commodity prices and employment, preventing and overcoming pre and post-crisis phenomena, high inflation and unemployment, ensure balancing aggregate supply and aggregate demand, revenues and expenditures of the state budget and revenues and expenditures of population, compliance with structural proportions.

*Table 1: Dynamics of indicators of economic growth of the Azerbaijan Republic  
(% of previous year)*

Indicators	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP	126,4	105,0	100,1	102,2	105,8	102,8	101,1	96,9	100,1	101,4
Industrial production	133,5	102,6	95,0	97,7	101,8	99,3	102,4	99,5	96,6	101,5
Fixed investment	117,2	121,2	127,3	118,5	115,1	98,3	88,9	78,3	102,8	95,7
Oil and gas sector	106,3	101,8	90,2	94,9	100,9	97,1	100,6	100,1	94,7	100,5
Gross capital formation (specific gravity)	41,5	18,1	20,3	22,3	25,7	27,5	27,9	25,7	24,1	20,1
Mining industry	141,5	101,2		95,8	100,7	97,9	102,0	99,3	96,1	100,2
Share in the extractive industries in GVA (in %)	85,2	88,8	89,2	87,2	86,2	83,7	80,2	82,9	85,3	86,6
Oil production (million tons)	22,2	50,8	45,6	43,4	43,4	42,1	41,6	41,0	38,7	38,8
Export	120,2	106,9	92,6	95,1	105,1	98,0	100,1	94,4	92,9	100,6

*(Source: The table is compiled on the basis of statistical data, Statistical indicators of Azerbaijan, Baku-2015, 2019. National accounts, Baku-2015, 2019.)*

As can be seen from the table, there is a very obvious relationship between the main macroeconomic indicators. Thus, there is dependence between the growth rates of oil production, the mining industry and its specific gravity, the oil and gas sector, GDP and exports.

#### 5. ECONOMIC GROWTH TRENDS

It should be noted that economic dynamics are objectively subject to fluctuations and often economic growth is accompanied by inflation and the persistence of imbalances and social inequality. Improving the quality of life of the population in the process of market transformation can significantly lag behind economic growth. High rates of economic growth may not lead to their optimization and increase in economic efficiency. Increasing rates of economic growth, accompanied by an increase in the share of savings, inevitably lead to a decrease in the share of consumption and, consequently, to a lag in the level of satisfaction of growing needs of the population. Economic growth and exports have interdependent dynamics. Under non-optimal macroeconomic regulation, economic growth and export can be one-sided, preconditioning each other. It should be noted that mineral products account for the big share in the export of the Republic of Azerbaijan, while manufacturing products occupy a significant share in imports. Rapid price increases and environmental concerns may also be the result of uncontrolled economic growth.

In this regard, the priority of state regulation should be the creation of a rational production and commodity structure, the elimination of the negative cyclical consequences of economic dynamics. To achieve sustainable economic growth, it is necessary not only to use the resource opportunities and stimulate the priority development of promising sectors in the process of creating GDP, but also to ensure diversification both in production and distribution, and in the use of the results of socio-economic activities. Therefore, in order to achieve sustainable economic growth, structural diversification and modernization of the economy are necessary. The main principle should be the fullest possible realization of the strengths and competitive advantages of each economically isolated economic unit. These problems are associated with the diversification of the economic structure. An important factor in structural transformations is the functioning of the national innovation system, which is still at the initial level in the republic. Substantial increase in the overall level of innovation activity is necessary. During research the dynamics of economic growth, analysis of the world prices for the products of extractive industries is of particular importance, thus, the dependence of growth on the increase in these prices, as well as the possibility of their use for diversifying the economy is revealed. In the current period, of course, to increase or decrease economic growth, the prevailing importance is the dynamics of prices in the oil and gas sector. Of course, economic growth also depends on the development of other industries and the prices of their products. Opportunities from the redistribution of income from the export of raw materials in favor of the development of industries with a high share of the final product give significant potential for achieving sustainable economic growth. The progressive nature of economic growth is associated not with the influx of additional resources into its production, but with its transfer to labor-saving technologies, with a fuller use of the achievements of scientific and technological progress. As a result of progressive changes, the sphere and sectorial structures of the country's economy will change and the quality indicators of its functioning will increase, approximating the stability of economic growth. The level and growth rates of individual countries over a fairly long period have changed depending on the socio-economic structure, the pace of scientific and technological progress, demographic processes, and international economic relations. Despite all this, successively growing growth rates are periodically interrupted, suspended, and reduced due to resource potential of an investment, labor, natural, financial, and innovative nature. In this regard, it can also be argued that each socio-economic structure has its own capabilities and limits of economic growth. During the transition to negative values in growth rates and the onset of the crisis period, a sharp decrease in investment activity occurs. This process is accompanied by a decrease in activity in high-tech industries, which are the basis of economic progress. In turn, in accordance with economic objectivity, as any process has both a positive and a negative side in the context of the onset of crisis, the need to resume positive dynamics determines the use of a new type of investment using the achievements of scientific and technological progress. At the same time, the implementation of reproduction at a qualitatively new level in the republic requires the functioning of progressive industries: engineering, instrumentation and manufacturing industries that produce high-tech products with a high share of final products to meet the growing needs of the population. We also note that the urgent need for modern economic growth is the implementation of social transformations, without which economic growth is unthinkable. Modern economic growth and improving the livelihood of the population are inextricably linked processes of complex, but unified socio-economic dynamics. Direct economic growth and purely social problems are interconnected and preconditioning concepts with a certain significance of the primacy of the first, as the basis for the upcoming socio-economic dynamics. It should be noted that the quality of economic growth in the Republic of Azerbaijan has its own characteristics, preconditioned by structural dynamics. The main dynamics is expressed in the fact that the share created in the oil and gas sector from 44% in 2005 to 39% in 2018 decreases with fluctuations in the GDP of the republic for the study

period and, accordingly, the share created in the non-oil sector increases with fluctuations from 48% in 2005 to 52% in 2018. Moreover, the share of GVA created in the mining industry amounted to 41.5% in 2018, and 5.2% in the manufacturing industry. To characterize economic growth, we present the sectoral structure of the GVA created in the industry, in which 86.6% is created in the mining industry and 10.9% of it is created in the manufacturing industry (6). The dynamics of economic growth, thus, depends on the fluctuating dynamics in the oil and gas sector and the growth observed in the republic has not yet acquired a stable character. Based on the foregoing, in order to achieve sustainable economic growth in the republic it is necessary: further diversification, accelerated development of manufacturing high-tech industries, approaching the optimal ratio of macroeconomic proportions, expanding and improving the domestic market, improving the social, investment structure, development of innovative activities, which together will ensure progressive perspective growth of the national economy.

## 6. CONCLUSION

The article examines the dynamics of economic growth, factors influencing it, the possibilities of achieving sustainable growth in the future. It analyzes the structural and investment features of the economy of the republic, their dependence on the stages of development, notes the need to change certain proportions in production, investment and innovation to achieve sustainable growth in the future.

## LITERATURE:

1. Shevchenko I.V., E.N. Alexandrova, A.V.Alexandrov. Prerequisites for economic growth in the modern Russian economy. Finance and credit. [Predposilki ekonomicheskovo rosta v sovremenniy rossiskoy ekonomiki. Finansi i kredit] 2009 N.9
2. O.Cherkovets Regional. Integration and the Establishment of a Single Economic Space. [reionalnaya integrasiya i stanovleniye yedinoqo ekonomicheskogo prostranstva. Zelo.] M. Zelo 1998, p. 150.
3. Tarasevich V. On the problems of economic growth. The Economy of Ukraine. [k problemam ekonomicheskogo rosta. Ekonomika ukraini]1999, N. 8.p.11.
4. Kleiner G.B. The stability of the Russian economy in the mirror of systemic economic theory. Economic issues.[ustoychivost rossiskoy ekonomiki v zerkale sistemnoy ekonomicheskoy teorii.Voprosi ekonomiki] M.2015, N. 12.p. 107-123.
5. O.VLenkova.Sustainable development of oil and gas companies: concept, conditions, factors. J. Economics and Entrepreneurship. [ustoychevoye razvitie nefteqazovix kompanii:ponyatiye,usloviya, faktori. Ekonomika i predprinimatelstvo] M. 2015.№5.p.479-482.
6. V.S. Osipov. Model of a cluster management system. Economy. [model sistemi upravleniye klasterom] 2014, N. 1-2. P. 71-73.
7. Statistical indicators of Azerbaijan. [Azerbaycanin statistik gostericileri] Baku-2019.
8. National accounts of Azerbaijan. [Azerbaycanin milli hesabları] Baku-2019

## REGIONAL POLICY AND STATE REGULATION OF AGRARIAN PRODUCTION IN THE REPUBLIC OF AZERBAIJAN

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### **ABSTRACT**

*The purpose of the study is to single out the regional policy separately in the field of regulation and support of agricultural production, and also to highlight the level of socio-economic development of the regions as a distinctive feature of this policy. In each of the developed countries, agricultural organizations are treated with caution and, of course, this is welcome. Given that agriculture provides employment for a large part of the population, it is important to create innovative opportunities in this area. The implementation of a single regional policy is as follows: identification of regions with a low level of development and high unemployment; identification of the growth potential of enterprises in these regions; development of programs and projects for their development; preparation of relevant information and proposals to attract those who are interested in participating in these projects. The agricultural field is a strategic direction for us. This is an economic and social sphere. All this again requires state attention to this vital area. Without the comprehensive development of the agricultural economy, it is impossible to ensure food security and proper nutrition of the population. We believe that the objectives of the state control system should mainly be to support and resolve the following issues: production of environmentally friendly and high-quality food; gaining consumer confidence in food security, especially in domestic goods; access and integration of national producers to international food markets, export promotion; increasing the responsibility of state bodies in the field of consumer control and the effectiveness of their efforts; application of the latest scientific approaches, concepts and methods at all stages and stages of the food monitoring system; Dynamic growth of agricultural production, maximum support for agricultural and food producers.*

**Keywords:** *Agrarian sector, Food security, Agriculture, Priority area, Gross domestic product*

### **1. INTRODUCTION**

As it is known, regional policy as a separate direction in the regulation and support of agricultural production and socio-economic development of regions as a distinctive direction of these policies is the same. Therefore, the development of the economy of our country, dressed in the oil sector, the agricultural sector is always at the center of attention in this area. We consider that the production and processing of agricultural products will be increased at the expense of increasing the volume of competitive production. In order to achieve this growth, the main attention will be paid to the creation of intensive farms, based on the application of advanced agro-technical rules and automation. In this case, the potential of each region in the country will be considered, including the measures to be taken in the creation of special production zones (clusters) and subsectors in groups. As a result of traditional production methods used in the country, there will be encouragement in the development of basic agricultural culture on the basis of methods of organic farming on the basis of state standards. As a result, measures taken to improve production and processing of agricultural products in Azerbaijan will ensure the active participation of producers in the regions with a high added value. Regional policy in the field of agribusiness, primarily the development of high-tech types of production, innovation, the creation of technology parks, other infrastructure (transport, communications, etc.), the financial restructuring of traditional industries in the region, the

strengthening of regional and local financial markets, consulting, manufacturing, marketing services, development of education and culture.

## **2. METHODOLOGY**

The theoretical and methodological basis of the study is research conducted by economists of the Azerbaijan Republic and foreign countries on regional policy and state regulation and development of agricultural production, as well as laws adopted by the Milli Majlis, decrees and orders of the President of the Azerbaijan Republic. Azerbaijan, relevant decisions of the Cabinet of Ministers. organizes documents. The research method consists of observation, data collection, dynamics, data grouping, generalization, analysis and other statistical methods. The study used materials from the Goskomstat of the Republic of Azerbaijan, the Ministry of Agriculture, the Ministry of Economics, and research institutes.

## **3. LITERATURE REVIEW**

The implementation of the unified regional policy is carried out in the following order: identification of regions with a low level of development and high unemployment; identification of enterprises with growth opportunities in these regions; development of programs and projects for their development; preparation of relevant information and proposals to attract those who are interested in participating in these projects. In one of his speeches, the president said: “Azerbaijan is successfully pursuing a policy of economic reforms and a market economy. This is clearly evidenced by the fact that currently more than 70 percent of GDP is generated in the private sector. Land reform was successful and led to hundreds of thousands of peasants becoming landowners. If we look at the growth of agricultural production, we will see how effective the results of reforms in this area are. Our country is experiencing a period of growth in all areas of economic development, and it is gratifying that economic and macroeconomic indicators are improving every year, real incomes are growing, real wages are growing and, of course, social conditions are improving [1, p. 143]. The Law on Land Reform, adopted in 1996, defined the starting point for the development of agricultural entrepreneurship and reform. The agrarian reforms carried out in Azerbaijan in subsequent years in many respects were exemplary for the CIS countries in terms of their nature, preparation, level of soundness, pace and scale. “Azerbaijan will achieve great success and become economically strong in the near future. Our economy will develop further. We are already seeing this development. Especially in the agricultural sector. Azerbaijan is the only country in the CIS to receive land for peasants. We already see the consequences. At the same time, as a result of the privatization process, thousands and tens of thousands of entrepreneurs appeared. We must work to create a strong middle class in our country, to comprehensively develop all regions of Azerbaijan [2, p. 94]. We believe that the tasks of the state control system should be mainly aimed at supporting and resolving the following issues: production of environmentally friendly and high-quality food products; gaining consumer confidence in food security, especially local products; access and integration of national producers to international food markets, export promotion; increasing the responsibility of government agencies in food control and the effectiveness of efforts; application of the latest scientific approaches, concepts and methods at all stages and stages of the food control system; Maximum support for the dynamic growth of agricultural production, producers of agricultural and food products. [3, p.109]

## **4. ANALYSIS**

Methods of state regulation of a market economy are stable, but may vary depending on the market situation. At the same time, general measures should ensure the optimal development of the agri-food economy. The basis of the agri-food economy is agriculture, despite the fact that in the 1990s its share in GDP decreased and grew faster than in the food and processing



industries, it remained the largest sector of the country's economy. The production of agricultural products (raw materials) and food products is a very complex system, its condition and development depend on the complex influence of many external and internal factors [4, p. 36]. To compare gross agricultural output with previous years, let's look at the following table.

*Table 1: Gross agricultural output, in actual prices, million manat [5]*

Years	Total	Including	
		crop products	livestock products
<b>All economic categories</b>			
<b>2010</b>	3877,7	1999,2	1878,5
<b>2011</b>	4525,2	2339,8	2185,4
<b>2012</b>	4844,6	2458,2	2386,4
<b>2013</b>	5244,6	2629,6	2615,0
<b>2014</b>	5225,8	2449,4	2776,4
<b>2015</b>	5635,3	2761,1	2874,2
<b>2016</b>	5632,4	2577,2	3055,2
<b>2017</b>	6580,0	3019,0	3561,0
<b>2018</b>	7010,0	3186,0	3824,0

Years	Total	Including	
		crop products	livestock products
<b>Agricultural enterprises</b>			
<b>2010</b>	192,6	60,0	132,6
<b>2011</b>	236,0	82,2	153,8
<b>2012</b>	319,4	97,3	222,1
<b>2013</b>	363,9	120,5	243,4
<b>2014</b>	404,5	111,8	292,7
<b>2015</b>	410,1	132,5	277,6
<b>2016</b>	449,2	145,8	303,4
<b>2017</b>	645,4	238,5	406,9
<b>2018</b>	660,9	262,1	398,8

In January-October of this year (2019), agricultural products worth 6900.3 million manat were produced in Azerbaijan. This is 7.2% more than for the same period last year (2018). Over the year, the cost of crop production increased by 11.4% to 3549.5 million manat, livestock production increased by 3.2% to 3350.8 million manat [6]. As of November 1, 99.9% or 1,038.9 thousand ha of sown areas of grain and leguminous crops (excluding corn) and 3,249.4 thousand tons or 6.3 tons were harvested compared to the same period last year. % more products have been accepted. Compared with the same period last year, in January-October this year, live meat production increased by 2.9% to 429.9 thousand tons, milk production increased by 1.8% to 1751.4 thousand tons, egg production increased by 8.1% to 1531., 7 million units of wool production and production increased by 1.5% to 15.9 thousand tons. In addition, 643.7 tons of cocoons were produced in the country, which is 25.3% more than in the same period last year [7]. It also turned out that as of October 1, 2019, there were 3,007 greenhouses in the country with a total area of 1300 hectares. Compared to the same period last year, the total number of greenhouses increased by 3.3 percent, and their area - by 6.3 percent. Compared to the corresponding period of 2018, in January-September of this year, the production of tomatoes, one of the main products grown in greenhouses, increased by 0.1 percent to 189.2 thousand tons, and the production of cucumbers increased by 7.2 percent to 11 , 6 thousand tons [8]. Along with these indicators, the producer price index of agricultural products, of course, will increase or decrease, which can be seen in the table below.

*Table following on the next page*

*Table 2: Producer price index for agricultural products [9]*

Product names	2013	2014	2015	2016	2017	2018
Barley, rye and oats	103,1	108,3	108,8	94,9	106,6	101,0
Other vegetables that give	109,4	99,0	83,9	63,4	128,2	85,6
Wheat	106,6	101,4	96,7	84,2	101,7	101,0
Cereals (excluding rice), legumes and oilseeds - total	104,2	102,5	100,2	90,0	104,5	100,9
Potatoes	95,0	106,8	103,5	100,7	100,0	102,5
Rotatoes, onions and radishes	97,8	100,3	100,4	100,9	106,0	100,2
Fibrous plants	99,4	100,0	100,0	100,4	100,1	105,4
Cor	96,3	96,6	105,9	101,0	100,6	97,2
Watermelon and berries	99,6	78,9	88,1	66,5	102,3	94,6
Dried beans	90,5	92,1	91,2	112,0	135,9	105,2
Sugar beets	100,0	101,7	118,0	100,0	100,0	100,0
Vegetables, melons	103,1	101,4	93,9	84,1	113,8	94,6
The table, which is high in starch, is made up of root crops and tubers	95,5	106,8	103,5	100,7	100,0	102,4
Raw cotton	99,4	100,0	100,0	100,4	100,1	105,4
Leafy and stalked vegetables	101,5	102,2	98,2	96,2	108,7	99,1
Green legumes	101,9	108,8	81,3	496,0	99,9	102,5
Forage crops	99,5	117,5	96,7	91,0	100,3	90,3

All this once again requires state attention to this important area of life. Thus, it is impossible to ensure food security and proper nutrition in the country without ensuring the comprehensive development of the agricultural economy. Experience shows that during the transition period, an aggravation of the food problem is inevitable in all countries. The experience of the countries of the world shows that agriculture can develop not only in private, but also in state enterprises. In this sense, the Netherlands is a good example. Here is another example. In Poland, agriculture is less developed than in Hungary, which is based on collective agriculture. It can be concluded that, among other conditions for the prosperity of agriculture, it is important to improve the culture of agriculture and livestock [10, p. 346]. “The agricultural sector is a strategic direction for us. This is both an economic and a social sphere. 47% of our population lives in regions. Therefore, the attention paid to the socio-economic development of agriculture and regions in recent years is aimed at increasing both employment and productivity, and Azerbaijan - at increasing domestic demand and exports to the highest level. [11] These words were spoken by President Ilham Aliyev during his speech at the opening ceremony of the Vegetable Institute. World experience shows that the system of state regulation and support of economic activity in agriculture is carried out in the interests of society and the state. In this case, the main task of the state is to create legal and economic conditions for the successful functioning of business entities in a market economy. “Agriculture should be developed on a scientific basis. Modern technologies and approaches should be applied” [12]. In recent years, significant progress has been made in improving the provision of agricultural producers with appropriate machinery and equipment due to significant state support and systemic measures. During 2005-2015 Agroleasing OJSC acquired 1869 combine harvesters, 7265 tractors and 14507 other agricultural equipment. During this period, a total of 18,090 units of agricultural machinery, including 723 combine harvesters, 6,305 tractors and 11,062 other agricultural machinery, were leased or sold to 10,644 legal entities and individuals. [13, p. 7]

## 5. CONCLUSION

Regional policy and state regulation and improvement of agricultural production are mainly aimed at increasing economic productivity. In this regard, the necessary measures to strengthen financial and budgetary processes must be sustainable.

With regard to measures aimed at strengthening and stimulating state regulation of agriculture, as well as regional policies and agricultural production, the following opinions may be expressed:

- ensuring the socio-economic interests of farmers and farmers, as well as raising incomes and living standards of peasants;
- along with the growth of processing enterprises in the regions, financial stability, financial capabilities of their simple and large-scale reproduction and the need to implement the necessary measures in this direction;
- further strengthening the supply of agricultural producers with appropriate means of production and services, increasing the level of labor productivity, etc.
- further improving the access of producers to the market through the development of market institutions and market infrastructure in the field of agriculture;
- carrying out structural changes in agricultural production in accordance with modern requirements;
- Strengthening the institutional capacity for state regulation of agriculture and improving governance.
- Conducting educational events among manufacturers to maintain and improve the quality of land, etc.

One of the main conditions for ensuring the sustainable development of the agricultural sector in the modern era is the regulation of the negative impact of agricultural production on the violation of the ecological balance. To this end, appropriate environmental standards should be developed and applied. At the same time, the environmental policy in agricultural production should be considered in the context of the export policy of “environmentally friendly” agricultural products. It is known that in each of the developed countries, subjects of economic activity in agriculture are treated with caution, and this is very natural. Since agriculture provides employment for the majority of the population, innovative changes can be applied. Local entrepreneurs need to develop a marketing plan on how to attract customers and make a profit. Thus, equal competition must be ensured. All parts of the offer - strong advertising, advertising and public relations - must be activated [14, p.1226]. We believe that in the current economic environment, in which the main priorities for the development of the non-oil sector in the country have been identified, it is very important and necessary for every businessman and farmer to ensure sustainable agricultural development and make a significant contribution to the country's economy is one of the conditions.

#### **LITERATURE:**

1. Ilham Aliyev “Development is our goal”, book 3, Azerneshr, Baku 2009, p. 143
2. Ilham Aliyev “Development is our goal”, book 3, Azerneshr, Baku 2009, p. 94
3. B.X.Ataşov. Structural and efficiency problems in the agricultural sector. Baku 2017, p.109
4. Ismet Abasov. Agriculture of Azerbaijan and the world. Baku - 2013, p.36
5. <https://www.stat.gov.az/source/agriculture/>
6. State Statistics Committee of the Republic of Azerbaijan
7. State Statistics Committee of the Republic of Azerbaijan
8. State Statistics Committee of the Republic of Azerbaijan
9. Agrarian Research Center. <http://agrodata.az/>
10. A.Sh. Shakaraliyev. Economic policy of the state: realities and perspectives. Baki -2009
11. President of the Republic of Azerbaijan Ilham Aliyev: From the speech at the opening ceremony of the Vegetable Research Institute. 24.01.2019

12. President of the Republic of Azerbaijan Ilham Aliyev: From the closing speech at the conference dedicated to the results of the implementation of the State Program of socio-economic development of the regions of the Republic of Azerbaijan in 2014-2018. 29.01.2019
13. Economic Reform Analysis and Communication Center. Azerbaijan Economic Reform Review. August 2017, p.7
14. What agricultural products can increase the country's export potential. S Mammadova - Economic and Social Development: Book of ..., 2019, p.1226 - researchgate.net
15. A.A Guliyev, L.S Amanova. Agrarian economy of Azerbaijan in terms of reform. Textbook. Baku - 2001
16. State Statistics Committee of the Republic of Azerbaijan

## ON DIRECTIONS FOR IMPROVING THE EFFICIENCY OF THE FINANCIAL MECHANISM IN THE CONTEXT OF SUPPORTING COMPETITIVENESS IN THE AGRIBUSINESS SYSTEM

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### ABSTRACT

*In the context of economic reforms in the Republic of Azerbaijan, the growing role of the financial mechanism in the formation of a competitive environment for entrepreneurship is always observed. In this regard, it was noted that the study of the problem is of particular importance due to the great importance of the financial mechanism in supporting the competitiveness of the country's agribusiness system. The article focuses on theoretical views on the financial mechanism of the agribusiness system, as well as the factors that lead to the long-term nature of the production cycle in this area. Regardless of ownership, the agribusiness system began to form a multifaceted system of financial relations in the economic activities of entrepreneurs, and the main stages of its turnover were discussed. The sustainability of inter-sectoral and intra-sectoral economic relations in the agribusiness system requires adequate flexibility of the financial mechanism for the reform period. Otherwise, the opportunities for income-generating activities, especially in the agribusiness system, are severely limited. There are local and external reasons for this. The article discusses the factors that create a competitive economic environment and, under certain conditions, are presented as factors of local development of the agribusiness system, as well as pricing policy. It was noted that the protection of the local market and the intensification of international relations are complementary processes in the agribusiness system. In these relations, the importance of relations with international organizations was highlighted. The directions of increasing the efficiency of the financial mechanism in the context of supporting competitiveness in the agribusiness system are reflected in the article.*

**Keywords:** *agribusiness system, competitive, support, financial mechanism, efficient, agrarian sphere, business entities*

### 1. INTRODUCTION

The financial mechanism acts as an important impetus for development in all spheres of the country's economy. The financial mechanism has a stimulating character in the country's economy and plays an important role in the agribusiness system as the most important and strategically important sphere of the national economy. For entrepreneurs operating in the agribusiness system, the financial mechanism, in addition to acting as an important component

of economic relations, also plays an important role in the implementation of large-scale reproduction, but also in the distribution of profits and protection of economic freedom of entrepreneurs. Competition is one of the important factors of economic growth in the agribusiness system in modern conditions using market principles. In the agribusiness system, agriculture and closely related areas are characterized by a high degree of sensitivity to systemic transformations, especially to processes that increase competition within the sector. Therefore, in the context of economic reforms in our country, the growing role of the financial mechanism in the formation of a competitive environment for entrepreneurship is always observed. From this point of view, taking into account the great importance of the financial mechanism in supporting the competitiveness of the agribusiness system of our country, the study of the problem is especially relevant.

## **2. THEORETICAL VIEWS ON THE FINANCIAL MECHANISM IN THE AGRIBUSINESS SYSTEM**

It is clear from research that the similarities between the financial and credit mechanisms in the agribusiness system are more pronounced in the context of maintaining competitiveness. This is primarily due to the fact that the agribusiness system does not meet the needs of entrepreneurs for financial resources at the expense of special funds, ie local resources, so more attractive funds are needed, and the role of credit mechanisms is irreplaceable. In general, there are different views on the financial mechanism in the economic literature [1, 2, 3]. The views of Galina N.Ryazanova are of particular interest. Thus, the author considered global institutional transformations at the macro level from several points of view for the development of effective integration of enterprises in the agricultural sector: 1. The impact of systemic management decisions on the level of the national economy; 2. Evolution of state regulation in the agrarian sphere by normative, financial and administrative tools; 3. Clarification of the results of enterprise reforms in the agrarian sector. Thus, the author shows the directions of proposals for reforms to improve the integration of agricultural enterprises in the agribusiness system in the framework of management decisions, and showed that the financial mechanism, by its nature, is the most important structural element of the economic mechanism [4]. The financial mechanism, in essence, includes the formation, distribution and use of financial and credit resources in the country's economy. From this point of view, the financial mechanism actually acts as an economic category in the agribusiness system. However, despite all this, the financial mechanism, both individually and as a whole, is characterized as a stimulating and regulatory economic category in the economic mechanism of the economy. As a result of research conducted by A.Ferrugento and A.Rocha, methodological proposals for the establishment of the enterprise structure were evaluated [5]. At the same time, the results of the research of these authors have made new contributions to information systems and technologies through the financial mechanism. Separately, as mentioned above, the credit mechanism, acting as the main mechanism for the management of credit relations as a whole, includes credit planning, lending mechanism, control and stimulus activities in this area. The financial mechanism combines the forms and methods of organization of financial relations, the use of financial levers, economic norms, various sanctions and incentives, as well as the distribution and redistribution of public goods and national income. From this point of view, both the financial and the credit mechanism perform redistribution functions in the economy. Approaching the problem from this point of view, the financial mechanism includes the management of financial relations in the agribusiness system and a set of forms and methods of its organization. First of all, it should be noted that since the agribusiness system exists as a sector of the economy with its own characteristics, there are specific features of both financial and credit relations and the credit mechanism in this area. Thus, agriculture, as the most important segment of the agribusiness system, is primarily dependent on natural climatic conditions and is a low-income sector.

D. Davidson identified the existing gaps and factors in his research on climate adaptation in agriculture [6, p. 434]. From this point of view, the financial mechanism also acts as a specific mechanism that combines these factors. In addition, it is clear that in the agribusiness system there are sharp differences between the duration of production and the duration of work, which ultimately leads to the formation of seasonality. Of course, all this is due to the following factors, which ultimately lead to the long-term nature of the production cycle:

1. Subsidies to the agricultural sector (breeding); compensations to the spheres of agribusiness system; financing of educational subjects in the agribusiness system; leasing operations; capital investments;
2. Subsidies for livestock products; maintenance of infrastructure; land improvement; maintenance of veterinary networks; capital investments;
3. Taxes;
4. Investments and their return;
5. Loans and their repayment.

From this point of view, entrepreneurs in the agribusiness system, regardless of ownership, have their own characteristics of turnover. Thus, the turnover of funds in the agribusiness system is decisively slow, ie characterized by relative slowness. In addition, in the process of turnover, costs recover almost gradually. It is also necessary to take into account the processes of withdrawal of funds from circulation. The process of putting funds into circulation actually involves the process after the product is sold. In other words, there are sharp failures between the inflow of funds, ie the cash flows and the duration of the costs of production. It should be noted that the specific features of the turnover of funds, ultimately, lead to the emergence of specific forms of organization of financial relations of entrepreneurs in the agribusiness system, regardless of ownership. It is clear that in all spheres of the national economy, each business entity compensates its costs through income. However, there are seasonal discrepancies between spending and revenue during the year, which ultimately leads to problems in meeting the demand for working capital and makes it an objective necessity to attract bank loans. Bank loans are more important for the agribusiness system than for other sectors of the national economy. Until income is generated, a decisive part of the costs of entrepreneurs in the agribusiness system can be formed through loans. It should be noted that the production cycle in the agribusiness system lasts a long time. In crop production, this process covers a period of 9-12 months. During this period, the financial results of the business entity are determined mainly at the end of the year. Of course, at the end of the year, profits are distributed based on the results of production, and, accordingly, economic stimulus funds are formed. Researchers at the Midwest Agribusiness Trade Research and Information Center, Alston J.M., Babcock B.A. and Pardey P.G. identified factors influencing changes in agricultural production and efficiency in the world [7]. The organization of financial relations, as well as social factors have a decisive influence. As in other spheres of the national economy, as a result of transformation-oriented processes in the agribusiness system, various property categories of business entities have been formed.

### **3. STAGES OF TURNOVER OF THE BUSINESS ENTITY IN THE AGRIBUSINESS SYSTEM**

In modern economic conditions, the agribusiness system includes state agricultural enterprises, collective farms, as well as farmers and individual households, all of which have a decisive impact on the organization of financial relations. It should be noted that in the system of agribusiness, regardless of ownership, a diversified system of financial relations in the economic activities of entrepreneurs has begun to take shape.

The turnover of funds for each business entity consists mainly of 3 stages, which include the following:

- acquisition of funds necessary for the organization of the material production process;
- procurement process;
- production and implementation process.

In the agribusiness system, entrepreneurs in the initial stage of turnover receive the products necessary for the process of material production, calculated primarily on the interaction with suppliers, which primarily includes oil products, mineral fertilizers, spare parts, lubricants, etc. According to the agreements concluded with the consignors, the relevant mutual relations are formed in connection with the payment of the price of transportation of goods and materials, determination of the price system, compliance with the terms of transportation and settlement. In the second stage of cash flow, as a rule, in the agribusiness system, entrepreneurs are engaged in the consumption of means of production, and in such conditions the process of formation of the finished product takes place. Of course, in such conditions, different types of relationships are formed between the direct participants in the production process. These entities include various enterprises and organizations that form financial relations between these organizations and business entities. At this stage, at the same time, the relationship between businesses and employees is formed in relation to wages and other benefits. Other payments include, first of all, social insurance funds, pension funds, as well as issues related to the payment of benefits. In addition, there is a relationship with financial institutions on payments to the budget in connection with the taxation of labor, which includes the payment of wages and taxes.

#### **4. FACTORS SHAPING A COMPETITIVE ECONOMIC ENVIRONMENT AND PRICING POLICY**

The sustainability of inter-sectoral and intra-sectoral economic relations in the agribusiness system requires adequate flexibility of the financial mechanism for the reform period. Otherwise, the opportunities for income-generating activities, especially in the agribusiness system, are severely limited. There are local and external reasons for this. Factors that create a competitive economic environment and, under certain conditions, are presented as factors of local development of the agribusiness system can include the following:

- level of realization of agro-potential;
- level of mobilization of material, labor and financial resources;
- speed of entrepreneurship development;
- the current level of protectionism in relation to the agribusiness system;
- efficiency of use of tax, credit, price and other regulatory instruments;
- purchasing power of the population and a number of other macroeconomic indicators.

The above factors have a great impact on the export potential of the agribusiness system. However, the above grouping of these factors can be considered as endogenous factors of competition. In modern economic conditions, the protection of this market is an important aspect of the economic policy of almost all countries. One of the characteristic features of the first years of the new century is the acceptance of stability in the local market as a key condition for solving the country's socio-economic development problems. The competitiveness of the agribusiness system in developing countries is a function of indicators of the level of implementation of the state's ability to regulate sharp fluctuations in the local market and the effectiveness of the mechanism to support economic activity [8, 9, 10]. Thus, Hena S, Jingdong L, Rehman A. and Zhang O. identified ways to solve this problem by conducting a mutual analysis of agricultural development and modernization in China and Pakistan [11, pp. 81-94].



Branstetter Lee G., Francisco Lima, Lowell J. Taylor and Ana Venancio conducted research based on recent economic reforms in Portugal. They identified the answer to the question of whether access regulation prevents entrepreneurship and job creation [12]. In his study of sales licenses, Bruhn M. identified the impact of the business registration reform in Mexico on entrepreneurship [13]. Hollinger Frank, an employee of the German Agency for International Cooperation (GIZ), identified the current development trends and problems of agricultural financing and developed proposals [14]. As a result of all these studies, it has been shown that the formation of a favorable financial mechanism for businesses operating in agriculture has a decisive role in increasing the competitiveness of the agribusiness system. The formation of a competitive environment in the agribusiness system and the financial mechanism for its support should take into account the current level and prospects of integration processes. Thus, the growing impact of agro-industrial integration on the competitive environment requires the justification of compromise options between the protection of the local agricultural market and the integration process. The nature of inter-sectoral relations depends on the form of farming, the level of development of entrepreneurship in the agribusiness system. Thus, the diversity of forms of ownership creates a complementary environment in the agricultural sector. Diversity stimulates relationships that stem from the dynamism and expediency of relationships. It is clear from the research that the main problems of business entities in the agribusiness system at the beginning of the transition to the use of market principles are related to the lack of financial resources. During this period, the state's ability to sponsor the field is also limited. One of the factors that negatively affect business activity in the agribusiness system in the context of the use of market principles is the strengthening of disproportion in the prices of industrial and agricultural products, which is not in favor of the latter. Non-equivalence in the exchange of industrial and agricultural products is a serious obstacle to the profitable operation of businesses in the agribusiness system. It is estimated that in the agribusiness system, an entrepreneur has to sell many more vegetables or milk than he did 20 years ago in order to buy a tractor. It is clear that in this situation, the business entity faces financial difficulties in the application of intensive technologies. On the other hand, as its cost of fuel and lubricants increases, its ability to purchase fertilizers, feed, and technical equipment is limited. It is very difficult to understand how people enter into economic relations in order to realize their independent interests. The pricing system is a mechanism that performs this task without being controlled from the center, without giving orders to people. The competitiveness of entrepreneurship in the agribusiness system depends on pricing policy. Reconciliation of interests between industry and agriculture should be an important direction in the formation of prices. In practice, a completely different approach is not uncommon. Thus, sometimes the state (through public procurement prices), as well as industrial enterprises that process agricultural products and provide the means of agricultural production and fuel (through contract prices) affect the interests of agricultural producers, selling their products at very low prices. they try to buy and sell their products at a high price. It is clear from advanced foreign practice that prices require the application of deeply justified forms of state intervention in agriculture. Recent data show that the role of guaranteed prices is growing. The role of a secure price mechanism in the development of business activity in the agribusiness system is also crucial. It is necessary to agree that increasing the role of the state in the food market will prevent dependence on the problems associated with the rise and fall of prices in the agribusiness system. It is known that the rise and fall of prices in the food market is mainly due to the seasonal nature of production in the agribusiness system and natural factors. In order to reduce the losses incurred by businesses in non-equivalent exchanges in the agribusiness system, the government should support parity prices, which should provide the necessary level of profitability. There is such evidence in US practice. In the early 1980s, the government's in-kind payment program had a decisive impact on grain production. The main purpose of this program was to reduce possible stocks of grain, rice and cotton, to support

market prices. Of course, modern reality puts forward different criteria. However, there are many opportunities to use the tested mechanism. Improving the structure of imports as an effective direction of state protection of business activity in the agribusiness system implies a reassessment of not only the indicators of food imports, but also the import status of technical and other means necessary for production. In modern economic conditions, the partial increase in the share of machinery in the total volume of imports in the agribusiness system of our country is not enough to achieve a qualitatively new level in the application of intensive technologies. This situation is mainly due to the low demand for solvent in the local market. Given these and other reasons, the approach to leasing has been more constructive in recent years. It is taken into account that world prices for agricultural products are, as a rule, determined by the best production conditions for those products. The Republic of Azerbaijan does not have such an opportunity to produce the main types of products. The agro-industrial complex of the Republic of Azerbaijan lags behind the leading countries in the world food market in terms of its technical and technological level, and the infrastructure of our agro-food complex is weak. The effectiveness of the financial mechanism to support competitiveness in the agribusiness system depends on the level of activation of the development potential of agriculture and closely related areas. Activation of this potential should cover a wide range of issues, from land relations to the improvement of the legal and regulatory framework of foreign trade. Foreign businesses exporting food products to our country are in a more favorable position. Thus, they have the opportunity to receive western loans, take advantage of discounts for large wholesale transactions, participate in the sale of food resources of their countries at low prices. It is not difficult for these businesses, especially in European countries, to receive export subsidies. These countries support the development of independent intermediaries and a network of wholesale food markets [15, pp. 176]. The possibility of supplying the local market with food products at the expense of national production should be thoroughly investigated. In this context, marketing research is of particular importance. Weaknesses of business entities in relation to imports in the agribusiness system should be investigated, theoretical-methodological and institutional recommendations should be developed to support competitiveness.

## **5. PROTECTION OF THE LOCAL MARKET AND INTENSIFICATION OF INTERNATIONAL RELATIONS**

In the agribusiness system, the protection of the local market and the intensification of international relations are complementary processes. In these relations, relations with international organizations, including the World Trade Organization (WTO) are of special importance [2, 16, 17]. It is clear that the WTO is aimed at activating the world's economic potential and further liberalizing foreign trade. Those who are cautious about this organization, first of all, show that this direction is more in the interests of the great powers. On the other hand, we must not forget that there are negative aspects to staying out of the WTO. In the modern world, it is necessary to accept globalization as a reality and adapt to it. In the Dillon, Kennedy, Tokyo and Uruguay rounds of the WTO talks, market issues in the agribusiness system, the abolition of trade interests and subsidies in agriculture were on the agenda. For more than 25 years, the organization has been pursuing a policy aimed at reducing protectionism and removing trade restrictions in the agribusiness system. Countries that are beginning to use market principles understand that national entrepreneurs must be protected by all means in order to compete on an equal footing with imported products. In this regard, the possibility of using customs duties, including the effective application of anti-dumping and countervailing duties, is particularly relevant. There are exceptions to the WTO's approach, which seeks to liberalize trade and promote free trade and intensive integration. Thus, for example, in the United States, quotas are widely applied to the import of basic livestock and

many plant products. In recent decades, systematic financial support has been provided to the agribusiness system in many developed countries, which are opposed to the regulation of product prices and subsidies, and a solid foundation has been laid for its development. In the agribusiness system, the priorities of competitive activities of business entities in the modern economic environment are mainly aimed at ensuring food security. Although food security cannot be achieved only through the development of agriculture, the leading role in countries that are just beginning to use market principles still belongs to the agribusiness system. In countries that are just beginning to use market principles, the shortage of products in the agribusiness system is often compensated immediately by imported goods. The main reason is that imported products are cheaper than domestic production. In some cases, the quality of imported food products does not meet the required requirements. However, they gain a favorable position in the market because they are cheaper.

## 6. CONCLUSION

In order to increase the efficiency of the financial mechanism in the context of supporting competitiveness in the agribusiness system, the following favorable opportunities for mutually beneficial economic activity are formed.

- Restrictions arising from the small size of business entities operating in the agribusiness system are partially eliminated;
- An environment of equal partnership is formed in the relations between producers and processors in the agribusiness system;
- Cooperation tendencies arising from direct practical needs are strengthening;
- a transparent environment is formed in the agribusiness system to assess the results of the application of real means to support the competitiveness of entrepreneurs;
- The nature and scope of the process of formation of associations of business entities operating in the agribusiness system of countries that are just beginning to use market principles is determined by the level of specialization, rural customs and mentality of producers and processors in the agribusiness system.
- cooperation expands the choice of relations with producers, processing entities and other partners;
- The financial mechanism to support the competitive environment must take into account the high risk probability in the agribusiness system. Thus, the risks require processing, commercial, service and credit organizations to be more sensitive to the needs of entrepreneurs in the agribusiness system.

## LITERATURE:

1. Diaz-Bonilla E., Orden D., and A. Kwiecinski. Enabling environment for agricultural growth and competitiveness: Evaluation, indicators and indices. OECD Food, Agriculture and Fisheries Papers, № 67, 2014, OECD publishing
2. Aliyev E., Kerimova T., Hajiyev G. Evaluation security in the Region Within the Framework of the FAO UN Cooperation Program Using the Fuzzy Interence // 13th International Conference on Theory and Application of Fuzzy Systems Soft Computing-ICAFS-2018. pp.609-618
3. Салимова А.А. Показатели конкурентоспособности в агробизнесной системе в условиях формирования финансовых отношений // Наука и бизнес: пути развития, №9(87), Москва, 2018, с. 67-70
4. Ryazanova G.N. Transformation of agricultural enterprises on the boundary of the XX-XXI centuries // IFAC-PapersOnLine Volume 52, Issue 25, 2019, Pages 225-230

5. Ferrugento A., Rocha A. Evolution of Methodological Proposals for the Development of Enterprise Architecture New Contributions in Information Systems and Technologies. Springer, Cham 2015, pp. 351-359 DOI [https://doi.org/10.1007/978-3-319-16486-1\\_35](https://doi.org/10.1007/978-3-319-16486-1_35)
6. Davidson D. Gaps in agricultural climate adaptation research // Nature Climate Change, № 6(5), 2016, 433-435 pp.
7. Alston J.M., Babcock B.A. and Pardey P.G. The shifting patterns of agricultural production and productivity worldwide. Midwest Agribusiness Trade Research and Information Center, 2010
8. Divanbeigi R., Paustian N. and Loayza N. Structural Transformation of the Agricultural Sector: A Primer. World Bank Policy Research Paper № 2, 2016, The World Bank, Washington, DC
9. Гаджиев Г.Б. Направления развития экономических отношений в зарубежных странах и организации бизнеса в Азербайджане // Экономика и предпринимательство, № 6 (83), Москва, 2017, с. 618-620
10. Салимова А.А. Современное состояние конкурентоспособности внешней торговли в агробизнесной системе // Глобальный научный потенциал, №9(90), Санкт-Петербург, 2018, с.62-65
11. Hena S, Jingdong L, Rehman A, Zhang O. A comparative analysis of agricultural development and modernization between China and Pakistan // International Journal of Advanced and Applied Sciences, № 6 (4) 2019, pp. 81-94
12. Branstetter Lee G., Francisco Lima, Lowell J. Taylor and Ana Venancio. Do Entry Regulations Deter Entrepreneurship and Job Creation? Evidence from Recent Reforms in Portugal // The Economic Journal (July 16), 2013
13. Bruhn M. License to Sell: The Effect of Business Registration Reform on Entrepreneurial Activity in Mexico // Review of Economics and Statistics, № 93 (1), 2011, pp. 382-86
14. Hollinger Frank. Rural and Agricultural Finance-Trends, Issues and Challenges. Germany Agency for International Cooperation (GIZ), 2011
15. Balayev R.A. Urbanization: the urban economy and the food problem. Baku, Science, 2007
16. Кулиев А.А., Гаджиев Г.Б. Регулирование бизнес производства и продажи продуктов в аграрном секторе // Science and Education Studies, № 1 (17), Stanford University Press, 2016, p.105-114
17. Гаджиев Г.Б. Современные проблемы и механизмы развития бизнеса в Азербайджанской Республике // Региональная экономика и управление: электронный научный журнал [Электронный ресурс]. Москва, 2017, Режим доступа: <http://eee-region.ru/article/5029/>

## **SOCIAL INVESTING IN PROVIDING SUSTAINABLE GROWTH IN MODERN ECONOMY**

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### **ABSTRACT**

*The crucial part of the whole investment activities are the social investment activities. This conception is wider than the simple sum of investments directed to the branches of social sphere and involves all the amount of investments directed to the development of human being. Quantitatively we speak about investment activities, first, in the framework of the branches of social sphere, second, in the framework of several other, “adjacent” branches and directions. Along with we must precise that the volume of social investment activities should not be considered as simple “arithmetic” sum of money directed to the branches of social sphere and above mentioned “adjacent” branches. We should also consider multilateral, synergetic effect of such type of investments for both economy and society which appears because of increasing quality of the whole human potential and positively affects the results of whole economic development. Besides, the social investment activities should be considered from the point of view of not only direct economic & direct social effect, but also with obligatory consideration of indirect social effect which includes long-range multiplicative changes in the whole social life of society. The investment activities in national economy are been regulated with the help of economic specific mechanism as a component of the whole economic mechanism. Respectively, mechanism of social investment activities includes the complex of mutually connected forms, methods and instruments directed, first, to forming and maintenance the general business climate and the most favorable investment climate as a part of the former, second, to concrete stimulating of investment activities as a whole and social investment activities particularly, third, to forming favorable environment for potential investors who are ready to invest to social projects.*

**Keywords:** *investments, national economy, social sphere, science, education, public health*

### **1. INTRODUCTION**

The course of processes in the global economy shows that providing the sustainability of economic growth and, especially, its acceleration can be achieved, first of all, on the lanes of innovative development. This is not just about development, but about innovative modernization, not only of the economy, but of the whole modern society. Such modernization implies the modernization of the entire social environment as integral component. This includes improving the level and quality of life of the main masses of the population, regardless of their specific material capabilities, providing them with the opportunity to use the most advanced achievements of social development - in healthcare, science, education and other areas. The objective complication and appreciation of such achievements require a significant increase in material costs in the structure of GDP, and this, in turn, implies an increase in volumes, an improvement in the structure and an increase in the quality of social investment.

### **2. INNOVATIVE MODERNIZATION, SOCIAL GROWTH FACTORS AND IMPROVEMENT OF SOCIAL INVESTMENT**

In the conditions of the continuing negative impact of the consequences of the global financial and economic crisis, the country is faced with the task of forming a sustainable mechanism that is not subject to external influences and conjunctural fluctuations in economic growth.

Providing such growth is seen on the lanes of not just innovative development, but particularly innovative modernization of both the economy and the entire modern society as a whole. In this study, innovative modernization involves: firstly, a qualitative update of the production apparatus and, in general, the basic assets of the national economy based on the latest achievements of science and technology; secondly, the formation of a mechanism for the innovative use of natural, material, financial and human resources available within the national economy and society; thirdly, a qualitative update of the existing personnel potential through the use of the most advanced methods and systems for the training and professional development of specialists and the creation of new, technologically equipped job places; fourthly, improving the system of production and social relations oriented towards the most efficient use of the achievements of scientific and technological progress in socio-economic development; fifthly, the integrated development of the human environment and, through this, the improvement of general conditions and quality of his life and work. The implementation of all these tasks is facilitated by the action in modern society of social factors affecting economic growth, whose role has only recently been increasing, such factors include:

- the general modernization of productive forces, including the increase in the level and quality of life of workers and the population as a whole as its integral part
- a new quality of labor productivity growth, which increasingly includes an innovative component and on which the achievement of high results in such areas as production of GDP per capita, average life expectancy, level of medical care and education of citizens, etc., is critically dependent;
- innovative development of industries that are not lagging behind the production sphere, directly entering both the social sphere, and other industries related to it, which in general form the living environment of a modern human;
- improving the system of economic and institutional relations in the economy and society as a whole, on the one hand, enhancing the social content of this system itself, and on the other hand, providing a positive influence on the content of economic growth by the feedback principle;
- the state and further development of consumer demand by the population, testifying, in particular, to the dynamics of needs for social services;
- the current state and dynamics of development of the totality of elements of social infrastructure, which, on the one hand, can be interpreted as a combination of objects of education, research, health, culture, recreation and leisure, etc., on the other hand, in a broader sense, as the direct activity of all these elements, which through the solution of specific social problems make a significant contribution to improving the quality of life;
- finally, directly the dynamics of social investments, acting as an integral part of the overall investment activity in the national economy.

The last of these factors plays a particularly significant role, since the implementation of all the above tasks requires a corresponding increase in material costs in the structure of GDP, which implies a quantitative expansion of investment, including in various areas of the human environment. Such a combination of funds invested in human development and directly in his environment, we attribute to social investment. In Azerbaijan, great importance is attached to state investment as an integral part of overall investment activity. So, according to the author's calculations, in 2018, expenditures on state investments, which are part of the state budget, increased by 31.9 times compared to 2005, from 159.9 million manat to 5.1 billion manat [6]. This includes the financing of large-scale infrastructure, as well as directly social projects. In this regard, the question objectively arises of a more qualified and efficient use of such investments, which puts forward increased demands on the efficiency and quality of the economic system itself.

### 3. SOCIAL INVESTING AND INVESTMENTS IN SOCIAL SPHERE

In the study, social investments should be considered, first of all, from the position of influence on the development of the entire national economy, a human and society as a whole, more specifically - on the general increase in the level and quality of human life. In other words, social investments from the point of view of the target orientation should be interpreted broader than just a set of investments in social sphere sectors. First of all, one should include in this concept branches of national economy “related” to such branches of social sphere and separate industries, in which, the improvement of the situation, by the principle of “feedback”, directly affects the increase in the overall development of a human. For example, a complex of industries that provides the functioning of housing and communal services, as well as a part of the transport complex performing passenger transportation, can be assigned to such “related” segments of the economy that directly affect the quality of people's daily lives. Some experts suggest attributing non-production types of consumer services to such segments [2,P.352]. Further, the impact of social investments on the economy and society is not limited only to the “related” with social sphere branches of the economy, but it also directly covers the production sphere. Thus, advanced management schemes and production technologies transferred to the sphere of modern education are being implemented in the form of a qualitative increase in the level of professional training, retraining of personnel and, in general, the intellectualization of the educational process [1,P.13]. Moreover, when assessing volumes, directions, etc. of social investing it is necessary to take into account the real unity of the sectors of the social sphere and other elements of the social environment, manifested in their close interaction when having impact on a modern human. Therefore, for example, when developing and implementing economic policy or conducting a scientific analysis, the volume of social investments should not be considered as a simple arithmetic sum of investments directed to the sectors of social sphere, to "related" industries and other objects. It is necessary to immediately take into account the multilateral effect arising for the economy and society from this type of investment. The role of separate industries, whose activity to a greater extent effects the qualitative development of both the economy and society as a whole should be particularly noted out. So, in the period from 2000 to 2018, total costs on research activities in the Republic of Azerbaijan increased by 9.5 times - from 15.9 to 150.5 million manat [3, P.351]. If we take the period 2005-2018, the amount of financing of the educational sector only from the state budget of the Republic of Azerbaijan in absolute figures increased from 372.5 million manat to 1.967 billion manat, or 5.3 times. Over the same period, the amount of budget expenditures on the healthcare sector in absolute terms increased from 115.3 million manat in 2005 to 709.9 million manat in 2018, or 6.2 times [4, P.400].

### 4. THE EFFECTIVENESS OF SOCIAL INVESTING

The multilateral effect of social investment should be determined, first of all, by analyzing the immediate goals of such investment in the development of the economy and society. As such goals, we can consider achieving positive dynamics of such indicators of living standards as:

- average life expectancy;
- real monetary incomes per capita, in particular, determined by the level of wages of employees;
- the size of social payments and benefits;
- consumer price index;
- inflation rate;
- security and affordability of housing;
- accessibility of social services (education, health and community services.);
- unemployment rate.

On the implementation of social investing, a synergistic effect is formed that arises as a result of improving the quality of the entire human potential and inevitably reflects - in a positive way - on the results of all economic development. In other words, there is a “double” or “cumulative” effect of social investment. So, investments in scientific research, in achievements in the field of education, improving the health of workers, etc., subsequently are paid off many times with the influx into the production of highly educated engineering and technical contingent and highly qualified specialists in working specialties. At the same time, the qualitative improvements that are taking place, for example, in the field of organizing scientific research, also bring significant and direct material returns through the accelerated transfer of research results to the sphere of material production. Another feature may contribute to the disclosure of the essence of the issue. The animated effect that the tourism industry provides in the modern world for economic growth and social development as a whole can be fully demonstrated using the example of Azerbaijan. Thus, the direct contribution of the tourism industry to the production of GDP in Azerbaijan at present (2018) is about 4.3 percent, and the industry also provides up to 3.4 percent of total employment in the economy [5, P.19]. At the same time, it should be noted that it would be wrong to consider social investments only from the point of view of obtaining a direct economic and direct social effect (often already in the short term), but also with the obligatory consideration of the indirect social effect, that is, implying distant multiplicative changes in the social environment of society. In addition, one should take into account not only just the remote, but also the indirect social effect of the invested social investments. Such an effect occurs in cases when social investments initially cause positive changes in some “related” areas of the economy or public life, and only after a certain period of time the social sphere directly experiences the effect. For example, speaking of innovations, the introduction of which can bring significant positive changes in the quality of life of the population. It should be remembered that any innovations - whether it is about scientific discoveries, technical and technological improvements or progressive changes in management processes - are initially implemented all the same in the field of material production, in order later a product of better quality and more quantity produced on the basis of these innovations was used in the social sphere. And already here, being consumed by the population, this product provides a return in the form of improving the organization, conditions and quality of labor in the same branches of material production. And that is what will be the realization of indirect social effect. In general, an indicator of the high quality work of specific sectors of the human social environment and individual social objects is not the volume of funds invested in them, but the efficiency of using the investments already made. The same applies to social investments themselves: their effectiveness should be measured as much as possible not in quantitative terms, but in achieving certain qualitative goals. In the processes of social investing, the participation of government is extremely large, which:

- firstly, gives a signal to private business about the profitability and prospects of such investing,
- secondly, directly contributes to an additional acceleration of economic growth.

In today's conditions, the important role of the government as a kind of dispatcher should be added to this, determining the directions for the most efficient use of funds intended for social investment.

## **5. SOCIALLY SIGNIFICANT GOALS AND PROFITABILITY OF SOCIAL INVESTMENTS**

In the modern world, the highest social criterion for the quality of ensured economic growth should be considered the evolution of society and the economy in such positions as the dynamics of welfare, level and quality of life of the population.



Social investing serves the realization of such purposes, and its special social significance is defined by this. This most directly affects the state of the general quality of life of the population of a particular country. For example, according to our calculations, for the period from 2005 to 2018 inclusive, real incomes of the population of Azerbaijan increased 2.6 times [6]. This is significant confirmation of the fact that here, thanks to successes of the general socio-economic policy pursued in recent years, the level and quality of life as a whole have improved. An important role in achieving such results the processes of social investing, developing in the national economy of the country contribute a lot. Taking into account special socially significant goals of social investments, it should be beat in mind that these investments may not bring direct financial returns in the form of net profit, but this does not mean that there is no possibility of obtaining income from this type of investment in general. Being social such kind of investments, therefore, are by no means opposed to the possibility of generating income from such an investment. Social investing is quite compatible with providing acceptable returns for private investors, and the creation of the necessary conditions for this is an objective basis for activating private business representatives in social investing. In other words, the owners and shareholders of private companies may well proceed from calculations - and moreover justified calculations - that their investments in the social sphere can provide not only the actual public social effect, but also a concrete material return to investors. Therefore, we can talk about the dual role played by social investment in the national economy, since it is distinguished by the multi-vector character of the impact on the entire environment of the population, and the possibility of achieving positive financial results for investors directly involved in this investing. To provide the marked dual role of this type of investment in the national economy, first of all, an effective mechanism for investing in the social sphere is called upon. In the structure of such a mechanism, it is necessary to highlight the special role of the government as a guarantor of sustainable social investing and its economic policy. Depending on the economic policy of the government, it is possible to provide not only the public social effect of investments in the social sphere, but also concrete material returns to investors. In this regard, the most important administrative and institutional resource for promoting investment development within the national economy should be considered the government policy in the field of investment support. It, in particular, aims to create a favorable investment climate, and also, accordingly, involves all kinds of stimulation of attraction to the country both domestic and foreign private capital. This applies both to investing processes in general and directly to social investments.

## **6. FAVORABLE CONDITIONS FOR SOCIAL INVESTING**

The investment attractiveness of any particular government for any potential investors, both domestic and foreign, is determined by the investment climate emerging in this particular country, and the investment climate, in turn, is part of the general business climate. The importance of the investment climate is objectively determined by the fact that in the context of the development of globalization processes in the modern world, in order to attract investment in any national economy, it is necessary to create competitive conditions in comparison with other countries that would make a particular economy attractive to investors. Moreover, it is especially important to emphasize that such conditions relate to the problem of attracting both domestic and foreign capital. Therefore, it can be stated, that the totality of such conditions is what the investment climate of a particular country represents. It should be remembered that the investment climate is part of the overall business climate. Therefore, always when it comes to measures that can be proposed to improve it, it should be remembered that they, not limited only to economic relations, encompass social relations emerging in the given area. Thus, we can state that the most important condition for sustainable and expanding investment activity - including social investing- is the formation and subsequent maintenance

of a favorable business climate within the national economy, the investment climate itself being an integral part of this national economy. A system of measures aimed at creating and maintaining such a climate is provided by the regulatory and supporting role of the government both at the national level and at the level of regions and municipalities. So, to improve the possibilities of social investing and enhance the participation of private business in it, it is necessary to create more attractive conditions for potential investors. Such conditions, in addition to creating an overall favorable business climate within the entire national economy, suggest a system of “targeted” tax, financial, administrative, legal and other benefits at the national, regional and local levels of government in the implementation of individual socially significant projects.

## **7. OPPORTUNITIES FOR IMPROVING SOCIAL INVESTING IN THE AZERBAIJANI REPUBLIC**

In general, there are noticeable improvements in the general business climate in Azerbaijan. Over the recent years, the inflow of foreign capital into the Azerbaijani economy in terms of volumes at a minimum does not concede domestic investments, which shows a fairly positive international investment prestige of Azerbaijan. At the same time, for further expansion of investment attracting, additional proposals on industries and specific projects attractive for investors may be effective, as well as benefits, as mentioned above, at the national, regional and local levels. Finally, the further development of social investing, aimed at achieving already new quality of activity in the sectors of social sphere and “related” areas of the social environment, requires the creation of more attractive conditions for potential investors. In countries such as Azerbaijan, it is necessary and fundamentally possible to increase participation in social investing not only of private entrepreneurship in general, but also of small and medium-sized business entities. Such opportunities can be provided by applying not only the general system of tax incentives for business, but also special flexible forms of banking and credit support for expanding financial capabilities of small entrepreneurs. Moreover, the preservation of government participation in social investing serves as a guarantor of reliability and an indicator of the social significance of various projects for private investors. On the other hand, in the conditions of objective constraints on expanding budget financing, to increase the volume of social investment, it is necessary to actively encourage private business to participate in it, including expansion of paid services in such sectors as education and healthcare. However, the researcher considers it necessary to note that with the possible expansion of paid services in the social sectors, it is imperative that two fundamental conditions be met: first, not only the preservation, but also the expansion of the field of social guarantees from the government; secondly, constant socio-economic monitoring of the ratio of free and paid services to the population in the social sectors in order to prevent distortion in favor of the latter, which would be contrary to the principles of the social government. The banking sector is called upon to play an important role in stimulating private business to make social investments, which requires a system of measures at the national level, including a number of legislative and regulatory acts.

## **8. CONCLUSION**

The significance of social investing as an integral part of the overall investment activity in the national economy in modern society is increasing due to the increase in the human factor. Social investing should be considered from the perspective of influencing the overall increase in the level and quality of human life and be interpreted more broadly than just the totality of investments in the sectors of social sphere. It should include such related with social sphere sectors of national economy as complex of housing and communal services, the part of the transport complex performing passenger transportation, as well as separate industries, the situation in which directly affects the increase in overall development of a human.

Social investments may not bring direct financial returns in the form of net profit, however it does not mean that there is no possibility of obtaining income from this type of investment in general. Social investment is quite compatible with providing acceptable returns for private investors under appropriate conditions. In the specific conditions of modern Azerbaijan, it is fundamentally possible to increase participation in social investing not only of private entrepreneurship in general, but also of small and medium-sized business entities. Such opportunities can be provided by applying not only the general system of tax incentives for business, but also special flexible forms of banking and credit support for expanding the financial capabilities of small entrepreneurship.

**LITERATURE:**

1. Bodrunov S.D. Government and revolution. – The economic revival of Russia. – 2019. – No. 1 (59) – P.13
2. Russian socio-economic system: realities and development vectors. / Res. edit. R.S. Greenberg and P.V.Savchenko. – M.: INFRA-M. – 2014. – P.352
3. Education, science and culture in Azerbaijan. – The State Statistical Committee of the Republic of Azerbaijan. – Baku. – 2019. – P. 351
4. Statistical Yearbook of Azerbaijan. 2019. – The State Statistical Committee of the Republic of Azerbaijan. – Baku. – 2019 – P. 400
5. Tourism in Azerbaijan. - The State Statistical Committee of the Republic of Azerbaijan. – Baku. – 2019. – P. 19
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## ISSUES OF EXTENSION OF TRADING RELATIONS BETWEEN AZERBAIJAN AND THE EUROPEAN UNION

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### **ABSTRACT**

*The issues of extension of trading relations between Azerbaijan and the EU were analysed in this article. After the collapse of the former USSR Azerbaijan as an independent country gave priority to the strategy of building relations with different regions and leading countries of the world on the basis of national interests. Collaboration with the EU is of special importance for our country, thus this is a major export market for such important national resources as oil and gas. The relations with the EU were quite intensified and although they were built in 1991, they mainly started in 1996. Starting with 2009 the collaboration in the framework of 'Eastern Partnership' Program as well as trading relations was extended. The share of the EU in the trade turnover of Azerbaijan is 50 per cent. More than 1500 companies representing different countries of the EU function in the country. Relations with the European Union were one of the serious factors in the implementation of transnational energy and transport projects. Azerbaijan became one of the key energy security partners of the Europe. It strengthens as a major investor and trading partner of the country. On July 11, 2019 in Brussel Azerbaijan and the EU agreed on 'Partnership Priorities', and at present the relations within the framework of this document, including trading relations have entered a new stage of development. Azerbaijan has active trade and economic relations with many countries of the EU such as Italy, Germany and France. Long years Italy leads the export of Azerbaijan, and has close ties with our country in realization of oil-and-gas projects. Business forums are regularly held with the countries of the Union and the diversification measures on trading relations are taken.*

**Keywords:** *Azerbaijan, economic cooperation, the European Union, trade turnover, trading relations*

### **1. INTRODUCTION**

After the collapse of the former USSR Azerbaijan had to form its own independent state attributes, and especially its conceptual approach in merchandize trade in the foreign economic relations sector. These issues took place in quite difficult conditions. In the early 1990's during the formation of market economy mechanisms in the country the pre-existing economic entities had to adapt to the new conditions, the transition from planned economy to the market economy mechanisms should be provided. The other issue was formation and development of the independent state within the framework of national interests of the foreign trade conception. So far at that time Azerbaijan passed the law about protection of foreign investments for more active attraction of foreign investors to the country and enforcement of foreign economic ties. Thus, with the aim of foreign investments protection and regulation of capital flow processes the state law about 'Protection of Foreign Investment' was passed on January 15, 1992 and 'Investment Activities' on January 13, 1995 (Aliyev Sh. T, 2015). On September 20, 1994 in connection with signing of 'the contract of the century' the strengthening of macroeconomic stability and increase of production and export to world markets of the oil which is the main natural resource became to be possible in the country. As the result very soon Azerbaijan became the leading dynamically developing country of the region and was the initiator of major energy and transport projects and a major financial donor. In 1995-2003 the main phase of economic reforms in Azerbaijan was completed, and also important steps were taken to increase

the export potential of the economy of the country. During last 10-15 years stabilization of oil and gas export in the country made the rapid development of relations with many regions and powerful countries of the world possible (Aliyev Sh. T, 2018). From this point of view, the relations with powerful world economic centers draw attention, and relations with the EU was not an exclusion. The features of trading relations between the EU and the post-Soviet republics draw more attention mainly in terms of energy resources (Peternelj B., Kurecic P., Klopotan I., 2019). Also the relations between Azerbaijan and the EU were formed mainly on the basis of oil and gas factors or rather energy security. In the coming years our country will further increase its potential to become one of the important energy partners of the EU. Thus transportation of natural gas to Europe will significantly strengthen the trading relations, and will pave the way for expanding trade in other areas. The remarkable thing is that relations between Azerbaijan and Europe have a 102-year history, since the establishment of the Azerbaijan Democratic Republic on May 28, 1918, one of the main directions of its activity has been related to the renewal and integration into Europe. (Azerbaijan-European relations - 101-year-old cooperation, 2019). However, the formation of the USSR and the occupation of the independent Azerbaijan state by the Russian Bolsheviks interrupted these processes. As we have mentioned before these issues became possible only after restoration of independence by Azerbaijan starting with October 18, 1991. The relations between Azerbaijan and the EU began to be formed at that period, and only in 1996 the 'Partnership and Cooperation Agreement' was signed and commenced in 1999. The agreement, which envisages cooperation in a number of areas, emphasizes the trading relations. To strengthen this relations the delegation of our country under the EU has been functioning since 2000, and in 2003 it was announced to be EU special agency on South Caucasus. In the following year the relations intensified more and became an active participant of many programmes and agencies of Azerbaijan-the EU. 'Partnership priorities' cover 2018-2020 and reflect its equal, reciprocal nature. This document gave a new impetus to the EU-Azerbaijan bilateral agenda. Today the EU is the main trading partner of Azerbaijan and its share in the total trade turnover is 50 percent. EU countries are prevalent among the investors to economy of Azerbaijan (Bakhshaliyev R., 2018).

## **2. LITERATURE REVIEW**

More effective organization of trading relations between Azerbaijan and the EU, implementation of maximum productive mechanisms to improve the cooperation forms, the issues of long-term modeling of the trading relations were given in scientific works and analyses of various researchers. Alongside with this the attention was drawn to the scientific works of the researches who conducted the analysis of problems reviewed in the context of the modern challenges. The problems of diversification and efficiency upgrading of trading relations between Azerbaijan and the EU were reviewed in the works of certain researchers on the problems of the subject, the advice were given, ideas were put forward. The current situation of the trading relations between Azerbaijan and the EU, objective realities, potential and unused resources, factors determining the adoption of effective measures in this regard are reviewed in the works of a group of researches such as Carrion, C.J., Orujova, L. (2016), Gomulka K. (2018), Peternelj, B., Kurecic, P., Klopotan I. (2019). From the approaches and researches of these authors, it can be concluded that the economic cooperation format and trading relations between Azerbaijan and the EU should be renewed and improved in accordance of global tendencies and modern challenges. Alongside with the export of oil and gas raw materials the other competitive goods and products should be introduced to EU market, and necessary measures should be taken. It should be taken into consideration that agreements between Azerbaijan and the EU on the encourage and stimulation of investment in exchange for a favorable environment should be appropriate to the existent potential of intensity and structure of the trading relations.

That is Azerbaijani brands and non-oil products should be given a wide place in the structure of trading relations. In the scientific research of N.Arabov the role of Baku port in the more active and rapid integration of Azerbaijan into the world economy, especially in increasing the trading relations between EU countries and enhancement of the structure was revealed and validated (Arabov N., 2019). As the infrastructure of International Sea Trade Port created at Baku Port and Alat strengthens, additional opportunities are created for intensification of the trading relations with many countries of the world including the EU countries. The researchers Aliyev E.V. and Aliyev Sh.T. drew more attention to the issues of disclosure of export potential of Azerbaijan, indication of reserves, strengthening of this potential for account of non-oil sector products (Aliyev E.V., 2015 and Aliyev Sh.T., 2017). Among the important approaches in these matters creation of competitive and export-oriented production infrastructure, implementation of innovation functions, and increasing the production of goods and products that meet the requirements of EU market were considered to be more important. With this aim creation of high-technologies based enterprises, mastering the features of EU market and implementation of international experience with the aid of in-depth study should be provided. The researcher Bakhshaliyev R. managed to prove with scientific arguments that Azerbaijan is a major investor and trading partner of the EU and announced that in the near term new opportunities would be opened up for development of trading perspectives (Bakhshaliyev R., 2018). In the scientific work of the other researcher Gulaliyev M.G. the role of foreign trade and its influence on the national economics and macroeconomic stability in the country was investigated, and again the focus is on export increase and expanding of the trading relations with EU countries (Gulaliyev M.G., 2016). Professor Hajiye F.Sh. conducted the complex analysis of the export potential of Azerbaijan and determined its development perspectives. The authors consider that – ‘The organizations manufacturing the export-oriented products should be stimulated, interstate chambers of commerce institutions should be expanded, it is necessary to open the representations of the export potential organizations abroad and to reach the expansion of their activities’ (Hajiev, F.Sh., 2018). In the researches by Ibrahimov A. more concrete definition of economic relations with the EU and importance of concluding a long-term agreement was highlighted. In these relations, it is said that there is a great potential for intensifying of the trading relations through the efficient use of energy and transport projects (Ibrahimov, A., 2020). Professors Kerimli I.A. and Bayramov I.R. presented arguments for modeling import-export operations in Azerbaijan, that is to say providing a special approach to EU market - the market of goods and products with strong potential (Kerimli, I.A., Bayramov, I.R., 2017). S.Mammadov drew attentions to the fact that among EU countries Italy is the key trading partner of Azerbaijan and strengthens this status. The author considers that long-term sustainability of the trading relations with such developed country as Italy can provide the impetus for export of the other goods and projects to EU market as well as the oil and gas products (Mammadov, S., 2020). Professors Shekeraliyev A., Aliyev Sh. And Shekeraliyev G. Substantiated the great importance of the EU in the acceleration of Azerbaijan economy. As to the author in the coming years the trading relations between Azerbaijan and the EU will enter a more intensive phase, and the structure of this relations will continue to expand, and for this it is necessary to form and implement the activity concept expressing the modern challenges of export potential increase (Shekeraliyev A., Shekeraliyev G., 2016; Aliyev Sh. T., 2018). Alongside with all these, it is necessary to expand the trading relations between Azerbaijan and the EU, complexly and systematically investigate the existing problems, and determine the ways of optimal solution of these problems.

### **3. RESEARCH METHOD**

The methods, approaches and tools existing in the economic science, including comparative analysis, synthesis, systematization, generalization, diagrams, histograms and graphs were used

in preparation of the article. The ideas and considerations of the world economists and researchers are reviewed, the author's attitude to the problems covered in the article were formulated and summarized. The priority was given especially to relations between Azerbaijan and the EU, first of all the foreign trade relations, formation of the modern thinking on efficiency of trading relations, disclosure of problems. From this point of view the author using different economic methods considered it important to express his opinion on the stated issue. As to the author the expansion of trading relations between Azerbaijan and the EU should be considered more creatively and effective in the context of modern global challenges. Expressed differently alongside with the oil and gas raw materials the serious attention should be paid to formation of the other national brands, production of competitive industrial and agricultural products meeting EU standards should be seriously considered.

#### **4. RESULTS AND DISCUSSION**

Deepening of economic reforms came to the fore as necessity in the context of diversification of the economy in Azerbaijan and decrease of its dependence on oil, including increase of the export potential, diversification of trading relations issues. Thus, the systematic works are conducted on managing such complex tasks as improvement and renewal in appropriate manner in the situation formed from the global influence of the economic development processes in our country in recent years. The structure of economics is being renewed and improved, at the same time in the world experience the serious attention is paid first of all to the issues of implementation of the mechanisms drawing attention with their efficiency in EU countries. In that context conceptual approaches and strategic goals are mainly given in strategic roadmaps. One of the highlights in the strategic documents is related to development of the trade, and all these were reflected in the 'Strategic Roadmap for the development of logistics and trade in the Republic of Azerbaijan' approved by the Decree of the President of Azerbaijan dated after December 6, 2016 (Strategic Roadmap for development of logistics and trade in Azerbaijan, 2016). The diversification perspectives of the trade will be reviewed below later, but let us mention shortly that the EU is of strategic importance for Azerbaijan as one of the largest markets in the world. Thus, even if the relations between Azerbaijan and the EU had entered an intensive phase, there is still necessity to do take many steps in the usage of current potential of the modern period here. It is always questionable whether Azerbaijan is suitable for the European market in terms of products other than oil and gas. There is necessity to form and develop the conceptual approaches to these issues. Some opposers can say that no one in Europe needs the other products except oil and gas from Azerbaijan and if we approach considering this factor the perspectives of trading relations expansion is poor. However, it should be taken into account that even during the Soviet Union period Azerbaijan exported many non-oil products to Europe, including chemical products, steel pipes, conditioners, agriculture goods. The relations with East Europe countries were quite intensive, and Azerbaijan currently still has good relations with a group of these countries (Aliyev Sh.T., Sazmani N.E. (2017). For example Azerbaijan has quite close ties with Hungary, Bulgaria, Czech Republic, Poland, Romania, Balkan and Baltic countries. Despite all this we consider important to review, analyse and evaluate the trading relations with EU countries on the basis of modern objectivities in connection with the globalization of the world economy and appearance of new challenges. The remarkable thing is that from the point of view of strengthening the trading relations with the EU, in recent decades Azerbaijan makes an attempt of active use of the East-West transport corridor, and the cargo turnover of this corridor is approximately 150 million tonnes, but the share of Azerbaijan in the total cargo turnover of this trade traffic is small. The territory of Azerbaijan along the East-West corridor is the shortest route in terms of distance from Central Asia to the Black Sea region. The availability of the double-track railway connection between Baku and Tbilisi, the ferry line to carry the railway trains between Central Asia and Azerbaijan,

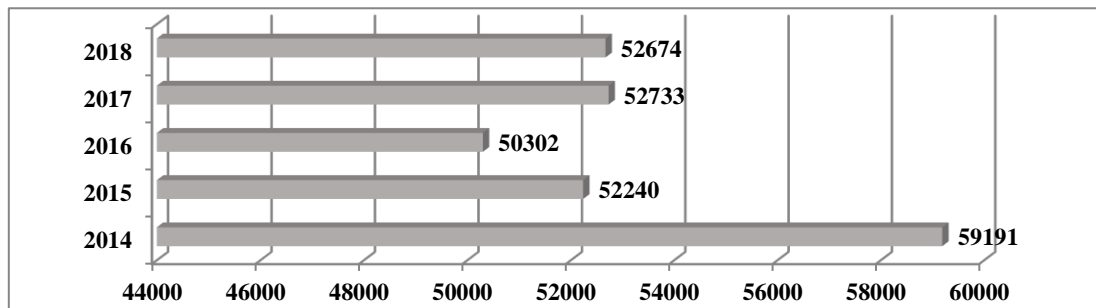
and pipelines creates many advantages for Azerbaijan to be a key participant in this route. Location of Azerbaijan may allow it to gain an advantage on the new Great Silk Way opening the trade corridor for Western China which has no access to the sea and is expected to grow strongly in the coming years, by taking more advantage of the trade between China and Europe along the East-West corridor. The remarkable thing is that within the framework of Azerbaijan TRASEKA project from the point of view of its place on the trade traffic between China and Europe, liquid cargo transported by tank cars along the East-West corridor composes 66.4 per cent of the total volume of the freight between Middle Asia and Black Sea region, dry goods composes 19,2 per cent, and container freight composes 14,4 per cent (Strategic Roadmap for development of logistics and trade in Azerbaijan, 2016). Alongside with this, favorable environment was formed for the further intensification and operationalization of the relations on certain aspects of air services between Azerbaijan and EU countries through the Agreement signed on July 7, 2009 (Agreement on the certain aspects of Air Services between the Government of the Republic of Azerbaijan and the European Union, 2010).

#### **4.1. Strategic aspects of the trading relations between Azerbaijan and the EU**

The relations between Azerbaijan and the EU need to be diversified and improved at a significant level from the point of view of the trade operations. The benefits that Azerbaijan can get from the EU first of all should be related to the high technology products and innovations, that is our country should actively import new technologies and innovations from the EU, and this therefore can give opportunity for modernization of Azerbaijan economy and strengthening of its competitiveness. In the period of active cooperation the EU allocated funds in amount of 600 million Euro to Azerbaijan for realization of different projects, and the experience of Europe played a huge role in deepening of the economic reforms (Azerbaijan and the EU: 25 years of cooperation and future outlook, 2016). From the other hand there were taken measures for the expansion of the trading relations and increase of their volume. Almost every year the President of Azerbaijan pays regular visits to the EU, business meetings are held, agreements are signed and business forums are held. The amount of investment allocated to the economics of Azerbaijan by the EU is approximately 16 billion USD, the parties are especially interested in TANAP and TAP projects (Azerbaijan-EU relations were discussed, 2018). On June 13, 2019 the 5th Azerbaijan - the EU business forum was held in Baku, and more than thousand participants took part in this event. The main target was increase of the trading relations efficiency and its volume, and determination of the growth rate. Azerbaijan is the main trade partner of the EU in the South Caucasus region, and the share of Azerbaijan in the total trade volume of the region is %78. The volume of investment to the economics of Azerbaijan by the different EU countries is 34 billion US Dollars. It is interesting fact that Azerbaijan is one of the few developing countries in the world that acts as a financial donor, and was able to manage the financial resources necessary for the international energy projects, as well as transport projects which it had initiated. Particularly for account of these projects the total volume of the investment to Azerbaijan by the EU is approximately 15 billion USD (The Azerbaijan – European Union business forum was conducted, 2019). Alongside with this from the point of view of transitivity Azerbaijan has a huge potential as the international transport-logistics center which is of strategic importance between Europe and Asia. Freight trains departing from Baku already goes to Europe. International Sea Trade Port realized at the Caspian Sea coast plays a important role in raising trade relations to a new level. The process of establishing Free Trade Zone on the basis of this port is underway, and in the near term the formation of a strong transport and logistics hub that will further intensify the trading relations between Azerbaijan and the EU will be completed. Picture 1 shows the dynamics of the total volume of the cargo transportation on the territory of Azerbaijan in the Europe – Caucasus – Asia transport corridor during 2014-2018, and as we can see from this, the total volume of the cargo transportation for



the period of analysis conduction did not increase, but decreased, thus in 2014 the volume of cargo transportation at the territory of Azerbaijan in the strategic transport corridor was 59.2 million tonnes, and in 2018 it composed 52,7 million tonnes.

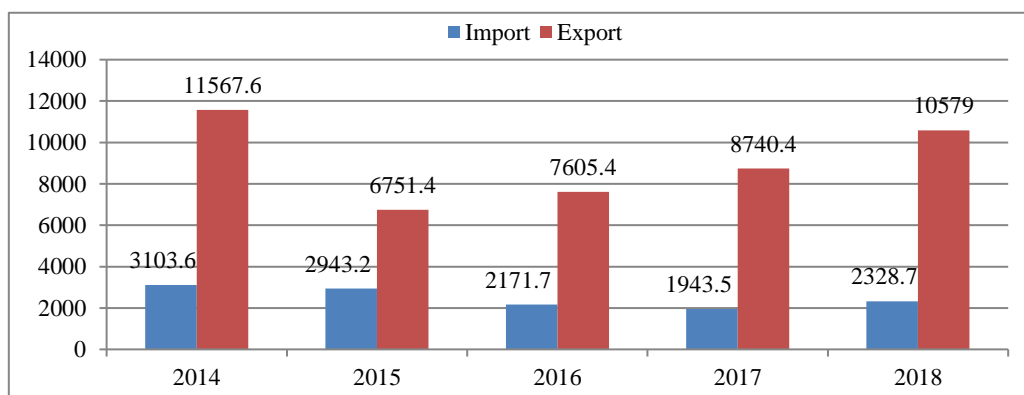


Picture 1: The dynamics of the total volume of the cargo transportation on the territory of Azerbaijan in the Europe – Caucasus – Asia transport corridor, thousand tonnes, 2014-2018  
Source: Author, on the basis of ARSSC information <https://www.stat.gov.az/>

At the same time EU market is of strategic importance in the increase and diversification of the export potential in our country. In 2015-2018 the growth trend on export potential intensified during 2015-2018, and at the end of 2018 the foreign trade turnover composed 31.8 billion USD, the amount of 20,3 billion USD of it fell to the share of export (The foreign trade of Azerbaijan, 2019).

#### 4.2. Analysis and evaluation of the trading relations between Azerbaijan and the EU

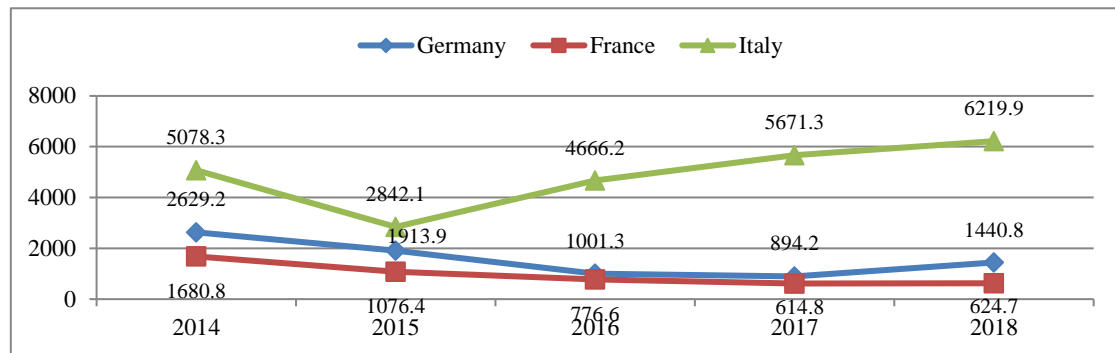
The measures on expansion of the trading relations between Azerbaijan and the EU is related as we have mentioned before mainly with the export of raw materials, more properly with oil and gas. Azerbaijan as one of the main energy security partners of the EU satisfies % 5 of its needs in oil. Besides, EU market is provided with the natural gas raw material by the South gas corridor. The EU doled out money for more than 13 thousand companies to operate in Azerbaijan and to enter European market, give incentives for expansion of the regional and international trading relations (EU - Azerbaijan relations facts and figures, 2019). In Picture 2 the dynamics of import and export between Azerbaijan and the EU in 2014-2018 was analysed and spottiness during this period drew attention. But starting with 2015 we can mention the dynamics on export increase, and the average annual volume to EU countries from Azerbaijan increased by %56.7 and composed 3.8 billion US Dollars.



Picture 2: The dynamics of import and export between Azerbaijan and the EU, mln. USD, 2014-2018-ci illər

Source: Author in accordance with ARSSC - <https://www.stat.gov.az/>

In Picture 3 the trade turnover between Azerbaijan and large and leading countries of the EU is given, and for the longest time Italy stands as the partner No 1 in the export of Azerbaijan.



Picture 3: The foreign trade turnover between Azerbaijan and Germany, France and Italy, mln. US Dollars, 2014-2018

Source: Author on the basis of ARSSC materials - <https://www.stat.gov.az/>

Azerbaijan pays special attention to the issues in the context of demand in machinery and equipment of the country in its trading relations, and for this reason the machinery and transport equipment is an integral part of the import with the share of 30.4%. It has objective nature, thus our country does not have large enterprises on production of machinery and transport equipment and does not specialize in these sectors.

#### 4.3. Development potential and perspectives of the trading relations between Azerbaijan and the EU

As global changes and economic transformations deepen, more strategic tasks and priorities appear in increasing of activity of the economics of Azerbaijan in the world integration processes and maximum diversification of the trading relations. More in-depth study and evaluation of the development potential of the trading relations with the EU is important because of location of Azerbaijan on the Great Silk Way and because of its importance as one of the major international hubs. On September 7-8, 1998 the international conference on restoration of the historic Silk Way took place in Baku with participation of 9 countries, 13 international organizations and 32 state delegations, and at the end 'Basic Multilateral Agreement about international transport on development of Europe – Caucasus – Asia corridor' was signed, at the same time Baku Declaration was accepted (Azerbaijan - transport corridor of Eurasia, 2017). Azerbaijan perceived as an important transport corridor between EU countries and Asia, and plays an important role for the large transport and logistics companies, and transnational companies operating in the most countries of the world. The freight traffic activity on the Baku – Tbilisi – Kars railway is 5 million tonnes, and in perspective it will be 17 million tonnes, and the perspectives of the large numbers in the future increases the attractiveness of the transport-logistics system of Azerbaijan and significantly increases the international cooperation potential with the EU. From the other hand, there was formed the environment of diversification of the trading economic relations between our country and many world countries, freight turnover increase, more and more active involvement of business and entrepreneurship entities to the foreign trade activities for account of formation of the new transport projects and infrastructure network, and also effective use of the opportunities by the international traffic route at Baku – Tbilisi – Kars railway. For account of formation of the 'North-South' transport corridor the reduce of freight delivery time in the direction from India to Russia, and also North and West Europe will be provided, thus in present delivery of the freight by Suveysh channel takes up to 60 days, after 'North-South' transport corridor had been

put in commission this period compose 14-20 days. All these will give additional incentives to expansion of the trading relations with EU countries. In general, the additional trade volume which Azerbaijan can gain benefiting from West-East and North-East corridors, including dry and liquid cargo, container freight is 230 million tonnes, and EU is considered to be one of the main markets among them. In the near term the issue of admission of Azerbaijan to World Trade Organization can be a boon to expansion of the trading relations with EU. Azerbaijan started the processes of preparation to enter the WTO in 1997, and our country is a participant in the work of this organization like an observer. The main demand of Azerbaijan was to obtain a status equal to the status of developing countries and to ensure the acceleration of the development of the agricultural sector of our country in case of entering the WTO, and our country can join this international organization against mitigation of contradictions. Therefore these factors can open a new stage in modeling of the trading relations with the EU in accordance with modern requirements.

## 5. CONCLUSION

Consequently in the coming years more attention should be paid to a group of issues, and more factors should be considered in the context of expansion problems of the trading relations between Azerbaijan and the EU, existent realities, potential and perspectives:

- At present, energy products make up a significant part of the trade turnover between Azerbaijan and the EU, and it is necessary to form and develop the production network of the other export-oriented products alongside with these resources in the future;
- Azerbaijan possessed the status of strategic energy security and trade partner for the EU, and the measures on strengthening of this status should be taken;
- There should be provided the strengthening of cooperation of the oil and gas sector of Azerbaijan as well as the other economic sectors with EU transnational companies especially in developing of high-tech industries and agriculture sector, in bringing productive technologies and management forms to this sector;
- The economic and structure reforms which had started in our country in recent years should be more deepened with the aim of diversification of the trade turnover between Azerbaijan and the EU, and the competitiveness of the economic sector should be increased;
- It would be cost-effective to establish a "Trade delegation of Azerbaijan in the EU" in Germany or Italy with the aim of strengthening of coordination of the trading relations between Azerbaijan and the EU, conduction of more effective business forums, trade fairs, conferences, building concrete relationships.

## LITERATURE:

1. Agreement on the certain aspects of Air Services between the Government of the Republic of Azerbaijan and the European Union (2010). Baku city, № 1065-IIIG.
2. Aliyev E.V. (2015). Analysis of the current state of export of Azerbaijan to the EU // Azerbaijan Journal of Economics and Social Studies/ Number 2, Volume 1, 2015.
3. Aliyev Sh.T. (2018). Economics of Azerbaijan. SSU, Sumgait. – 376 p.
4. Aliyev Sh.T. (2015). Foreign economic policy of Azerbaijan. Sumgait, 2015.-185 p.
5. Aliyev Sh.T. (2017). Ways to increase export potential in the implementation of strategic roadmap in Azerbaijan // Audit, № 1. - p. 60-66.
6. Aliyev Sh.T., Sazmani N.E. (2017). The problems of diversification of Azerbaijan's export potential in modern condition // Journal «International scientific review». Boston, USA, №02-. -P.41-45.
7. Arabov N. (2019). Azerbaijan Integration. Significance and Role of Baku Port / Vishka. – № 28. – p. 6. - [http://www.elibrary.az/docs/qazet/qzt2019\\_3565.pdf](http://www.elibrary.az/docs/qazet/qzt2019_3565.pdf).

8. Azerbaijan presumes on soonest partnership agreement execution with EU (2020) - <https://rus.postimees.ee/6878521/azerbaydzhan-rasschityvaet-na-skoroe-podpisanie-s-es-novogo-soglasheniya-o-partnerstve>.
9. Azerbaijan-EU relations were discussed (2018) -<https://www.economy.gov.az/article/azerbaycan-avropa-i-ttifaqi-elaqeleri-muzakire-edilib/29242#>.
10. Azerbaijan-European relations - 101-year-old cooperation (2019). - <https://report.az/en/analytics/azerbaijan-european-relations-101-year-old-cooperation/> –
11. Azerbaijan-Italy relations at new development level (2020). -<https://report.az/analitika/azerbaycan-i-taliya-munasibetleri-yeni-inkisaf-merhelesinde/>.
12. Azerbaijan-Italy relations reached the strategic level (2020). -<http://www.azerbaijan-news.az/view-183962/azerbaycan-italiya-munasibetleri-strateji-seviyyeye-yukselib>.
13. Azerbaijan - transport corridor of Eurasia (2017) - <http://diaspor.gov.az/azerbaijan/11.php>.
14. Baxshaliyev R. (2018). European Union main investor and trading partner of Azerbaijan / Azerbaijan. – 30 november. – № 270. P.1-2.
15. Carrion, C.J. (2016). Why Azerbaijan needs a Strategic Reform of its foreign policy towards the European Union? – CESD – 32 p. - <http://cesd.az/new/wp-content/uploads/2016/04/CESD-Paper-Why-Azerbaijan-needs-a-Strategic-Reform-of-its-foreign-policy-towards-the-European-Union.pdf>
16. Carrion, C.J., Orujova, L. (2016). Feasibility study on the Deep and Comprehensive Free Trade Area between Azerbaijan and the European Union. // Center for Economic & Social Development. CESD Press, Baku, Azerbaijan, September – 36 p. - [http://cesd.az/new/wp-content/uploads/2016/09/CESD\\_DCFTA\\_Paper.pdf](http://cesd.az/new/wp-content/uploads/2016/09/CESD_DCFTA_Paper.pdf).
17. Conducted Azerbaijan – France business forum. (2019). <https://www.economy.gov.az/article/azerbaycan-fransa-biznes-forumu-kechirilib/30298#>.
18. Contemporary Azerbaijan in Social and Political Dimension. (2016), Edited by PiotrBajor. Kraków. – <http://scfwca.gov.az/store/media/Contemporary%20Azerbaijan%20e-book.pdf> . 126 p.
19. Economic cooperation. Commercial turnover between Azerbaijan and Germany (2019). <http://berlin.mfa.gov.az/content/52>.
20. EU - Azerbaijan relations facts and figures (2019) - <https://www.euneighbours.eu/sites/default/files/publications/2019-05/EAP%20FACTSHEET%20AZERBAIJAN%20RU.pdf>.
21. Getting out from “In-between” (2018). Contributing Authors: Samuel Charap, James Dobbins, Andrei Zagorski, ReinhardKrumm, Esther Ademmer, YaroslavLissovolik, OleksandrChalyi, YuliaNikitina – Published by the RAND Corporation, Santa Monica, Calif. RAND Corporation, 73 p. - [https://www.rand.org/content/dam/rand/pubs/conf\\_proceedings/CF300/CF382/RAND\\_CF382.pdf](https://www.rand.org/content/dam/rand/pubs/conf_proceedings/CF300/CF382/RAND_CF382.pdf)
22. Gomulka K. (2018). Economic contacts between Azerbaijan and EU // Historical and social- educative idea. V.10, № 6-2, p.53-61.
23. Gulaliyev M.G. (2016). The degree of government intervention to the foreign trade and its macroeconomic effects // “Scientific works”, № 1. - p. 19-28.
24. Hajiev, F.Sh. (2018). Analysis of export potential and development perspectives in the Republic of Azerbaijan // “Statistics News”, № 1, Volume 1, p. 28-37.
25. Ibrahimov, A. (2020). Azerbaijan hold back on signing agreement with EU-<https://russiancouncil.ru/blogs/alimusa-ibragimov/azerbaydzhan-ne-toropitsya-podpisyvat-soglashenie-s-es/>.
26. Kerimli, I.A., Bayramov, I.R. (2017). Improvement of currency control over import-export operations of Azerbaijan // Tax journal.1(133), P.61-76.

27. Mammadov, S. (2020). New stage in Azerbaijan-Italy relations starts: Successful visit of President Ilham Aliyev to Rome will have a positive impact on bilateral relations // National newspaper. - №41. - p.3,5. - [http://files.preslib.az/projects/azdiplomacy/a5\\_2.pdf](http://files.preslib.az/projects/azdiplomacy/a5_2.pdf)
28. Najafova, U. (2017). European Union (EU). Relations with Azerbaijan. - <http://lawyers.az/post/avropa-birliyi-ittifaqi-azerbaycanla-elaqeler>.
29. Peternelj, B., Kurecic, P., Klopotan I. (2019). The Prospects Of Defence Cooperation Between The European Union, The Russian Federation And The People's Republic Of China / 37th International Scientific Conference on Economic and Social Development – "Socio Economic Problems of Sustainable Development" - Baku, P. 118-125.
30. Public hearings on the agreement between Azerbaijan and European Union were held Politics (2019). - <http://www.contact.az/ext/news/2019/4/free/politics%20news/az/80312.htm>.
31. Regional economic aspects of agreement between Azerbaijan and European Union (2019). - <https://modern.az/az/news/201259>.
32. Shakaraliyev A., Shakaraliyev G. (2016). Economics of Azerbaijan: realities and perspectives. Baku, "Turkhan", NPB.– 536 p.
33. Sterjneva M.V., Rudenkova D.E. (2016). EU: foreign policy architecture – Moscow: IMEMO RAN. – 135 p.
34. Strategic Roadmap for development of logistics and trade in Azerbaijan (2016). Baku, 67 p.
35. The 5th meeting of the Intergovernmental Commission on Economic Cooperation between Azerbaijan and Italy was held (2020). - <http://www.minenergy.gov.az/index.php/az/news-archive/626-15-01-20>.
36. The Azerbaijan – European Union business forum was conducted (2019). [https://azertag.az/xeber/Azerbaycan\\_Avropa\\_Ittifaqi\\_biznes\\_forumu\\_kechirilib\\_VIDEO-1294331](https://azertag.az/xeber/Azerbaycan_Avropa_Ittifaqi_biznes_forumu_kechirilib_VIDEO-1294331).
37. The foreign trade of Azerbaijan. (2019). Statistical yearbook.Baku-216 p.

## THE ECONOMIC PREREQUISITES AND PROSPECTS OF DEVELOPMENT ECONOMICS IN AZERBAIJAN

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### **ABSTRACT**

*In the modern world, prerequisites for economic development are formed in a number of leading countries. The author, considering all this, examined the main factors affecting the transition of the Azerbaijani economy to a new economic model in the context of economic development. In recent years, a new area of economics has been the focus of development economics. The main theme of research in development economics is the study of key factors that accelerate and slow down development. There are various factors affecting development in modern times. One of the main factors of this factor is institutions. Institutions based on development economics are the rules for the "game", the participants of which are economic, political and social units. There are also different approaches to institutions. North Douglas (1990) classifies institutions according to formality to formal and informal institutions, and Daron Acemoglu (2001) classifies economic, political, and legislative institutions. At the World Economic Forum in Davos, Switzerland, January 21-24, 2020, the views on the transition to a new stage of the economy were heard. According to the World Economic Forum, the economy has already shifted from shareholder capitalism to stakeholder capitalism. In the globalized world, institutional changes are fundamental for Azerbaijan to meet the world's current economic challenges. The current state of the Azerbaijani economy makes it necessary to study the problems that stimulate economic development and slow down. In the early years of independence, Azerbaijan provided economic development by prioritizing natural resources. This development took place at the expense of rich oil resources and was due to the need for that period. But it is impossible to ensure sustainable economic growth through the use of natural resources only in the long run. Gradually Azerbaijan, as in the modern world, prefers a new model of development. In the Strategic Roadmap for the National Economic Perspectives of the Republic of Azerbaijan, adopted by the President of the Republic of Azerbaijan in 2016, this issue has been raised as a strategic goal of the state. It states: "It is an important strategic decision to ensure the future economic growth of the country through which" growth points ". There are two options for a country to actively pursue a future growth approach as a result of the narrowing of its value-added capability in the new strategic period: a. multidimensional growth approach b. productivity-effective growth approach. Integration into the global value chain, in terms of the quality and sustainability of economic growth, can be a strategic choice in transforming a cost-effectiveness-based economic growth approach. " So today Azerbaijan is on the threshold of a new model of economic growth. The article explores the factors most likely to affect this development.*

**Keywords:** *development economics, institution, growth model, effectiveness, stakeholder capitalism*

### **1. INTRODUCTION**

The key question of a traditional economy is to achieve economic growth based on the efficient allocation of limited resources. Political economy goes beyond the traditional economic sciences and, among other things, encompasses the distribution of limited productive resources by certain groups of economic and political elites now and in the future, either for their own benefit or for the benefit of their own social and institutional processes.

Development economics has an even greater scope. In addition to being concerned with the efficient allocation of existing scarce (or idle) productive resources and with their sustained growth over time, it must also deal with the economic, social, political, and institutional mechanisms, both public and private, necessary to bring about rapid (at least by historical standards) and large-scale improvements in levels of living for the peoples of Africa, Asia, Latin America, and the formerly socialist transition economies [2]. Economics is a social science. It is concerned with human beings and the social systems by which they organize their activities to satisfy basic material needs (e.g., food, shelter, clothing) and nonmaterial wants (e.g., education, knowledge, spiritual fulfillment). It is necessary to recognize from the outset that ethical or normative value premises about what is or is not desirable are central features of the economic discipline in general and of development economics in particular. The very concepts of economic development and modernization represent implicit as well as explicit value premises about desirable goals for achieving what Mahatma Gandhi once called the “realization of the human potential.” Development policies are wide-ranging, from broad macroeconomic policies such as monetary and exchange rate policies to microfinance interventions. This is perhaps one of the differences between the development economy and other sectors of the economy. Poverty reduction, economic growth and development are the result of complex interactions in all economic policies and institutions. In this sense, "development policies" really have a very broad meaning.

## **2. REVIEW OF THE LITERATURE ON DEVELOPMENT ECONOMICS**

There are different approaches to development in modern times. Growth is no longer measured only by economic growth, but by new indicators such as happiness, profitability, productive employment, freedom of choice, a sense of satisfaction, and so on. According to the development economics, the main goals of development are defined as follows:

- **Sustenance:** the ability to meet basic needs. Pradip K. Ghosh described the minimum human needs that provide life as food, shelter, health and protection [4];
- **Self-esteem:** to be a person. According to Todaro, the second universal component of a good life is self-esteem - a sense of value and self-respect, the inability of others to use you as a tool for their own ends [2];
- **Freedom from Servitude:** to be able to choose. W. Arthur Lewis stressed the relationship between economic growth and freedom from servitude when he concluded that “the advantage of economic growth is not that wealth increases happiness, but that it increases the range of human choice.” [6].

Economics is a social science. It is related to people and the social systems in which they organize their activities to meet basic material needs (e.g., food, shelter, clothing) and non-material needs (e.g., education, knowledge, spiritual fulfillment). It is necessary to recognize from the outset that ethical or normative value premises about what is or is not desirable are central features of the economic discipline in general and of development economics in particular. The very concepts of economic development and modernization represent implicit as well as explicit value premises about desirable goals for achieving what Mahatma Gandhi once called the “realization of the human potential.” The view that income and wealth are not ends in themselves but instruments for other purposes goes back at least as far as Aristotle. Amartya Sen, the 1998 Nobel laureate in economics, argues that the “capability to function” is what really matters for status as a poor or nonpoor person. As Sen puts it, “the expansion of commodity productions...are valued, ultimately, not for their own sake, but as means to human welfare and freedom.” [1]. The most common way to define the developing world is by per capita national income. Several international agencies, including the Organization for Economic Cooperation and Development (OECD) and the United Nations, offer classifications

of countries by their economic status, but the best-known system is that of the International Bank for Reconstruction and Development (IBRD), more commonly known as the World Bank. According to this classification, the countries of the world are divided into the following groups:

- Low-income countries - <\$ 1026;
- Lower-middle income countries - \$ 1,026 - \$ 3,995;
- Upper middle-income countries - \$ 3,996 - \$ 12,375;
- High-income countries > \$ 12,375 [9].

The main indicators of development in the economic literature are real per capita income, which is regulated by purchasing power; health indicators measured by life expectancy, nutrition and infant mortality; divided into educational indicators measured by literacy and school education. The most widely used measure of the comparative status of socioeconomic development is presented by the United Nations Development Programme (UNDP) in its annual series of Human Development Reports. The centerpiece of these reports, which were initiated in 1990, is the construction and refinement of its informative Human Development Index (HDI). The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions [10]. The Human Development Index (HDI) is a summary measure of the average achievement in the main dimensions of human development: a long and healthy life, a knowledgeable and decent standard of living (per capita GDP). This index covers the welfare of the population more broadly than GDP. HDI combines three dimensions of human development:

- Long and healthy life (calculated based on average life expectancy);
- Education level (calculated on the basis of adult literacy, as well as the proportion of students in primary, secondary and higher education);
- Decent standards of living (purchasing power calculated on the basis of income).

According to last year's figures, Norway, Switzerland and Australia are the highest level of human development among the 189 countries. According to the 2018 report Azerbaijan takes 80th place in this rating. If we compare 1995-2019, we can see that there was an increase in all three dimensions of this indicator. Today, the position of developing countries is significantly different from the position of developed countries in the period of modern economic growth. Todaro identifies eight important differences in the initial conditions that require a special analysis of growth prospects and the requirements of modern economic development: 1.) Physical and human resource endowments 2.) Per capita incomes and levels of GDP in relation to the rest of the world 3.) Climate 4.) Population size, distribution, and growth 5.) Historical role of international migration 6.) International trade benefits 7.) Basic scientific and technological research and development capabilities 8.) Efficacy of domestic institutions [2]. One of the most important of these factors is the institutions. Institutions based on the development economy are the rules of the "game" in which the participants are economic, political and social units. Here, too, economists have different views. North Douglas (1990) classifies institutions into formal and informal institutions according to the degree of formality, and Daron Acemoglu (2001) classifies them into economic, political, and legislative institutions by spheres. Douglas expresses his views on institutions as follows: "Formal rules include political (and judicial) rules, economic rules and contracts. Political rules broadly define the hierarchy of the polity, its basic decision structure and the explicit characteristics of agenda control. Economic rules define property rights. Contracts contain the provisions specific to a particular agreement in exchange. 'Routines', 'customs', 'traditions' and 'culture' are words we use to denote the persistence of informal constraints." [3].



The World Economic Forum's 50th Annual Meeting in Davos set the theme for the meeting as "Stakeholders for a Cohesive and Sustainable World." One of their goals will be how to help corporations to establish new processes for how to update key performance indicators to coincide with the shift to stakeholder capitalism [11]. P. Edward Freeman introduced the concept of capitalism of interested parties into the economy long time ago. According to his approach "Stakeholder capitalism is not based solely on private property, self-interest, competition, and free markets – such a view requires constant justification based on achieving good outcomes or avoiding authoritarian alternatives. Rather stakeholder capitalism is "based on freedom, rights, and the creation by consent of positive obligations." [5]. The main research object of this article is to study the necessary conditions for the development economy in Azerbaijan and possible steps to meet the economic challenges of the modern world.

### **3. BASIC CONDITIONS AND PROBLEMS OF DEVELOPMENT IN AZERBAIJAN**

Structural changes have taken place in the economy of Azerbaijan, which create favorable conditions for the realization of national interests, and favorable conditions have been created for the development of progressive sectors of the economy. International oil agreements signed in the first years of our independence played an invaluable role in the development of the country's economy as a whole, as well as a main source of investment in the development of the private sector of the economy. The oil strategy, which plays an important role in the formation of Azerbaijan's national economy, is being successfully continued. During the years of independence, our economic development has been ensured mainly through the development of the oil sector. During the years of independence, a new impetus was given to the development of the Azerbaijani oil industry by involving the world's leading oil companies in joint work with the Azerbaijani oil industry (oil contracts). The World Economic Forum shows three stages of economic development:

- Factor-driven economies are the least developed. They are dominated by subsistence agriculture and extraction businesses, with a heavy reliance on (unskilled) labor and natural resources;
- Efficiency-driven economies are increasingly competitive, with more-efficient production processes and increased product quality;
- Innovation-driven economies are the most developed. In this phase, businesses are more knowledge-intensive, and the service sector expands [12].

In the first years of independence, in accordance with international agreements, foreign investments in the oil industry of Azerbaijan were spent in the form of investments in physical capital. About \$ 250 billion invested in Azerbaijan's economy during the years of independence. A very significant part of the dollar investment was invested in physical capital. The funds accumulated in the Oil Fund were spent on investment in one or another area in accordance with the economic policy of the state. It is true that a significant part of these funds was spent on the development of the oil sector and its infrastructure in the first years of independence. These investments have played an invaluable role in bringing new oil technologies to the country, the formation of highly professional oil industry workers. The period dominated by investment in physical capital is typical for the economy based on factors that are the first stage of economic development of countries (Factor-Driven Economies). After successful oil projects, Azerbaijan began to implement international gas projects. Among them, the Southern Gas Corridor project is the most important. The Southern Gas Corridor is a giant gas pipeline project that will transport gas from the Shah Deniz 2 field to Europe. For the first time, the Southern Gas Corridor will change the energy map of the entire region by connecting gas supplies from the Caspian region to European markets.

The project consists of 4 parts:

1. Shahdeniz 2;
2. South Caucasus Pipeline (SCP);
3. 3. Trans-Anatolian Pipeline (TANAP);
4. Trans-Adriatic Pipeline (TAP).

The Southern Gas Corridor is a complex project involving various stakeholders - including 7 governments and 11 companies. At the initial stage, 6 bln. m<sup>3</sup>, 10 billion to Europe. m<sup>3</sup> of gas is planned to be transported. The pipeline system of the Southern Gas Corridor is designed in such a way that its throughput can be doubled to transport possible additional volumes of gas in the future. On May 29, 2018, the Southern Gas Corridor was inaugurated in Baku, and on June 12, 2018, the Trans-Anatolian Pipeline (TANAP), an important part of this corridor, was inaugurated in Eskishehir. On June 30, 2018, the first commercial gas was sent to Turkey via the Trans-Anatolian Pipeline (TANAP). Azerbaijani natural gas is planned to be delivered to Europe in 2020. The total cost of the Southern Gas Corridor is about \$ 40 billion. The main investor in this project is the State Oil Company of Azerbaijan (SOCAR). The foundation of the STAR Oil Refinery was laid down by Azerbaijani President Ilham Aliyev and Turkish President Recep Tayyip Erdogan on October 25, 2011. The refinery was constructed by a consortium comprising "Técnicas Reunidas" (Spain), "Saipem" (Italy), "GS Engineering & Construction Corp" (South Korea) and "Itochu" (Japan). The total cost of the project is \$6.3 billion. STAR has the first Strategic Investment Promotion Document of Turkey. The capacity of the refinery is 10 million tonnes of crude oil per year. The plant is planned to carry out processing of such oil grades as Azeri Light, Kerkuk and Urals. After starting the operation, the refinery will produce 1.6 million tonnes of naphtha, 5 million tonnes of diesel, 1.6 million tonnes of aircraft fuel, 300,000 tonnes of LPG, 700,000 tonnes of oil coke, 400,000 tonnes of mixed xylol, 160,000 tonnes of sulfur and other products. STAR will supply raw materials to the only petrochemical complex of Turkey - Petkim in which SOCAR holds the main share, meet the growing demand for diesel and aircraft fuel in the Turkish market and reduce Turkey's import by \$1.5 billion. The refinery will meet more than 25% of Turkey's demand for oil products [8]. The next stage of the oil strategy, which was more important in the early years of independence, was the collection and effective management of oil revenues from the joint development of the country's oil fields with foreign companies, directing these funds to the development of priority sectors and socially and economically important projects. For this purpose, the State Oil Fund of the Republic of Azerbaijan (SOFAZ) was established by Heydar Aliyev's Decree No. 240 dated December 29, 1999. Heydar Aliyev said, "The mission of the State Oil Fund of the Republic of Azerbaijan (SOFAZ) is to collect revenues from depleted natural resources and become a permanent source of income for present and future generations of the Azerbaijani people" [7]. According to 2019 data, SOFAZ's total assets are more than 43 billion dollar. 68.7% of these funds were invested in bond and currency market instruments, 14.1% in stocks, 5.8% in real estate and 11.4% in gold [7]. Several seminal studies prove that most of resource rich countries tend to grow slower than countries without natural resources and these economies suffer from different macroeconomic challenges which are tightly related to booming sector (Sachs and Warner, 1997; Auty, 2001; Gylfason, 2001; Gylfason and Zoega, 2002). This phenomenon became known as the "resource curse" and in this regard resource abundance seems to be a curse rather than a blessing for such types of economies. There are four main explanations of the resource curse, but the traditional approach to tackling there source curse is the Dutch Disease concept (Sturm and et al. (2009). Dutch Disease is the appreciation of a country's real exchange rate caused by the sharp rise in exports and the tendency of a booming resource sector to draw capital and labor away from a country's manufacturing and agricultural sectors, which can lead to a decline in exports of agricultural

and manufactured goods and inflate the cost of non-tradable goods (Corden, 1984; Corden and Neary, 1982). Corden and Neary (1982) present the Core model of Dutch Disease economies which assumes that there are three sectors in an economy, namely the Booming Sector (this is the sector which observe high export revenues), the lagging Sector (this is the sector which consists of non-booming tradable sector, such as agriculture and manufacturing). One of the main goals of the relevant government agencies in Azerbaijan is to reduce the threat of Dutch syndrome in the country. In 2019, GDP grew by 2.2 percent, which is a good result, especially given that the growth in the non-oil sector is 3.5 percent. Industrial production increased by 1.5 percent, but industrial production in the non-oil sector increased by 14 percent. Azerbaijan's foreign exchange reserves increased by \$ 6.4 billion and reached a record \$ 51 billion. Azerbaijan ranks first place in the CIS in terms of per capita foreign exchange reserves. The foreign trade surplus is \$ 6 billion [13]. Despite all this, it is impossible to achieve sustainable economic development based on resources in the long run. Azerbaijan faced this problem in 2014 against the backdrop of a three-fold drop in oil prices on the world market. For the first time in the last 15 years, in 2016, a decline of -3.1% was observed in GDP. In order to overcome the problems arising after the oil crisis, in 2016 the President of the Republic of Azerbaijan was adopted by the Strategic Roadmap for the National Economic Perspective of the Republic of Azerbaijan. One of the main goals of this document is to ensure the transition of Azerbaijan to a new concept of development and to ensure long-term non-oil economic development. Along with the strategic roadmap, today Azerbaijan should pay attention to the main factors studied by the development economics during the formation a new model of the growth concept. One of these factors is the creation of a competitive business environment, as mentioned above. The main factors determining the competitive business environment are low tax burden, modern infrastructure, lack of shadow economy, transparency and facilitation of the customs system, protection of free competition by the state, transparency of the arbitral tribunal, state investment support mechanism and a number of other factors. The Doing Business report prepared by the World Bank, which includes many of these indicators, is an international assessment of the business environment in the country. According to the Doing Business report for 2019, Azerbaijan ranks 34th out of 190 countries. One of the best results of Azerbaijan in this index, which combines 10 different indicators, is the indicator of starting a business, where Azerbaijan ranks ninth.

#### **4. CONCLUSION**

Along with all these positive changes, Azerbaijan faces a number of important challenges to achieve sustainable economic development. One of them is the formation of institutions that increase economic development, which is required by the development economy. The transformation of Azerbaijan's economic borders beyond its geographical borders can play an important role in shaping the country's economic development. Azerbaijan's active participation in international projects and becoming one of the investors in these projects indicates its opportunities for economic development. Azerbaijan's foreign trade relations with about 160 countries are an indicator of its reliable partnership and sustainable development. Our country is actively mobilizing new sources of economic development by creating added value in the international value chain. An oil-free model of economic development will be preferable in predicting our future development. Accelerating the development of human capital, replacing labor-intensive industries with science-intensive industries, increasing the share of innovative products in GDP, digitalization of the economy will create favorable conditions for more efficient realization of Azerbaijan's economic potential.

## LITERATURE:

1. Amartya Sen, “Development Thinking at the Beginning of the 21st Century.” In Economic and Social Development in the XXI Century. Emmerij, Luis (Ed.) Inter-American Development Bank and Johns Hopkins University Press, Washington, D.C. [Also available as LSE working paper, Copyright Amartya Sen, at <http://eprints.lse.ac.uk/6711/>]
2. *Economic development / Michael P. Todaro, New York University, Stephen C. Smith, The George Washington University. -- Twelfth Edition. 2015 Pearson page 10*
3. Institutions. Douglass C. North The Journal of Economic Perspectives, Vol. 5, No. 1. (Winter, 1991), pp. 97-112
4. Pradip K. Ghosh, ed., Third World Development: A Basic Needs Approach (Westport, Conn.: Greenwood Press, 1984
5. Stakeholder Capitalism. R. Edward Freeman Kirsten Martin Bidhan Parmar Journal of Business Ethics Springer 2007
6. W. Arthur Lewis, “Is economic growth desirable?” in The Theory of Economic Growth (London: Allen & Unwin, 1963), p. 420.
7. <https://www.oilfund.az/>
8. <https://report.az/en/energy/star-oil-refinery-inaugurated-updated/>
9. <https://blogs.worldbank.org/opendata/new-country-classifications-income-level-2019-2020>
10. <http://hdr.undp.org/en/content/human-development-index-hdi>
11. <https://www.weforum.org/press/2019/10/world-economic-forum-50th-annual-meeting-in-davos-defining-stakeholder-capitalism/>
12. <http://www3.weforum.org/docs/GCR2014-15/>
13. <https://president.az/articles/35608>

# ANALYSIS AND EVALUATION OF THE OPTIMAL USE OF PRODUCTIVE CAPACITIES IN THE OIL ENGINEERING COMPANIES OF AZERBAIJAN

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## **ABSRTACT**

*Modern conditions made important and urgent tasks, such as the formation of regional industrial complexes, the expansion of international economic agreements, and the justification of the assessment of the results of the socio-economic development of production. Based under these conditions, intensification of direct economic links between enterprises in all sectors of the national economy and especially in the oil-and-gas industry, the efficient use of production capacities and ratio of potential stock yield (the average value of fixed assets) to the most important parameters of efficiency in modern times. Unlike the sciences, economic analysis requires the establishment of new principles. Maximum performance of work by machine-building industry and, in particular, by oil-and-gas industry enterprises with their main production capacities, characterizes the potential possibilities for the use of certain economic entities within the planned time and quality. At present, the potential capacity of machine-building enterprises for the commissioning of new facilities is assessed by calculating the level of production capacity. In the process of calculating and identifying existing production capacities, the degree of complete load and utilization of technological equipment, interdependence and interconnection between business entities, material, labor and financial resources requirements for mechanical engineering are disclosed and studied. This proves that the structure, technical and technological level of industrial production by types of economic activity has not yet been adapted to the acute requirements of the free economy, and it expects a number of technical, technological and organizational-economic problems in these areas. Today, one of the most important constituents of the industry is oil engineering. But after the collapse of the Soviet Union, the oil and gas industry, whose production capacities were calculated for the post-Soviet space, lost their traditional suppliers and began to operate at low power. Therefore, it is important for scientific engineering organizations to effectively organize and operate new market structures in oil-and-gas industry, to apply mathematical methods to fully utilize their production capacities and optimize their use in these areas. The optimal use of production capacities in the modern conditions dictates the relevance of the research of scientific and methodological and practical problems of resources, the need for scientific justification of the development of the national economy, and in particular the determination of the optimal use of existing productive forces in the market economy.*

**Keywords:** *free economy, mathematical method, vector matrix, optimal option, estimation*

## **1. INTRODUCTION**

The modern stage of economic development of the Republic of Azerbaijan further enhanced the need for its economic management in the direction of public production intensification. Under these conditions, it is important to explore the possibility of optimum utilization of productive capacities in oil engineering enterprises and related businesses.

The transfer of the economy to a qualitatively new level of development necessitates the identification of forces and potential opportunities for their use in industrial enterprises, especially in oil engineering. In this process, the use of advanced technology and modern technical equipment, interdependence among business entities, and the need for material, labor and financial resources for oil-and-gas enterprises make the study of the situation an important necessity. From this point of view, it is necessary to pay special attention to the use of production capacities in economic entities. Production capacity of a business entity is the ability to produce maximum output in a certain nomenclature, assortment and quality throughout the year. The production capacity of an industrial sector for a certain type of product is determined by the total capacity of enterprises and separate specialized workshops and factories. The key elements that determine the productive capacity of an enterprise or business are: the number of machines, mechanisms and units installed in the enterprise; production area of enterprises and workshops; working hours, or rather, the number of shifts, hours and hours of an enterprise during the year; technical and economic norms of use of machines, mechanisms, units and apparatus, development of co-operation. Thus, in determining the production capacity of the economic entity as a whole, the increase in the capacity of individual enterprises as a result of the cooperative production must be taken into account. The production capacity of an economic entity is a variable quantity. It is changing as a result of increased labor productivity based on good technical knowledge, improvement of technological processes, and implementation of organizational and technical measures. Therefore, the production capacity of the enterprise should be maximized. For this purpose it is necessary to improve the feasibility study of the main types of equipment, to make full use of the equipment and production areas. The production capacity of unique equipment (large machining machines, special machines with maximum processing parameters) should be taken into account (Rustamov and Mammadova, 2015). In accordance with the requirements of the market economy, each enterprise seeks to equalize the capacity of its workshop and industries. However, this is not always achieved. Then it is necessary to calculate the production capacity of enterprises and economic entities based on the production capacities of leading sex groups. The collection of workshop, which form the leading group for various areas of mechanical engineering, is different. As the range of products, their scale and production technology can be changed, the bureaucracy, volume and technology of production should be chosen in such a way as to maximize the unit and maximize production capacity, so that domestic and foreign market needs to be maximized. There is a method of linear mathematical programming and mass service theory based on the optimal linear search for solving problems in this area.

## **2. COOPERATION PROCESS**

The optimal option is to solve any production, technical, economic and organizational issues in a number of ways (many variants), which are differentiated by different amounts of live and labor costs, and choose the most economically viable (most cost-effective) option. The economic comparison of the majority of these options requires a qualitative analysis of each option. This, in the end, allows us to properly understand the nature, essence and nature of economic events and to choose the most effective and expedient of them. Thus, the economic optimum is reflected in the quality ratio of the benefits and costs that condition it. Let us analyze the optimal use of production capacity in economic entities by applying this method (Urubkov and Fedotov 2009). Let us clarify the issue by taking Baku oil machine plant as an object. Various assortments of products are produced at the plant's economic entity, and eight workshop of the business entity produce the necessary nodes and details. Each range contains the minimum and maximum output required. Each workshop is known for its capacity to produce a set of nodes and a complete set of details as well as the operating time fund of the most loaded equipment.

For simplicity, we accept that the cost and profit are proportional to the stated machine capacity. Under these conditions, the maximum load on the equipment, namely, the output of the product (by cost) and the maximum profitability criterion, should be determined by the average of machines of each type (Table 1).

*Table 1: Primary data for calculation of mathematical methods and optimal production capacity*

Indications	Manufacturing, piece			Proper capacity of workworkworkshops, days								Optimal manufact ured piece
	Minima l	Maximal	More than maximal	1	2	3	4	5	6	7	8	
Fountainfittings	20	188	168	28	28		20	132	80		8	97
Undergroundpumps	100	184	84	8		8	40	50	10	8		117
Cuttingmachines	30	156	126	18		27		72		21	8	38
Detergents	90	132	42	5	23			20	18.6		12	118
Annualworkingtimefund				319 0	347 0	203 0	524 0	1454 0	553 0	185 0	528 0	
Time fund required for minimum release				235 0	263 0	161 0	440 0	1160 0	427 0	143 0	116 0	
Free time fund for more than one release				840	840	420	840	2940	126 0	420	420	

### 3. ETHODOLOGY

The plan is not to leave less than the minimum, so it is important to set the working time of the equipment to implement the minimum program in each workshop. The free time fund of equipment should be used to maximize machine production. This problem is expressed by linear programming terms: Let us find the maximum of the linear form  $L(x) = s_1x_1 + s_2x_2 + s_3x_3 + s_4x_4$  under the following conditions. First, let's define what  $s_1x_1 + s_2x_2 + s_3x_3 + s_4x_4$  shows, as well as  $L(x)$  (Yusifov MY (Baku 2015)). Since maximum load factor is the maximum load limit for all eight (L) cylinder units, the first, second, third, and fourth names of the machine will be manufactured with minimum  $x_1, x_2, x_3, x_4$ . Required quantity:  $s_1, s_2, s_3, s_4$  the following terms are given to limit the free time resources of all equipment with the development of a set of nodes and details of the appropriate name:

$$28x_1 + 8x_2 + 18x_3 + 5x_4 \leq 840;$$

$$28x_1 + 23x_4 \leq 840;$$

$$8x_2 + 27x_3 \leq 420;$$

$$20x_1 + 40x_2 \leq 840.$$

$$132x_1 + 50x_2 + 72x_3 + 20x_4 \leq 2940;$$

$$80x_1 + 10x_2 + 18.6x_4 \leq 1260;$$

$$8x_2 + 21x_3 \leq 420;$$

$$8x_2 + 12x_3 \leq 420.$$

The condition for the maximum amount of annual releases of the assortments is expressed as follows:

$$x_1 \leq 168$$

$$x_2 \leq 84$$

$$x_3 \leq 126$$

$$x_4 \leq 42$$

This means that information in any name should be prepared more than it needs to be. Then there are additional non-negative variables to transform the first group of conditions into equations:

$$28x_1 + 8x_2 + 18x_3 + 5x_4 + x_5 \leq 840;$$

$$\begin{aligned}28x_1+23x_4+x_6 &\leq 840; \\8x_2+27x_3+x_7 &\leq 420; \\20x_1+40x_2+x_8 &\leq 840.\end{aligned}$$

$$\begin{aligned}132x_1+50x_2+72x_3+20x_4+x_9 &\leq 2940; \\80x_1+10x_2+18.6x_4+x_{10} &\leq 1260; \\8x_2+21x_3+x_{11} &\leq 420; \\8x_2+12x_3+x_{12} &\leq 420.\end{aligned}$$

Here  $x_5$ ,  $x_6$ ,  $x_7$ ,  $x_{12}$  represent the incomplete loading of workshop within the quarter. If we refer to the maximum number of relevant assortments,  $x_{13}$ ,  $x_{14}$ ,  $x_{15}$ ,  $x_{16}$ , then the inequalities in the second group are:

$$\begin{aligned}x_1 + x_2 &= 168; \\x_3 + x_{15} &= 126; \\x_2 + x_{14} &= 84; \\x_4 + x_{15} &= 42.\end{aligned}$$

Thus, a total of 16 equations comprising a 16-bit system are obtained. It can be written as Table 2. In general, this system of equations can be written as follows:

$$R_0 = R_1x_1 + R_2x_2 + \dots + R_{16}x_{16}$$

or in a general form:

$$R_0 = \sum_{i=1}^{16} R_i x_i$$

Here  $R_1..R_{16}$  is a vector derived from the corresponding coefficients, and  $R_0$  is a free bound vector in the system of equations.

$$\begin{aligned}\text{Calculation free time fund in all workshop of economic entities: } &840 + 840 + 420 + 840 + 2940 \\ &+ 1260 + 420 + 420 = 7980\end{aligned}$$

Hence (taking into account the overall machine capacity of the product):

$$\begin{aligned}s_1 &= 288.0 / 7980 = 3.6\%; \\s_2 &= 132 / 7980 = 1.65\%; \\s_3 &= 150 / 7980 = 1.9\%; \\s_4 &= 66.6 / 7980 = 0.84\%.\end{aligned}$$

*Table following on the next page*



Table 2: The vector matrix for calculation of the optimal production power

840	28	8	18	5	1	0	0
840	28	0	0	23	0	1	0
420	0	8	27	0	0	0	0
840	20	40	0	0	0	0	0
2940	132	50	72	20	0	0	0
1260	80	10	0	18.6	0	0	0
R0=	R1=	R2=	R3=	R4=	R5=	R6=	R7R8=
420	0	8	21	0	0	0	0
420	0	8	12	0	0	0	0
168	1	0	0	0	0	0	0
84	0	1	0	0	0	0	0
126	0	0	1	0	0	0	0
42	0	0	0	1	0	0	1

Table 3 is made to calculate the optimal plan. The first support plan is as follows:  
 $X = (0; 0; 0; 0; 840; 840; 420; 840; 2940; 1260; 420; 420; 168; 84; 126; 42)$ .

Table 3: Calculation of the optimal plan

Sc→	Vector	R0	3.6	1.65	1.9	0.84
			R1	R2	R3	R4
	R5	840	28	8	18	5
	R6	840	28	0	0	23 <sup>36.5</sup>
	R7	420	0	8	27 <sup>15.6</sup>	0
	R8	840	20	40 <sup>21</sup>	0	0
	R9	2940	132	50	72	20
	R10	1260	80 <sup>15.8</sup>	10	0	18.6
	R11	420	0	8	21	0
	R12	420	0	8	12	0
	R13	168	1	0	0	0
	R14	84	0	1	0	0
	R15	126	0	0	1	0
	R16	42	0	0	0	1
Zc-Sc			-3.6	-1.65	-1.9	-0.84
(Zc-Sc)θc			-56.8	-34.6	-29.6	-30.6

If  $\theta = 15.8$  the biggest minus price is -56.8

The startup base vectors respond to additional variables that enter the linear form with zero coefficients. Therefore, the last column of the table is not filled: all  $z_1 = 0$  and so:

$$\Delta_c = Z_c - S_c = -S_c$$

The value of linear form is  $L_0 = 0$ . Columns R5-R16 are not displayed to reduce space. You need to get a new support plan, in which case one of the first base vectors will be replaced with a new vector so that the load factor is  $L_1 > L_0$ .

Table following on the next page

Table 4: Specific Vector Matrix II

Sc→	Vector	R <sub>0</sub>	3.6	1.65	1.9	0.84
			R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
	R <sub>5</sub>	398	0	4.5	18	-1.55
	R <sub>6</sub>	398	0	-3.5	0	16.4
	R <sub>7</sub>	420	0	8	27	0
	R <sub>8</sub>	524	0	37.5	0	-4.66
	R <sub>9</sub>	840	0	33.4	72 <sup>11.8</sup>	-11
-3.6	R <sub>10</sub>	15.8	1	0.125	0	0.233
	R <sub>11</sub>	420	0	8	21	0
	R <sub>12</sub>	420	0	8	12	0
	R <sub>13</sub>	152.2	0	-0.125	0	-0.233
	R <sub>14</sub>	84	0	1	0	0
	R <sub>15</sub>	126	0	0	1	0
	R <sub>16</sub>	42	0	0	0	1
Z <sub>c</sub> -S <sub>c</sub> (Z <sub>c</sub> -S <sub>c</sub> ) ΘC				-1.2 -16.8	-1.9 -22.4	0 0

The following artificial tricks are used for this purpose. The value of  $\Theta$  is the smallest negative value. It consists of the ratio of one of the R<sub>0</sub> vector elements to the corresponding positive number of the column R<sub>c</sub> = min (c = 1, 2, 3, 4).

$$\Theta = 840/28 = 30; 840/28 = 30; \dots; 840/20 = 42; \\ 2940/132 = 22; 1260/80 = 15.8; \dots; 168; \dots$$

Similarly, all those are calculated. (Z<sub>c</sub>-S<sub>c</sub>) shows the percentage of loading of machines with the  $\Theta_c$  number, whose numerical value is the c. Table 3 shows that when  $\Theta_1 = 15.8$ , (Z<sub>c</sub>-S<sub>c</sub>)  $\Theta_c = 56.8$ , which is the largest negative value. This means that instead of the R<sub>10</sub> vector, the base column R<sub>1</sub> is inserted into the base. We get a Schedule 4 that reflects the new support plan. If it is included in a new table for a number of columns  $\Delta_c < 0$ , then the plan can be improved. This process is shown in Tables 5, 6 and 7. As a result, we get an optimal support plan: x=(7,8; 17.5; 8.1; 28; 217.3; 0; 61; 0; 0; 0; 115.7; 182.5; 161; 65.5; 117.7; 21.5

#### 4. CONCLUSION OF THE ANALYSIS

So, the output of the minimum program is: Fantasy fittings - 7 pieces; underground pumps - 17 pieces; cutting machines-8 pieces; detergents - 28 pieces (rounded to full numbers P1, P2, P3, P4). Thus, in a cooperative setting, the economic entity determines the maximum production capacity (according to the given criteria).

Table following on the next page

Table 5: Specific Vector Matrix III

Sc→	Vector	R <sub>0</sub>	3.6	1.65	1.9	0.84
			R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
1.9	R <sub>5</sub>	186	0	-3.7	0	1.2
	R <sub>6</sub>	398	0	-3.5	0	24.3
	R <sub>7</sub>	102	0	-4.3	0	4.14
	R <sub>8</sub>	524	0	37.5	0	-4.66
	R <sub>9</sub>	11.8	0	0.456	1	-0.153
3.6	R <sub>10</sub>	15.8	1	0.125	0	0.233
	R <sub>11</sub>	178	0	-1.6	0	3.22
	R <sub>12</sub>	278	0	2.5	0	1.84
	R <sub>13</sub>	152.2	0	-0.125	0	-0.233
	R <sub>14</sub>	84	0	1	0	0
	R <sub>15</sub>	114	0	-0.456	0	0.153
Z <sub>c</sub> -S <sub>c</sub> (Z <sub>c</sub> -S <sub>c</sub> ) ΘC	R <sub>16</sub>	42	0	0 -0.785 -11	0	1 -1.13 -27.5

Table 6: Specific Vector Matrix IV

Sc→	Vector	R <sub>0</sub>	3.6	1.65	1.9	0.84
			R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
0.84	R <sub>5</sub>	156.8	0	-3.44	0	0
	R <sub>4</sub>	24.3	0	-0.214	0	1
	R <sub>7</sub>	1.5	0	-3.4	0	0
1.9	R <sub>8</sub>	637	0	36.5 <sup>17.5</sup>	0	0
	R <sub>3</sub>	15.52	0	0.423	1	0
3.6	R <sub>1</sub>	10.14	1	0.175	0	0
	R <sub>11</sub>	100	0	-0.9	0	0
	R <sub>12</sub>	233.3	0	2.9	0	0
	R <sub>13</sub>	157.9	0	-0.175	0	0
	R <sub>14</sub>	84	0	1	0	0
	R <sub>15</sub>	110.3	0	-0.423	0	0
	R <sub>16</sub>	17.7	0	-0.214	0	0
Z <sub>c</sub> -S <sub>c</sub> (Z <sub>c</sub> -S <sub>c</sub> ) ΘC				-4.5 -7.9		

Table 7: Specific Vector Matrix IV

Sc→	Vector	R <sub>0</sub>	3.6	1.65	1.9	0.84
			R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R <sub>4</sub>
0.84	R <sub>5</sub>	217.3	0	0	0	0
	R <sub>4</sub>	28	0	0	0	1
	R <sub>7</sub>	61	0	0	0	0
1.65	R <sub>8</sub>	17.5	0	1	0	0
1.9	R <sub>3</sub>	8.1	0	0	1	0
	R <sub>1</sub>	7.8	1	0	0	0
3.6	R <sub>11</sub>	116.7	0	0	0	0
	R <sub>12</sub>	182.5	0	0	0	0
	R <sub>13</sub>	161	0	0	0	0
	R <sub>14</sub>	66.5	0	0	0	0
	R <sub>15</sub>	117.7	0	0	0	0
	R <sub>16</sub>	21.5	0	0	0	0

## 5. CONCLUSION

If there is no co-operation (or it is insignificant), the issue of linear programming can be greatly simplified. At present, the existing production capacity is not sufficient to fulfill the orders and obligations of economic entities, thus it is necessary to create additional production capacity through investment. In this case, particular attention should be given to the optimal allocation of investment between new construction and modernization of the existing plant.

## LITERATURE:

1. A.F.Musayev, A.G.Gahramanov "Mathematical modeling and forecasting in economy" Baku, 2000
2. A.Urubkov, I.Fedotov (2009) Methods and models of decision management optimization.
3. I.Yershn. Line optimization and linear inequality systems. M, 2010
4. Industrial Relations in Europe (2013). Comission Staff Working Document.
5. Kremer N.Sh. Econometrics. Textbook for university students/ Kremer N.Sh, B.A.Putko, M, Yuniti 2010, 328 p
6. M.G.Zaychev, S.E.Varyukhin Methods and made of decision management optimization
7. Michael Wolf and Dalton Terrell "The high-tech industry, what is it and why it matters to our economic future, "Beyond the numbers: Employment and Unemployment" (2016), Vol5, No8
8. Mammadov M.I. (Baku, 2015). Optimal management of difficult economic systems (in Azerbaijan), 258 page
9. Orlov A.I. Econometrics. /A.I.Orlov, M. Fenike 2009, 572 p
10. Granjer C.W.J (1981). "Some features of time series indicators and their use in the econometric model specification, Econometric magazine, p 121-130.
11. Hasanli Y.H. Econometric modeling of inflation processes in Azerbaijan. " (2008). "Taxes journal in Azerbaijan" CBS paleographic production. N3 (55), p20-37
12. G.A.Rustamov, Mammadova A.T. (Baku, 2015). Optimal and adaptive management systems (in Azerbaijan), 265 p
13. R.Nilson (2003) Business Tendency Surveys. A Handbook. Statistics Directorate, OECD, 2<sup>nd</sup> edition. France 130
14. Robert F. Engle, C.U.J.Granjer (1987). Co integration and error correction representation, estimation and testing. Econometrica, Vol 55, N2 (March) pp 251-276.
15. Yusifov M.Y. Econometric modeling of inflation processes in Azerbaijan, ECM modeling application. "Taxes journal in Azerbaijan" N 2 (122), Baku 2015, page 165-180.

## ECOLOGICAL AGRICULTURE AND LAND RESOURCES IN AZERBAIJAN

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### **ABSTRACT**

*The subject of the article is ecologic agriculture, its priority issues, significance using of mineral and organic fertilizers. Issues of preserving of land resources as main recourse of agriculture were investigated. It was studied dependence of agricultural products on import and use of technique, investment, main funds, man power, land area, mineral fertilizer, interaction between productivity of various products and adding mineral fertilizer to the sowing. The results showed that there was no line relation between using fertilizers and productivity of some plant products. On ecological point it was concluded to reduce adding mineral fertilizer to sowing.*

**Keywords:** *Ecologic Agriculture, Mineral and organic Fertilizers, Land recourses*

### **1. INTRODUCTION**

At the beginning of XIX the Swiss scientist Hans Muller founded conception of ecological agriculture. In 1921 in Switzerland Muller created civil movement aimed to increase thinking of peasants. According to him this movement would have contributed them to find their continuous place in society. Hans Muller tried hard for 19 years to protect interests of peasants in agrarian policy of Switzerland. But later he admitted that peasants problems couldn't be solved only in political level and they had to help themselves too. After defeat Muller with his wife founded eco-bio-organic cropping in agrarian policy. The main principles of this conception was the Austrian Rudolf Steiner's training course ("Demeter") in Silesia based on these ideas and contributed to biodynamic development of agriculture in 1924. Rudolf Steiner was one of the founders of organic agriculture. In his work "spiritual and scientific foundations of successful development of agriculture" edited in 1924, he created biodynamic soil science. As a result of the efforts of Eve Balfour and Albert Howard, the farm was established in England in the 40s of the twentieth century based on the organic agriculture system widespread in the German-speaking countries. Currently the majority of the organic farms in England operate based on this system. "Organic agrarian farm" term was first appeared in the economic literature in 1929 by Lord Northbourn and he valued farm as unit organism in his "Look to the land" edited in 1940. (Lord Northbourn, 2003). In the same period Albert Howard also researched this problem and released his book "An Agricultural Testament" in 1940 (Howard, A., 1943). In his next book he used terminology of Northbourn and called it "The Soil and Health. A Study of Organic Agriculture" (Howard, A., 2007).

In his invention the Japanese microbiologist Masanobu Fukuoka created his organic method directed to minimize anthropogenic influence to microbiological fertilizers and soil and plants. In 1975 he published his first book “One Straw Revolution”. Results of his 30-year work were collected in that book. (Fukuoka M., 1993). “The Living Soil” by Eve Balfour was published in 1943. He published details of “Hooghly experiment” book in which production of agricultural products was compared in organic and convention methods. (Balfour E.B., 1948) As different terms are used in different countries to express practice that meets principles of production of organic products at present, according to European standards “ecological”, “biological” and “organic” agriculture terms are synonyms (Palkin, G., 2008).

## 2. LITERATURE REVIEW

Organic agriculture (Terziev and Arabska, 2016, Yovchevska, 2015, Nikolich et al., 2011, Benchasri and Bairaman, 2010) and ecological and environmental issues (Oxouzi and Bagiatis, 2012, Lampkin et al., 2001, Henning et al., 1991, Lockeretz, 1995, Moran et al., 2007) covered general provisions of organic agricultural products in research were studied by several economic scientists. So Terziev (2016) valued organic products in rural districts as great potential for economic increase, Yovchevska (2015) grounded that due to rapid and even inevitable exhaustion of resources, climate change those living environmental changes have become an important problem in globalizing process. Answer of scientific society is combined policy of ecological production and organic production. This type of norm has been accepted as technological decision which keeps kind attitude to the environment. Society is ready to support agricultural producers on this action. Nikolich et al. (2011) studied difference of development of weeds in organic and other production variants, Oxouzi and Bagiatis (2012) studied achievements in organic norm area of EU member countries in agrarian farm during 1998-2008. Besides it, application of modern agricultural technologies (De Souza et al., 1999, Caffey and Kazmierczak, 1994), organic agriculture and health of domestic animals (Lund and Algers, 2003, Sundrum 2001, Lampkin, 1997), stability of organic agricultural system (Pacini et al., 2003, Rigby and Caceres, 2001, Campbell et al., 1997) and its financial issues were studied (Offerman and Nieberg, 1999). In several researches it was studied living organism and organic agrarian field (Biao et al., 2009), fish (Atanasova et al., 2008), prawns (Biao et al., 2011), wheat (Gubatov et al., 2017), potatoes (Nacheva et al., 2015, Mitova et al., 2014), sweet corns (Bavec et al., 2015), mushrooms (Tsvetkov et al., 2014), tomatoes (Thakur, 2016), nuts (Roversi, Al., 2016), dairy products (Bavec et al., 2015), their production with organic composition, their influence to environment and soil (Angelova et al., 2013, Ciric et al., 2013, Angelova et al., 2013), consumer's attitude to organic products (Kuhar and Juvancic, 2010), economical comparison of organic and simple production (Oxouzi and Papanagiotou, 2010), valuation of diversity between organic and simple production (Mihov et al., 2012, Stuoğè et al., 2016, Keskin et al., 2010), productivity issues (Adanacioglu and Olgun, 2012, Nesic et al., 2014, Manolova et al., 2014), influence of organic production to social relations (Lanfranchi et al., 2015), organic agrarian production issues in developing countries (Alzaidi et al., 2013, Altarawneh, 2016) and others in details. Biao et al. (2011) estimated productivity increasing both weight and nutrition quality of organic nutrition Chinese prawns and came to conclusion they were high. By means of different statistic approaches Gubatov et al. (2017) researched productivity of grain on ecology of environment point and proved its significance. Mihov et al. (2012) researched using energies consumed and used for cabbage in effective way under organic and simple production conditions in agrarian farm. Nacheva et al. (2015) studied agrobiological significance of planting potato production in different system of organic production. Mitova et al. (2015) identified influence of organic, mineral and organic mineral fertilizers to increase of potato products, its productivity and other quality indicators. Bavec et al. (2015) researched influence of soil which physical, chemical and biological features

increased by means of organic fertilizers and cultivation to the productivity of sweet corns and morphological parameters. Thakur (2016) defined that it will be easy to grow better nutrition qualified tomato with appropriate combination of organic technology. He emphasized necessity to accept organic production strategy for safe production, that has good effect on farmer's health, which more significant than use of conventional cultivation method of different organic fertilizers. After research related to nuts production in organic agrarian sector Roversi (2016) came to conclusion that cultivation method during production is time-saving, production costs high and is highly financed. Average productivity in organic and simple, economic results (price, changed expenditures, total profit), volume of used organic and inorganic fertilizers were compared in the article. Atanasova et al. (2008) researched biochemical structure of carp fish under organic agrarian production condition and concluded that nutritional value of the feed that the fish were fed was high. Tsvetkov et al. (2014) researched influence of mycorrhizal inoculation to preventing from soil disease and development of vine-growing as biotechnical alternative and concluded that Mycorrhizal fungi *Glomus* spp. and *Trichoderma* spp. have positive effect on increase of nutrition elements of grape harvest, increase of soil fertility and generally development of vine-growing. Antunovi et al. (2012) proved that amount of heavy metals which is dire, dangerous for health was in little amount in production of goat milk with organic basis. The scientist studied amount of heavy metals in grain-based feed, grass, straw. Wrzaszcz et al. (2015) evaluated production activity of farms and organization of their economics and efficiency depending on organic minerals of soils in agrarian sphere. Ciric et al. (2013) researched efficiency of various using mode of different type of soils and came to conclusion that obtained results would play a great role in increasing of fertility of soil. Angelova et al. (2013) evaluated effect of organic addition on soil. Nesic et al. (2014) studied influence of organic and conventional production to soil and compared them. Oxouzi et al. (2012) studied social features of simple and biological agrarian farm, analyzed economical activities of grape farmers in organic and simple management methods, researched significance of alternative organic and biological production in new agricultural production model context in Greek agriculture and concluded that biological and simple production does not possess only social features (age, education, agricultural practice, information access), but also difference in volume of product, production cost and profit. Alzaidi et al. (2013) researched attitude of farmers to organic agrarian farm in Ar-Riyadh region and also individual, socioeconomic features and concluded that academic level factor of farmers has direct positive correlation to organic agrarian farm. After having studied obstacles that affected organic agrarian production Altarawneh (2016) included them high production cost of grain organic plants, financial difficulties of farmers, high demand to production, lack of knowledge of managers and politicians engaged with organic agrarian division, failing of coordination and legislative and regulatory frameworks, education, not enough information about hazardous pesticide, especially advantages of organic agrarian production and so on. Adanacioglu and Olgun (2012) compared economical profit and technical efficiency of organic cotton production with simple cotton production in research and concluded that although cost of organic cotton production is more than cost of simple cotton production and profit is less, it affects environment little and there is no difference in technical efficiency of those productions. Manolova (2014) researched economical efficiency of fertilizing in simple production process and during passage period to organic production and noted that they made loss due to low productivity of grain-crops, additional expense, higher cost of the production than simple production. He used additional product, value of fertilizing, additional profit from fertilizing. Here, he used indicators, such as supplementary crops, fertilizing value, extra income from fertilizing, extra profit from fertilizing, fertilizing cost effects, residual effect of fertilizing - extra profit. Stuoğè et al. (2016) researched milk and meat productivity of cattle of organic farmers and environment in Lithuania.

### 3. MATERIALS AND ANALYSIS

According to the latest surveys (FAO, 2010) worldwide 31 million hectare of territory or up to 623 thousand farms are run with ecological methods. At present Australia (12,1 million ha), China (3,5 mln. ha) and Argentina (2,8 mln. ha) are among the countries that possess the largest ecological territory. Research has shown that compared to conventional farm, ecofarm production is more profitable and this index increases year by year. As reasons to them we can indicate increasing demand to ecological products among consumers and expansion of those product markets. Development this way contributes to expansion of ecological agriculture in Azerbaijan. As we know existing 9 out of the world's 11 climate zones in Azerbaijan enables to grow abundant agricultural products in different regions of it in all seasons. This assists to provide population with agricultural products around the year. Today 3 large enterprises in Republic realize processing of agricultural products that meets ecological standards (table 1). Besides these enterprises several family farms deal with processing of homemade ecological products. They are mainly engaged in the desiccation of fruits (plums, apricots, figs, apples, cornel, hircic and other wild plants), confuter and jams, soaps, juices and compotes.

Name of enterprise	Administrative area	Production Priority
Reyhan LLC	Gakh region	Fruit of wild plants (dog-rose, hawthorn, buckthorn)
RDR company	Ganja	Juices and compotes (pomegranate, quince, raspberry, blackberry)
Süleyman KFT	Shamkir region	Pomegranate syrop, pomegranate juice, soups, comfiture

*Table 1: Companies engaged in the production of organic products in Azerbaijan*

The survey among consumers shows that price of organic products in Azerbaijan is much more expensive than the price of conventional products, as it is in the whole world. Comparison between sale prices of ecological and conventional products shows that increase of price in Azerbaijan corresponds relevant index of the European countries. But there is certain difference in some products (table 2). Researches of last two years show that interests to organic products of population in the Republic have increased a lot. Nowadays 10% of population of the country are potential consumers of ecoproducts.

Countries	Vegetables	Potato	Fruit	Milk	Butter	Meat and meat production	Egg
Azerbaijan	25-50	50-60	70-90	50-100	25-50	100-120	40-50
Germany	20-100	50-100	20-150	25-80	30-40	80-100	30
Austria	50-60	50-100	60-70	25-30	32-35	25-30	70
Italy	50-220	70-130	50-100	20-50	35-45	20-50	50-200
France	50-200	40-50	40-200	20-50	37-48	30	25
Netherlands	20-50	33	26	38	30-35	30-40	43

*Table 2: Price increasing (%) of organic products in Azerbaijan and countries of European Union*

It is safe to say that high prices do not bother consumers, and they are ready to pay added value price for organic products. Biodynamic agriculture is a special type of ecological agriculture. It follows all principles and standards of ecological agriculture, but it is one step behind: biodynamic agriculture combines space and religious imaginations. It is based on "anthroposophy" theory founded by Austrian philosophy Rudolf Steiner in 1920. He came up with a new scientific approach, combining religious views with natural phenomena. According to the Steiner "Matter is never without Spirit. Spirit is never without Matter".



Agrochemical means have been used widely only since 1960. For this reason, farms that have not been exposed to the Green Revolution automatically comply with the most of the biological agricultural criteria, that is to say, do not use synthetic fertilizers, pesticides and genetically modified organisms (GMOs). Such agricultural systems are called “Conventional Agriculture”. Such farm system is based on “ancestor’s tradition” method. “Simple Agriculture” system makes to get confused and sometimes accepted as “conventional agriculture” system by mistaken. Conventional agriculture is based on the ancestral methods that have been passed through centuries. In the simple (intensive) agriculture system all modern means (fertilizers, pesticides, etc.) that Green Revolution granted are used. This farm system is an agriculture used by the majority in the world and its principles are totally contrary to the principles of the ecological agriculture. Proper regulation of the fertilizer norm is important for the good development and high productivity of agricultural plants. Fertilizers are mainly divided into two parts, mineral and organic. Mineral fertilizers also contain macro and micro fertilizers. Combinations such as boron, manganese, copper, molybdenum, zinc, cobalt and other elements that used in plants are called microfertilizers. Although microelements are not needed for plants much as it is clear for its name, it has great importance in plant life. Microelements have a great role in metabolism in plant organism. Consisting of nitrogen, phosphorus and potassium the macroelements are added to the plants as fertilizer. According to the effect mechanism to productivity and environment when adding fertilizers to the soil, the productivity increases at initial effect of fertilizer, the productivity is stabilized at optimal fertilizer norm and at the end when it is observed crop loss when it is more than norm. It is known that in modern life long-lasting and dynamic development production, preserving and increasing fertility of soil, raising plant productivity and improvement of its quality is impossible in agriculture. Not only in our country but all farms in the world in order to achieve high and qualitative productivity in agriculture, demand to mineral fertilizers must be satisfied. World demand dynamics to mineral fertilizer from 2011 to 2015 is given in table 3.

Years	2011	2012	2013	2014	2015	Annual growth rate
Nitrogen (N)	105 348	107 374	109 299	111 109	112 909	1.7%
Phosphorus (P <sub>2</sub> O <sub>5</sub> )	41 679	42 562	43 435	44 245	45 015	1.9%
Potassium (K <sub>2</sub> O)	28 679	29 682	30 683	31 594	32 453	3.1%
Total (N+ P <sub>2</sub> O <sub>5</sub> +K <sub>2</sub> O)	175 706	179 618	183 417	186 948	190 377	2.0%

*Table 3: World demand to fertilizer in effective substance amount (thousand tones) 2011-2015*

It should be noted that currently in our republic there are 0.16 hectares of land per capita, which is less than the average index in the world. To provide the population of the country with grain, vegetable, cattle-breeding and the industry with raw materials, crop obtained from sowing per capita should be increased. Such approach requires intensification of sowing, growth of productivity of sowing field. Lack of nitrogen, phosphorus and potassium in soil has become restriction factor in productivity growth of agricultural plants totally. If agrotechnical measures is implemented in optimal term and qualitative way, unless plants are provided with nutrient materials completely, even if the best kind of plant is used, it will be impossible to achieve the expected result. D.Pryanishnikov who regarded as one of the founders of agrochemical science on the grounds of results of his scientific research and world practice concluded that crop is generation of fertilizer. It is specified that depending on added dose 1 kg nitrogen (in effective substance amount) contributes growth of 12-15 kg autumn wheat seed, 100-120 kg potato, 10-12 kg raw cotton product, 1 kg phosphorus 7-8 kg wheat, 50-60 kg potato and 5-6 kg raw cotton product, 1 kg potassium 3-4 kg wheat, 40-50 kg potatoes, 2 kg raw cotton products. One can achieve high results if nitrogen, phosphorus and potassium is added not separately but

altogether and in defined dose to the soil. During sowing especially when manure and other organic fertilizers are used together with mineral fertilizers, its productivity becomes higher. On the other hand, when mineral fertilizers move into the soil alternately, harmful growth of nutrients materials is observed. In this case a piece of nutrient materials starts to be penetrated with difficulty, that is to say, it brings to loss of nutrient materials. So, when manure is applied with mineral fertilizers this shortage is eliminated. Biohumus is one of the best organic fertilizer and accepted the most qualified and organic fertilizer in the world. Unlike manure, biohumus contains 16% total humus, 3.2% total nitrogen, 2.2% total phosphorus, 2% total potassium and other essential macroelements. Biohumus is also considered to be a superior organic fertilizer for its composition and quality. For its composition and biological value, 1 ton of biohumus equals 10-15 tonnes of fresh manure. Continuous intensive development of agriculture, preservation and enhancement of soil fertility, increase of productivity and quality of plants depend directly on the proper use of organic and mineral fertilizers, medicinal preparations at the level of production technologies. Formation of adequate service network in raising competitiveness and export-oriented production in the agrarian sector is of great importance. The results of the research show that the use of organic and mineral fertilizers, which are the main means of production after soil, should be paid more attention to increase the production of agricultural products in the regions. It is important to carry out various statistical analyzes to determine the intensity of the existing relationships among the studied indicators. Thus correlation relations between different dependent and independent changes and between themselves are checked. On the other hand factorial analyses are used to determine influence factors creating those relations between statistic analysis and different indicators. As we know factorial analysis is considered a new division of multidimensional statistic methods. This method is more applicable in the grouping and classification of statistical indicators. For the purpose of protecting food security in the Republic, norms have been established in accordance with international standards when evaluating fertilizer supply to increase productivity in agrarian sector development.

*Table following on the next page*

Land names	Water-resistant aggregates ,%		
	> 1	1-0,25	<0,25
Mountain-meadow	58	18	24
Grayish brown mountain forest	63	20	17
Brown mountain-forest	60	17	23
Steppe mountain-brown	37	37	26
Greymountain-brown	26	32	42
Black mountain land	36	32	32
Chestnut mountain	20	30	50
Yellow	42	28	30
Meadow-chestnut	44	21	35
Chestnut	12	30	58
Meadow-chestnut	6	28	66
Grey-Greyish brown	9	16	75
Grey	8	17	75
Meadowed-grey	23	28	49
Meadow-grey	17	26	57
Meadow-forest	40	23	37
Alluvial - meadow	31	21	48
Meadow-marsh	54	18	28
Saline	6	15	79

Table 4: Quantity of water-resistant aggregates (0-30sm) in Azerbaijani lands (Mammadov R.H.,1988)

There is a strong correlation between the amount of water-resistant macroaggregates and the productivity of agricultural plants. Grain plants are more sensitive to land structure.

Land	Water-resistant aggregates (>0,25 mm),%	Water-resistant aggregates (>0,25 mm),%	
		Biological	farm
Non-irrigation			
Chestnut mountain	52	50,3	19,2
	46	40,2	17,4
	38	31,7	11,9
Light-mountain-chestnut	24	32,5	9,6
Chestnut	18	26,7	8,8
Irrigation			
Darkmeadow	68	124,2	38,9
Meadowed-grey	35	80,0	22,7
Meadowed-grey with little humus	25	52,7	19,6
Grey	20	105,0	32,0
Primary grey	14	78,4	22,2
Darkmeadow	8	64,7	18,4

Table 5: Land structure and productivity of wheat (Mammadov R.H.,1988)

#### 4. DISCUSSION

Large skeletal elements of the soil have a more negative impact on the development of agricultural plants and the level of fertility. The influence of stony soils on the productivity of cereal plants in Azerbaijan has been studied and the correction factors of these soils have been determined. (Гасанов X.H. , 1980).

Level of skeleton	Amount of skeletal elements (1 mm),%	Level of fertility	
		Garden	Vineyard
Free of skeleton	0	1,00	1,00
Weak skeleton	5	1,00	1,15
Average skeleton	10	1,00	1,14
	15	1,00	1,10
Many skeleton	20	1,00	1,00
	25	0,92	1,05
	30	0,84	1,00
	35	0,77	0,99
	40	0,70	0,95
Extra amount of skeleton	45	0,64	0,85
	50	0,56	0,78
	55	0,52	0,70
	60	0,45	0,62
	65	0,39	0,55
	70	0,30	0,47
	75	0,15	0,40
	80	0,15	0,30
	85	0,07	0,25
	90	0,0	0,16
	95	0,0	0,09
	100	0,0	0,0

Table 6: Change of fertility in grape soils, depending on the amount of skeleton (Valkov V.F., 1986)

For soils free of skeleton - 1,00, weak skeleton - 0,8, average skeleton - 0,6, extra amount of skeleton - 0,5.

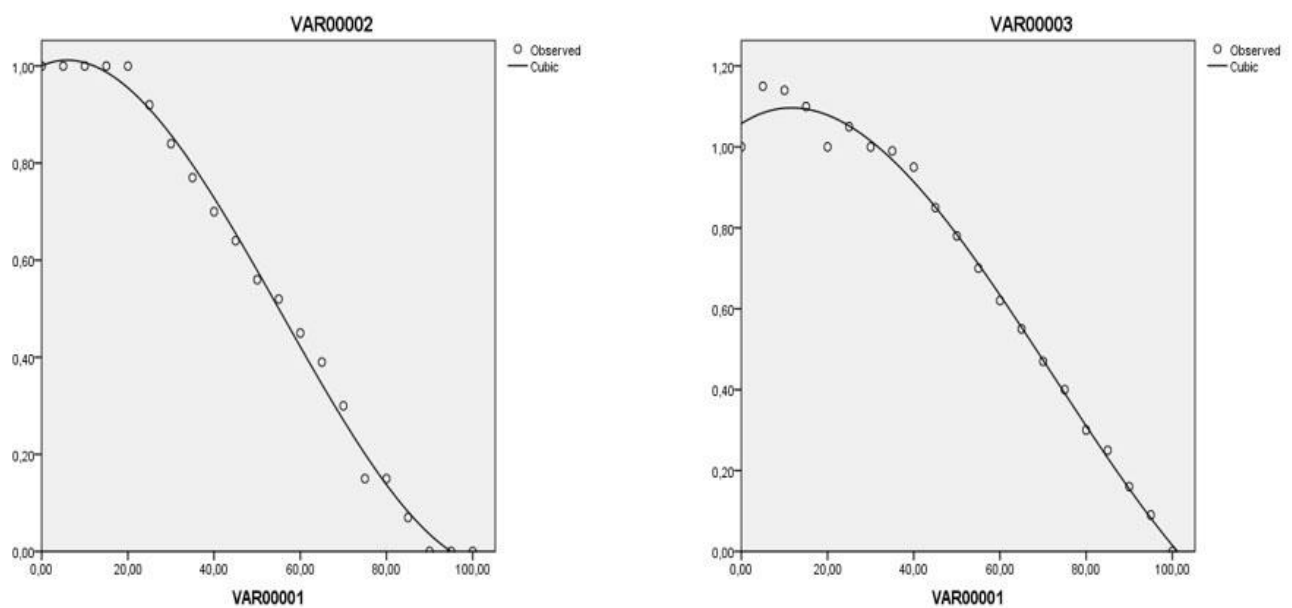


Figure 1: Change of fertility, depending on the amount of skeleton

	const.	X	X2	X3	R2	F	P- (F)
Y1	1,0005*** (0,021)	0,004*** (0,002)	-0,0004*** (0,00004)	2E-06*** (2,87E-07)	0,9953	1189,339	6,03E-20
Y2	1,0147*** (0,025)	0,0512*** (0,002)	-0,0086*** (0,00005)	0,0002*** (3,39E-07)	0,9932	831,337	1,24E-18

Note: 1.(Std. Error); 2. \* p<0,05; \*\* p<0,01; \*\*\* p<0,001.

Table 7: Analysis of agriculture

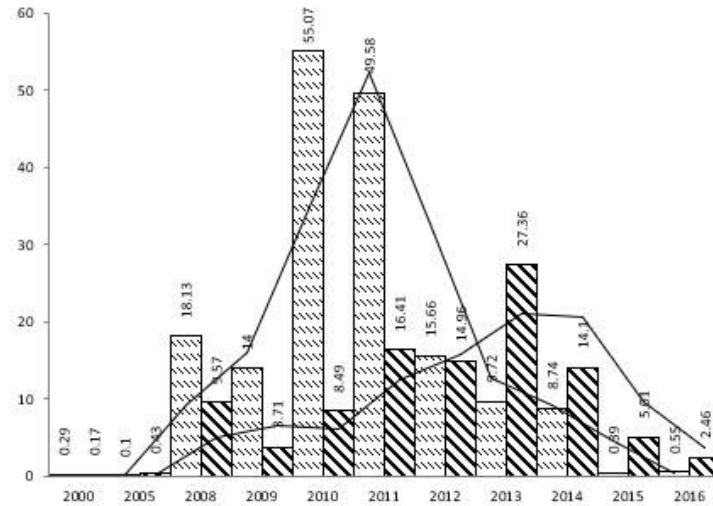


Figure 2: Investment to capital to protect lands and use them in effective way and current expenditures for land restoration activities (AZN million)

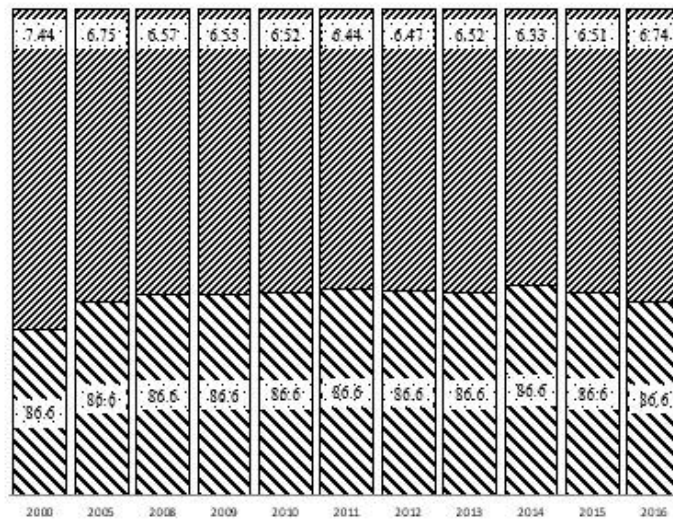


Figure 3: Total area of the country and lands that construction built on, and which excluded from being product turnover

Figure following on the next page

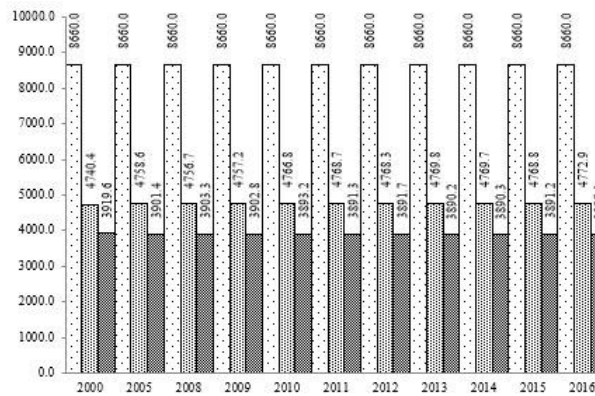


Figure 4: Total area of the country, non-agricultural and land suitable for agriculture

	const	IS	EP	AIC	AF	PA	IMF	MFS	SAAP	R2	F	P- (F)	DW
TCA	-45784,1** (11924,4)	30,731** (8,213)	-	0,769* (0,304)	1,071*** (0,087)	-0,019** (0,006)	-	-23,417*** (3,433)	1,059* (0,496)	0,998	F(6, 5) 425,052	1,33e-06	2,671
TCAP	17982,1*** (17982,1)	-	-12,443*** (3,009)	0,683** (0,242)	0,995*** (0,123)	-0,009 (0,004)	-	-12,421*** (2,719)	-	0,991	F(5, 6) 137,177	4,24e-06	2,552

Note: 1.( Std. Error); 2. \* p<0,05; \*\* p<0,01; \*\*\* p<0,001;

Table 8: Total crop of agriculture depends on chosen factors

TCA - Total crop of agriculture, factual price, million manat

TCAP -Total crop of agriculture, factual price, million manat planting

IS - Irrigated soils, to the end of the year 1000 ha

EP - Engaged population is one thousand

AIC - Agriculture Investment to capital million manat

AF - Agriculture main funds, balance value to the end of the year million manat

PA - Park of main type of agriculture, to the end of the year

IMF - Import of mineral fertilizers, in physical

MFS - To add mineral fertilizers to the sowing, in the account of 100% nutrition things

SAAP - Sowing areas of agricultural plants, on all farm categories 1000 ha

It is clear from the analysis that total crop of agriculture depends on factors chosen by us and which have an effect on it, such as, volume of irrigated soils, agriculture main funds balance value to the end of the year, investment to main capital in agriculture, in other words growth in each of them will cause to growth of general crops of agriculture in the total. However, the use of the engaged population in agriculture as a model is statistically inaccurate and has been removed from the model as an influencing factor. Another interesting phenomenon is associated with mineral fertilizers. Thus, the indicator of the import of mineral fertilizers was statistically unimportant and removed from the model. Besides it, though indicator of adding mineral fertilizers to sowing in agriculture is kept statistically significant in the model, its negative sign (-) is not economically significant. Consequently, one can say that the role of fertilizers in the growth of total crops should be revised again and the use or utilization of these mineral fertilizers should be reduced. The negative sign (-) of the influential factor in the park of the main type of agricultural machinery can be correlated with the inefficient use of many technics. And its impressive coefficient is (0.019). The same can be observed in investigating the effects of factors affecting the overall crop of agriculture in the field of plant growing. Thus, the obtained model here shows that even if the use of the engaged population in the model is statistically significant, its being (-), remove of sowing areas of irrigated soils and agricultural plants from the model for being statistically insignificant can be related to low productivity of engaged population and not using the soil are in efficient way. As indicator of mineral fertilizes import in this model is statistically insignificant, it has been removed from the model. Besides it, though indicator of adding mineral fertilizers to sowing in agriculture is kept statistically

significant in the model, its negative sign (–) is not economically significant. Consequently, one can say that the role of fertilizers in the growth of total crops should be revised again and the use or utilization of these mineral fertilizers should be reduced.

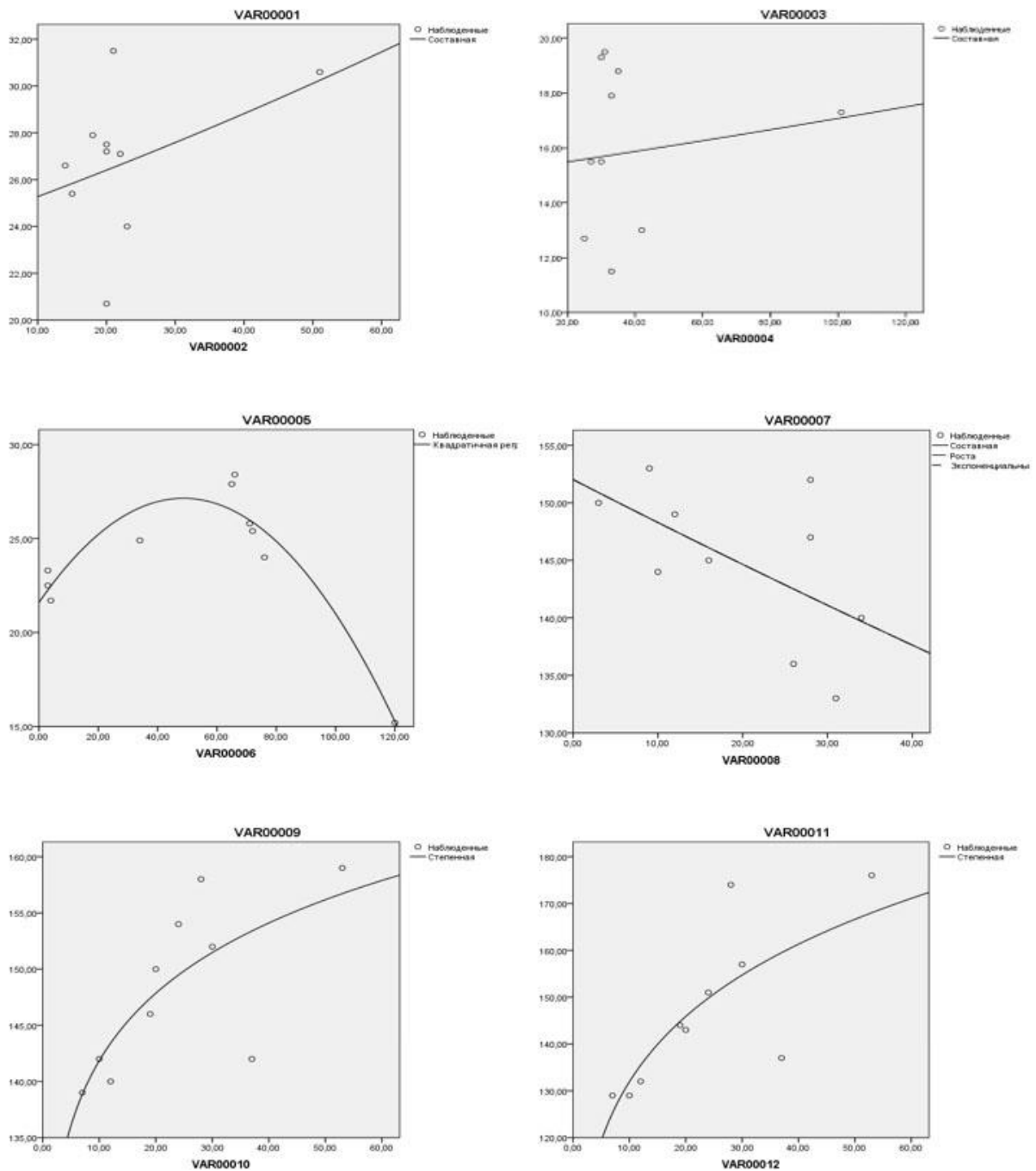


Figure 5: Dependence of the yield of individual crops on the rate of application of mineral fertilizers

Table following on the next page

	const	X	X2	X3	R2	F	P- (F)
Y1	24,19089***	1,00438***	–	–	0,147162	1,380444	0,273809
Compound	(2,20789)	(0,00374)	–	–			
Y2	15,11878***	1,00121	–	–	0,020504	0,167469	0,693108
Compound	(0,00297)	(1,985018)	–	–			
Y3	21,597565***	0,227596***	0,002336***	–	0,899152	31,20557	0,000325
Cubic	0,832877	(0,033397)	(0,000301)	–			
Y4	152,021***	0,997517***	–	–	0,330498	3,949178	0,082121
Compound	(4,230835)	(0,001247)	–	–			
Y5	152,021***	–0,002485***	–	–	0,330498	3,949178	0,082121
Growth	(–0,1463)	(0,001251)	–	–			
Y6	5,024018***	–0,002485***	–	–	0,330498	3,949178	0,082121
Exponential	(0,027831)	(0,001251)	–	–			
Y7	123,60957	0,059771***	–	–	0,552216	9,865741	0,013785
Power	(7,230191)	(0,019029)	–	–			
Y8	94,449321	0,145112***	–	–	0,623563	13,25191	0,006585
Power	(11,572751)	(0,0398625)	–	–		0	

Note: 1.( Std. Error); 2. \* p<0,05; \*\* p<0,01; \*\*\* p<0,001.

*Table 9: Dependence of the productivity of separate agricultural crop*

*Y1 – Grain and leguminous plants*

*Y2 – Cotton*

*Y3 – Tobacco*

*Y4 – Potato*

*Y5 – Vegetable*

*Y6 – Melons and gourds for food*

*Y7 – Sugar beat*

*Y8 – Sunflower as grain*

In the following models, the dependence of the productivity of separate agricultural crop in the indicator of adding of mineral fertilizers has been studied and concluded that there is no close relationship between them. This can be proved in with coefficients in graphs and models that are clearly visible.

## 5. CONCLUSION

Based on the research conducted, it is advisable to give the following conclusions according to the analysis of the wide range of studies conducted in the Republic in terms of assessing the level of supply of mineral and organic fertilizers in the country. It shall be deemed expedient joint application of mineral and organic fertilizers on the basis of the norms established on the basis of soil samples. If other main intensification factors of chemicalization agriculture production are realized with melioration and complex mechanization, the expected outcome can be achieved. Complex measures should be implemented to grow up fertility and to preserve the soil, among which the followings are important:

- to conduct analysis in order to supply soil with nutrient materials and to make cartogram according to the results, to deliver to producers;
- to conduct analysis in order to supervise influence of fertilizers, forage and planting production to the quality, to study remnants of nitrate in soil suitable for sowing;
- to prepare measure plans according to the results of analysis in order to increase complex fertility of soil.
- 

Thus, it is necessary to decrease mineral fertilizers considerably in agriculture and to expand use of organic fertilizer by giving wide place to organic agricultural crop production.



**LITERATURE:**

1. Adanacioglu, H. and A. Olgun, 2012. Evaluation of the efficiency of organic cotton farmers: a case study from Turkey. *Bulg. J. Agric. Sci.*, 18: 418-428
2. Altarawneh M., 2016. Determine the barriers of organic agriculture implementation in Jordan. *Bulg. J. Agric.Sci.*, 22: 10–15 Lord Northbourn. Look to the Land / Lord Northbourn. - Sophia Perennis et Universalis, 2003, - 128 p.
3. Alzaidi, A. A., M. B. Baig and E. A. Elhag, 2013. An Investigation into the Farmers' Attitudes towards Organic Farming in Riyadh Region – Kingdom of Saudi Arabia. *Bulg. J. Agric. Sci.*, 19: 426-431
4. Angelova, V. R., V. I. Akova, N. S. Artinova and K. I. Ivanov, 2013. The effect of organic amendments on soil chemical characteristics. *Bulg. J. Agric. Sci.*, 19: 958-971
5. Antunovi C, Z., T. Klapec, S. Cavar, B. Mioc, J. Novoselec and Z. Klir, 2012. Changes of heavy metal concentrations in goats milk during lactation stage in organic breeding. *Bulg. J. Agric. Sci.*, 18: 166-170
6. Atanasova, R., L. Hadjinikolova and L. Nikolova, 2008. Investigations on the biochemical composition of carp fish (*Cyprinidae*) blood serum at conditions of organic aquaculture. *Bulg. J. Agric. Sci.*, 14: 117-120
7. Balfour E.B, 1948. The Living Soil / E.B. Balfour. - London: Faber and Faber LTD, - 223 p.
8. Bavec, M., F. Bavec, M. Jakop, S. G. Mlakar and M. Fekonja, 2015. Productivity of sweet maize (*Zea mays L. Saccharata*) and nitrogen supply affected by cultivation systems in non-typical maize climate. *Bulg. J. Agric. Sci.*, 21: 791–800
9. Benchasri, S. and C. Bairaman, 2010. Evaluation of yield, yield components and consumers' satisfaction towards yardlong bean and cowpea in agricultural organic system. *Bulg. J. Agric. Sci.*, 16: 705-712
10. Biao Xie, Wei Jiang and Hao Yang, 2011. Growth performance and nutrient quality of Chinese Shrimp *Penaeus chinensis* in organic polyculture with razor clam *Sinonovacula constricta* or hard clam *Meretrix meretrix*. *Bulg. J. Agric. Sci.*, 17: 851-858
11. Caffey, R. H. and R. F. Kazmierczak, 1994. Factors Influencing Technology Adoption in a Louisiana Aquaculture System. *Journal of Agricultural and Applied Economics*, 26 (1): 264-274.
12. Campbell, H., J. Fairweather and D. Steven, 1997. Recent Developments in Organic Food Production in NZ: Part 2, Kiwifruit in the Bay of Plenty. Studies in Rural Sustainability, Research Report No 2, Department of Anthropology, Otago University.
13. Ciric, V., M. Manojlovic, Lj. Nestic and M. Belic, 2013. Soil organic carbon loss following land use change in a semiarid environment. *Bulg. J. Agric. Sci.*, 19: 461-466
14. De Souza M. F., T. Young and M.P. Burton, 1999. Factors Influencing the Adoption of Sustainable Agricultural Technologies. Evidence from the State of Espirito Santo, Brazil. *Technological Forecasting and Social Change*, 60: 97–112.
15. Gubatov, T., N. Tsenov and I. Yanchev, 2017. Correlation between the ranking of winter wheat genotypes by grain yield and stability through various statistical approaches. *Bulg. J. Agric. Sci.*, 23 (1): 92–101
16. Henning, J., L. Baker and P. J. Thomassin, 1991. Economics issues in organic agriculture. *Canadian Journal of Agricultural Economics*, 39: 877- 889.
17. Howard, A. 1943. An Agricultural Testament [Electronic source] / A. Howard. - New York and London: Oxford University Press, - System requirements: Adobe Reader.URL: <http://www.zetataalk3.com/docs/Agriculture/An Agricultural Testament 1943.pdf>.
18. Howard, A. The Soil and Health. A Study of Organic Agriculture / A. Howard. - The University Press of Kentucky, 2007. - 356 p.

19. Keskin, G., F. Fusun Tatlidil and I. Dellal, 2010. An analysis of tomato production cost and labor force productivity in Turkey. *Bulg. J. Agric. Sci.*, 15: 692-699
20. Kuhar, A. and L. Juvancic, 2010. What determines purchasing behaviour for organic and integrated fruits and vegetables? *Bulg. J. Agric. Sci.*, 16: 111-122
21. Lampkin, N. H., 1997. Organic livestock production and agricultural sustainability. Proceedings of 3rd ENOF Conference, Italy, 5-6 June, pp. 71-88.
22. Lampkin, N., S. Padel and C. Foster, 2001. Entwicklung und politische Rahmenbedingungen des ökologischen Landbaus in Europa. (Development and policy environment for organic farming in Europe.) *Agrarwirtschaft*, 50 (7): 390-394
23. Lanfranchi, M., C. Giannetto, T. Abbate and V. Dimitrova, 2015. Agriculture and the social farm: expression of the multifunctional model of agriculture as a solution to the economic crisis in rural areas. *Bulg. J. Agric. Sci.*, 21: 711–718
24. Lockeretz, W., 1995. Organic farming in Massachusetts: an alternative approach to agriculture in an urbanized state. *Journal of Soil and Water Conservation*, 50 (6): 663-667.
25. Lund, V. and B. Algers, 2003. Research on animal health and welfare in organic farming – a literature review. *Livestock Production Science*, 80: 55-68.
26. Manolova, V., S. Kostadinova and I. Manolov, 2014. Economic efficiency of fertilization and its residual-effect during conversion period to organic field crop production. *Bulg. J. Agric. Sci.*, 21: 1022-1026
27. Mihov, M., G. Antonova, S. Masheva and V. Yankova, 2012. Energy assessment of conventional and organic production of head cabbage. *Bulg. J. Agric. Sci.*, 18: 320-324
28. Mitova, I., N. Dinev and V. Vassileva, 2014. Effects of mineral and organic fertilization on early potato production. *Bulg. J. Agric. Sci.*, 20: 1182-1188
29. Moran, D., A. McVittie, D. J. Allcroft and D. A. Elston, 2007. Quantifying public preferences for agri-environmental policies in Scotland: A comparison of methods. *Ecological Economics*,
30. Nacheva, E., S. Masheva and V. Yankova, 2015. Agrobiological response of early potato breeding lines and varieties in biological production. *Bulg. J. Agric. Sci.*, 21: 618–623
31. Nacheva, E., S. Masheva and V. Yankova, 2015. Agrobiological response of early potato breeding lines and varieties in biological production. *Bulg. J. Agric. Sci.*, 21: 618–623
32. Nestic, Lj., M. Belic, L. Savin, V. Ciric, M. Stefanovic and M. Manojlovic, 2014. Effect of organic production on soil structure. *Bulg. J. Agric. Sci.*, 20: 1168-1174
33. Nikolich, L., D. Dzigurski, B. Ljevnaich-Masich, R. Cabilovski and M. Manojlovich, 2011. Weeds of lettuce (*Lactuca sativa* L. subsp. *Secalina*) in organic agriculture. *Bulg. J. Agric. Sci.*, 17: 736-743
34. Offerman, F. and H. Nieberg, 1999. Profitability of Organic Farming in Europe. Institute of Farm Economics and Rural Studies, Federal Agricultural Research Centre, Braunschweig, Germany
35. Oxouzi, E. and E. Papanagiotou, 2010. Comparative analysis of organic and conventional farmers and their farming systems. Where does the difference lie? *Bulg. J. Agric. Sci.*, 16: 135-142.
36. Oxouzi, E. and V. Bagiatis, 2012. Organic farming - what is going on in Europe? *Bulg. J. Agric. Sci.*, 18: 263-271
37. Pacini, C., A. Wossink, G. Giesen, C. Vazzana and R. Huirne, 2003. Evaluation of sustainability of organic, integrated and conventional farming systems: a farm and field-scale analysis. *Agriculture, Ecosystems and Environment*, 95: 273-288.
38. Roversi, Al., 2016. Observations on hazelnut organic farming. *Bulg. J. Agric. Sci.*, 22: 171–175
39. Rigby, D. and D. Caceres, 2001. Organic farming and the sustainability of agricultural systems. *Agricultural Systems*, 68: 21-40.

40. Stuogė, I., V. Ribikauskas, D. Ribikauskienė, R. Juodka and Z. Jomantas, 2016. Estimation of beef and dairy cattle welfare in organic farms of Lithuania. *Bulg. J. Agric. Sci.*, 22: 477–481
41. Sundrum, A., 2001. Organic livestock farming – A critical review. *Livestock Production Science*, 67: 207-215
42. Terziev, V. and E. Arabska, 2016. Sustainable rural development through organic production and community-supported agriculture in Bulgaria. *Bulg. J. Agric. Sci.*, 22: 527–535
43. Thakur, N., 2016. Lycopene quantification of tomato by SPE and HPLC. *Bulg. J. Agric. Sci.*, 22: 84–90
44. Tsvetkov, I., T. Dzhambazova, V. Kondakova and R. Batchvarova, 2014. Mycorrhizal fungi *Glomus* spp. and *Trichoderma* spp. in viticulture (review). *Bulg. J. Agric. Sci.*, 20: 849-855
45. Wrzaszcz, W., J. S. Zegar and K. Prandecki, 2015. Soil fertility and economic efficiency – the case of Polish agriculture. *Bulg. J. Agric. Sci.*, 21: 467-478
46. Yovchevska, P., 2015. Organic production: an opportunity for the family farmers and small producers in Bulgaria. *Bulg. J. Agric. Sci.*, 21: 1123–1127
47. Вальков В.Ф. Почвенная экология сельскохозяйственных растений.-М: Агропромиздат, 1986. 208 с
48. Гасанов Х.Н. Климат, почвы и биологический круговорот веществ. Изд-во“Элм”, Баку, 1980, 175 с
49. Палкин, Г. Экологическое сельское хозяйство в Беларуси / Г. Палкин // Белорусское сельское хозяйство. - 2008. - № 10. - С. 20-22.
50. Мамедов Р.Г. Агрофизические свойства почв Азерб. ССР. Баку, “Элм”,1988, 244 с
51. Фукуока, Масанобу. Революция одной соломинки (Введ. в натур. земледелие: пер. с англ.) / М. Фукуока. - М.: Аккоринформиздат, 1993. - 119 с.

## **FOOD SECURITY IN STATE PROGRAMS OF AZERBAIJAN (FOR EXAMPLE OF THE MAJOR CAUCASUS)**

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### **ABSTRACT**

*Food security is an issue of high strategic importance for a country. Providing food security makes necessary the increase in output of various subsectors of agriculture, the efficient territorial regulation of this economic sector as well as sustainable development of the agro-industrial businesses with benefiting international experience. The mentioned problems are very topical for the Republic of Azerbaijan in condition of low territory area of arable lands per capita and increasing demand of the population for foodstuffs, while needs in foodstuff are not completely met in the country. This article deals with the analysis and substantiation of the necessity in strengthening food provision, increasing of food supply capacity and the issues of transformation of the food market on the example of the Major Caucasus region of Azerbaijan. The aim of the article is to define priorities of food supply policy, with taking into account the current situation present in the food market. To define the mentioned, statistic data on quantity indicators of the agrarian sector and food supply are used, on the basis of which the situation analysis is conducted. The state documents accepted on agriculture and food supply are stated. Particular emphasis is laid on livestock products supply. It is concluded that the formation of a healthy farming business environment eligible to provide economic relations must be considered as one of the main tasks. Regulation of economic, social and environmental processes that must ensure sustainable development trends should be put as a target as well. It is very important also to establish a system of food safety and quality control, with taking into account international experience. Also, strengthening of trade relations based on free market principles is needed.*

**Keywords:** *Major Caucasus, agriculture, food market, agro-industrial, livestock, food security*

### **1. INTRODUCTION**

Political and economic stability of a country, as well as healthy lifestyle of population is linked directly to the food security. The level of food security ties to the situation in a market, the level of development of agricultural areas, and the feasibility of providing population with foods. The solution of the problem of food supply and food security is associated with satisfying the needs of the agricultural sector, especially the daily food products, the development of agrarian complexes, as well as the high content of proteins, oils, carbohydrates and other nutrients in composition of meat, milk and dairy products. Food market is formed under the influence of transformational changes by serving the needs of the population for food products. The demand and supply-based food market promotes the economic relations between producers and consumers and also economic stability of a country and social sustainability. In Azerbaijan, a number of measures on regulating the food market have been implemented following the

economic reforms led during the current stage of formation and development of new market relations. Relatedly, the material and technical base has been strengthened, and facilities of processing, storage and sales of food products have been established as well. However, current domestic agroindustry does not satisfy the demand for food completely. In order to eliminate the problem, issues of transformation of the food market must be explored scientifically. The means of increasing capacity of food supply reliability must be identified. Following the decree “On State Support to Agricultural Products Consumers”, dated to January 23, 2007 and signed by the President of the Republic of Azerbaijan, growth in the production of agricultural products is recorded.

## **2. ENSURING FOOD SECURITY IN GOVERNMENT PROGRAMS**

Domestic economic policy of a country targets ensuring economic security as the most urgent task. The essence of economic security is that the demand for food and light industry products is to be met at the expense of domestic production, the branchial structure of the economy structure must be regulated, and the economic and financial dependency from export must be reduced [3, pp. 486-487], since ensuring food security is a vital for the progress of a country. During the transitional period of Azerbaijan, there was a big need for producing quality food products and meeting relevant needs of consumers to achieve food abundancy, overcome the dependency on foreign agricultural markets and ensure food security [6]. Agrarian reforms have been implemented and new economic subsectors have been established in the regions of the country by using various forms of ownership (public, municipal and private) to achieve modernization of agricultural areas and productivity, make agricultural production more sustainable, and meet the population’s demand for food products at the expense of domestic output [4]. This has resulted in significant changes in the socio-economic development of the regions during the independence period of the Republic of Azerbaijan, and allowed create and extend new manufacturing areas. The new stage was favorable in terms of the development of traditional agrarian industries in the regions and material and technical base of them has been improved thanks to scientific and technical achievements. Efficient use of labor resources ensured increasing of employment rate and enhancing the well-being of the population. The issue of providing population with necessary foodstuffs is one of the main problems of social development [7]. Thus, under current conditions the minimum level of consumption norms is satisfied at the expense of imported products. Improving food security at current period is achievable in condition of setting and developing new ownership relations and strengthening the manufactural and economic relations. As we propose, strengthening of the material-technical base of the agro-industrial enterprises operating in the Major Caucasus region is an important means that may allow increase the effect of the public labor division, meet the needs of the population for food products at the expense of domestic production, make quality food products achievable and solve urgent socio-economic problems. As a result of the privatization policy implemented in Azerbaijan at the early years of independence period, many enterprises were forced to suspend their activities because of disrupted economic relations, and some others failed to assess properly the macroeconomic situation and could not set traditional manufactural and economic relations, as a result of which industrial complexes lost their opportunities of interacting with new formed production facilities [8]. However, on May 16, 2000, the Law of the Republic of Azerbaijan “On Privatization of State Property” was endorsed, according to which, the organizational, economic and legal basis of privatization of state-owned property was identified. The main objective of the privatization of state-owned property is to widen the efficiency of entrepreneurial activity, form competitive environment, increase the efficiency of non-oil sector through involving both domestic and foreign investments, improve the structure of national economy, and contribute to level of living and economic activities. The Azerbaijani government puts into reality the large-scale state programs aimed at meeting the population’s

demand for food products and developing areas directly linked to food security. Most important of them are The State Program on Socio-Economic Development of the regions of the Republic of Azerbaijan in 2004-2008, 2009-2013 and 2014-2018 years, State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015, and State Program on Reliable Provision of Food Products in the Republic of Azerbaijan for 2008-2015. As the result of the implementation of these programs, considerable growth in food production has been provided in the country's regions. Relatedly, a lot of activities on improving the agricultural subsectors have been realized to meet the population's demand for food products at the expense of domestic production. Following the implementation of measures on providing competitive manufacturing as well as economic stability in the country's regions in 2009-2013, the cooperation relations in the agrarian sector were strengthened, and new enterprises producing various food products were commissioned. Thus, beside with developing farms, food-producing enterprises and agroservices in Absheron economic region, series of measures have been implemented in other economic regions, including fostering of nut, hazelnut and also livestock products in Sheki-Zagatala, developing of fruits, vegetables and also poultry production in Guba-Khachmaz, improving of livestock production and processing of livestock products in Mountain Shirvan economic region. This has led to the decline in imports of foodstuffs from other countries and the strengthening of competition in domestic market. Technological reestablishment of production at the existing industrial enterprises is reflected among the targets of State Program on the development of agrarian sector aimed at producing high-quality, export-oriented and competitive food products in 2014-2018 years. It is planned to foster the production and processing of raw materials in the agrarian sector, encourage the development of traditional areas of farming, increase production of quality- and environmentally friendly products, raise the regions' capacity of self-sufficiency in food products. In accordance with principles of regional development, the implementation of state programs has led to the formation of a national agrarian market, increased employment among the regions' population and improvement of branch structures of agro-industrial complexes, and also the creation of new processing and service facilities in agricultural production [9]. These programs are being implemented compliant to the market principles of economic systems based on long-term and sustainable development strategies. Relatedly, the raw material market is regulated, and the growth trend in the production of agro-industrial enterprises is observed as well. These programs include the creation of an optimal balance between agricultural industries and other key sectors of the economy, the production of quality products, certification, strengthening of market regulation, the specific approaching to the financial and loan mechanism and the implementation of an effective foreign trade policy. The main measures of the "State Program of Socio-Economic Development of Regions in the Republic of Azerbaijan for 2008-2015" were aimed at the elimination of unemployment in the regions, improvement of living and economic activity of the population and provision of food security. Solution of these problems is a key factor in the development strategy of the agrarian sector, and therefore must contribute to the capacity of this sector. The State Program (2008-2015) mentioned above concerned also investing activity in the agrarian sector of Azerbaijan to elevate its level at up-to-date requirements. This policy envisaging also buying of latest technologies from abroad was of great importance in terms of food security in the country's regions as well. The State Program on Reliable Provision of Food Products in the Republic of Azerbaijan for 2008-2015 has created favorable conditions for the development of agricultural areas as well as growth in agricultural crops in the regions [2]. The main purpose of this program included the following:

- achieving full provision of the population with foods in line with the norms adopted for a healthy lifestyle of a country's citizen;
- continuously undertaking measures on full satisfaction of the demand for food products;

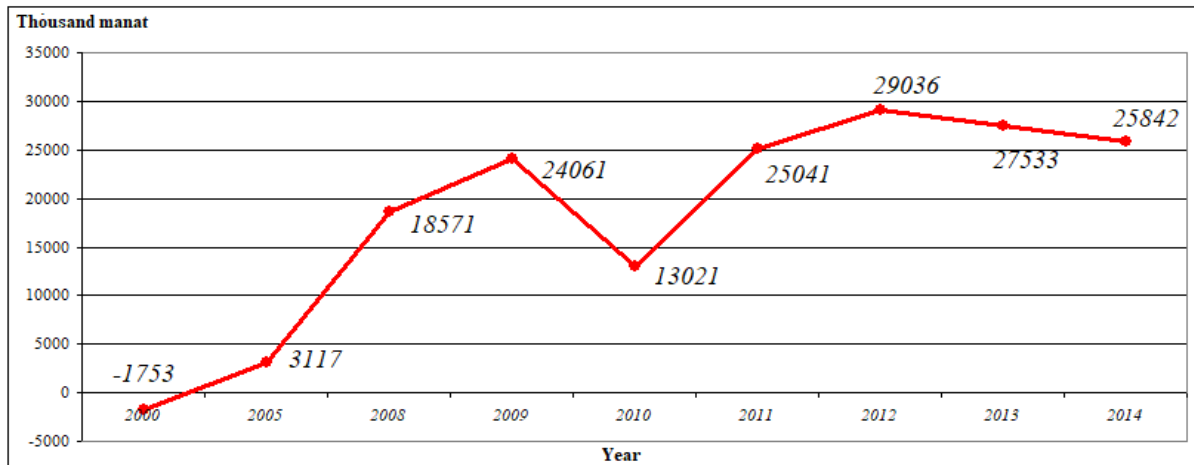
- increasing food production in the country, as well as meeting the demand for food products at the expense of domestic production;
- providing population with safe and high quality food products.

### **3. THE IMPORTANCE OF INVESTMENT AND THE VOLUME OF INSIDE PRODUCTION IN FOOD SECURITY**

Satisfying the demand for food products in the Republic of Azerbaijan as much as possible at the expense of local production, lowering the dependence on imports, providing the consumer market with quality products, creating of food markets in the regions etc. are reflected in the above-mentioned state programs. This is because the economic, social and ecological-geographical parameters of food security are considered to be one of the conceptual problems of the modern era. In general, despite the fact that some positive trends by livestock take place due to the implementation of agrarian reforms under the state programs in recent years, the growth in this area is not fully compliant to the real demands. At present, a number of countries in the world widely practice using of various chemicals, food supplements, substitutes etc. to increase foodstuff, whereas it is a serious threat to human health [5]. From this view, it is necessary to achieve comprehensive development of the regions to reduce the import of foodstuffs and meet the domestic demand for agricultural products. The mentioned has found its reflection in the governmental programs as well, where the necessity of satisfying food security in accordance with the physiological food standards, as well as the regulation of production and consumption of foodstuffs is stated. In recent years, the government of Azerbaijan has implemented a number of investment projects to strengthen the competitiveness of domestic production and increase the export potential. Under these projects, one-time payments from the state budget have been made with the purpose of improving the output and quality in agrarian sector. Also, the mechanisms of intensive development of agricultural subsector have been identified, and measures have been taken to expand the sowing areas. Consequently, since 2000, growth trends by production of some crops are recorded. The main task in the agriculture is to meet the population's demand for food products as well as satisfy the growing needs of industry for raw materials. In recent years, agricultural branches in the territory of the Greater Caucasus have seen considerable growth like by the overall country. This growth finds its reflection also by revenues from the sale of agricultural products. Incomes from the sale of livestock products has been increased as much as 25.8 million AZN in 2000-2014 due to implementation of state programs with success. Foodstuff produced in the Major Caucasus part of Azerbaijan satisfies the domestic demand and also may have export importance, since some part of those products are exported to the Russian Federation. Analysis of incomes from the sale of agricultural products in Azerbaijan shows that negative balance in sales of agricultural crops was fixed in 2000, and by other years mainly trend of increase and in part decrease were observed. At current, developing of new projects as well as large-scale the governmental measures on agrarian sector are underway.

*Figure following on the next page*

Figure 1: Incomes (damages) from sale of livestock products in the Republic of Azerbaijan, in thousand manat



Source: Agriculture of Azerbaijan, 2014. The yearly bulletin of State Statistical Committee of Azerbaijan

In 2016, 26.5% of all sales from agricultural production was accounted by Major Caucasus region. Major part of the agricultural production is shared by Shabran, Siyazan, Khachmaz, Guba, Gusar, Khyzy, Zagatala and Sheki administrative regions. Processing enterprises of the mentioned regions have both regional and national importance.

Table 1: Number of domestic animals and production of livestock products in Major Caucasus region

	Years		Decrease (–) and Increase (+), in percent
	2000	2016	
Number of domestic animals			
Cattle	239712	296819	+23,8
Buffalo	37323	19779	-47,0
Sheep	1705934	2106051	+23,4
Goat	178288	172199	-3,4
Pig	16635	3934	-76,4
Poultry	6909753	9333549	+35,1
Production of livestock products			
Meat (chopped), ton	31099	85144	+178,8
Milk, ton	293718	511237	+74,1
Wool (in physical weight), ton	3409	4462	+30,9
Egg, million unit	161973	539084	+232,8

(Source: Agriculture of Azerbaijan, 2016. The yearly bulletin of State Statistical Committee of Azerbaijan)

Increase in the output of livestock was achieved considerably due to the growth in number of cows, sheep and poultries. Thus, analysis shows that growth in number of eggs rose by 232.8%, while meat was increased by 178.8%, milk by 74.1% and wool by 30.9% as much (Table 1). The quantity factor has played a significant role in terms of meeting the daily needs of the population for livestock products. The Major Caucasus region is distinguished among other parts of the country for growth rate. New food and light industry enterprises have been commissioned here, which can be viewed as an incentive for the further development of livestock.



#### 4. CONCLUSION

Activities conducted on providing food security can be highly appreciated though, however, the complete realization of the tasks under the programs has not been achieved. In this regard, to define priorities of food security and also encourage the agricultural production in the Major Caucasus region, it is advisable to put into reality the followings:

- Formation of a healthy farming business environment eligible to provide economic relations;
- Regulation of economic, social and environmental processes that must ensure sustainable development trends;
- Establishment of a system of food safety and quality control, with taking into account international experience;
- Strengthening of trade relations based on free market principles.

Analysis of the situation present in the production of most important livestock products (meat, milk and eggs) per capita, with taking into account the daily and annual physiological standards of the World Health Organization, shows that satisfying the minimum needs of the population for foodstuff in the Major Caucasus region is an urgent factor on the way of solving social problems of countryside.

#### LITERATURE:

1. Agriculture of Azerbaijan. (2015). Yearly bulletin of State Statistical Committee of the Azerbaijan Republic. Baku: SE No. 9. 671 p.
2. Ahmadov G.A. (2006). Creation of system of innovation development in the agrarian sector of Azerbaijan. Baku: Nurlan. 125 p.
3. Aliyev B.H., Aliyev I.N. (2004). Some problems of agriculture and way of their solution in Azerbaijan. Baku: Ziya-Nurlan, p.571
4. Boyko I.P. (1986). Problems of sustainability of agricultural production. Leningrad: Leningrad State University, 169 p.
5. Eminov Z.N. (2005). Population of Azerbaijan. Baku: Chirag, 560 p.
6. FAO Statistical Pocketbook World food and agriculture, 2015., (2015), Rome, p. 231.
7. Hajiyev Y.Z. (1970). Bases of intensification of agriculture. Baku. p. 196
8. Hasanova A.S. (2007). Agrarian reforms and socio-economic development. Baku: Ganun, p. 128
9. Huseynov M.J. (2006). Problems of sustainable development of agrarian sector. Baku: Nurlan, p.304
10. State Programme on reliable food supply of population in the Azerbaijan Republic (2008-2015). (26 August, 2008), The newspaper of “Respublika”, Baku: No. 189 (3324).
11. The Law of the Republic of Azerbaijan “On land reforms” of July 16, 1996. Baku.

# THE EFFICIENT PREPARATION OF MECHANISM OF BUSINESS PLANS BY USING PRICING CRITERIA IN THE APPLICATION OF INVESTMENT STRATEGIES IN THE INTERNATIONAL CAPITAL MARKET

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## **ABSTRACT**

*In this article, by using pricing criteria in the formulation and modernization of investment strategies, the differentiation of the decisions about mechanism of the preparing business plans and feasibility of any project and its ability to attract to investment and the capital investment for the evaluation of investment opportunities, the ways of using the hierarchical system of the world existing economic relations in the efficiency of investments and the analysis of methodological advice on efficiency were conducted. The calculations of different budgets in terms of commercial of financial results of the project of the commercial efficiency of investments and in terms of budget efficiency, in the context of economic efficiency, the efficiency of the accounting of the expenses and results beyond the financial interest of participants were identified and by identifying the problem of the estimation of the efficiency of investments by the methods which don't into account the time factor, the mechanism of use indicators was defined, the analysis of the compilation of the business plan was carried out.*

**Keywords:** *securities, investment strategy, financial instruments, commercial efficiency, net discounted income, project risk accounting*

## **1. THE PROBLEM OF ASSESSING THE EFFICIENCY OF INVESTMENT IN THE INTERNATIONAL CAPITAL MARKET**

As we know, financial assets invested in real assets or securities should be based on two principles:

- 1) Full payment of the deposit;
- 2) Replacement of shortcomings related to temporary disbursement of earned income and funds.

The decision to facilitate a specific project must be implemented based on its ability to attract investment. To assess the affordability of investment, a number of experts recommend differentiating capital investments:

- 1) Economic efficiency of capital investments;
- 2) Social (environmental) efficiency of capital investments.

The hierarchical system of world economic relations has led to the division of investment efficiency. The types of efficiency are reflected in the methodological advice: Commercial (financial) efficiency - calculation of financial results of the investment project (for direct participation); Budget efficiency - Accounts (expenses and results) in favor of various budgets (state, regional, local); Economic efficiency - accounting of costs and results beyond the direct financial interests of the participants. The problem of assessing investment efficiency is not new to local experts. But for a long time, methods that did not take into account the time factor were used, that is, the following indicators were used:

## 1) Comparative Economic Efficiency E:

$$E = \frac{C(1) - C(2)}{I(2) - I(1)} \quad (1)$$

Here: C (1), C (2) - product cost (unit before and after investing). I (1), I (2) - capital investments (old and new). This indicator was used in these cases: when old equipment was replaced and new buildings were not justified. In this case, it is recommended to use production indicators (same-production) as a benchmark. Estimation of E is less than the norm of relative normative efficiency (should be less than E). When considering projects that are mutually exclusive, the biggest (overdue) option with E.

## 2) Minimum cost indicator:

$$C + E_{\text{норма}} * K = \min \quad (2)$$

Here: C - current expenses, money, vision. K- Simultaneous expenses (capital investments). E norm - normative indicators of efficiency of capital investments. Consequently, the current expenditure and total capital expenditure, shown in the same amount as the benchmarks for efficiency, is the same as the standard efficiency indicators.

## 3) Maximum Income Indicator (P):

$$P - E_{\text{норма}} * K = \max \quad (3)$$

Existing methods (methods of investment efficiency) can be divided into 2 groups:

1. Simple or statistical;
2. Complex or dynamic.

The calculation of the maturity of an investment can be attributed to simple methods of assessing the effectiveness of the investment. Investment self-repayment is defined as a period of time, and the first deductions from net income are understood. Thus, the firm's operating income over the estimated period covers its investment costs. The main advantage of this method is the simplicity of the calculation. Therefore, this method is often used as the simplest but most rigorous method (investment risk assessment method). However, this method has its disadvantages: the normative term of self-repayment may be subjective; the profitability of a project beyond self-repayment, that is, this method that can be used to compare projects with the same self-repayment term, cannot be used in new product development projects, and the accuracy of this method depends on the frequency of project life intervals; this method is "statistical", that is, does not take into account the time value of money. For example: the main disadvantage of the self-repayment indicator is that it does not take into account the life of the investment and thus returns outside its circle are not affected. Needless to say, this index can be used to limit the decision-making process rather than to the selection. The price calculated by the simple rate of return should be the same as the percentage of return on equity. This estimate shows how much investment costs are deducted during a planning interval. When comparing the rate of return with the minimum or average income level, the investor decides whether to analyze the future investment project. Despite the simplicity of the calculation, this method has its drawbacks: the value of future income is not taken into account; there is a great deal of dependence on net income for comparison; During the whole period, the rate of income

accrual plays a medium role [2 page.49.]. Criteria for the average accounting standard are as follows: comparing average earnings (after depreciation and amortization) with average investments (acquisition of fixed and working capital) It is good. The project with the highest average accounting standard is selected. This norm can be compared with the rate of return on an enterprise (if it operates) or in any industry. From a computational point of view - this method is very simple. But here are some disadvantages: take into account the alternative cost of money or the timing of earning; income from liquidation of old assets is not taken into account. Although this method is beyond the self-help method, it is used to identify project defects. The investment project must always take into account the future and the funds invested in the project must be effective. Therefore, project specialists are interested in the cash flow dynamics (graphs). It is important to remember that cash income is currently low.

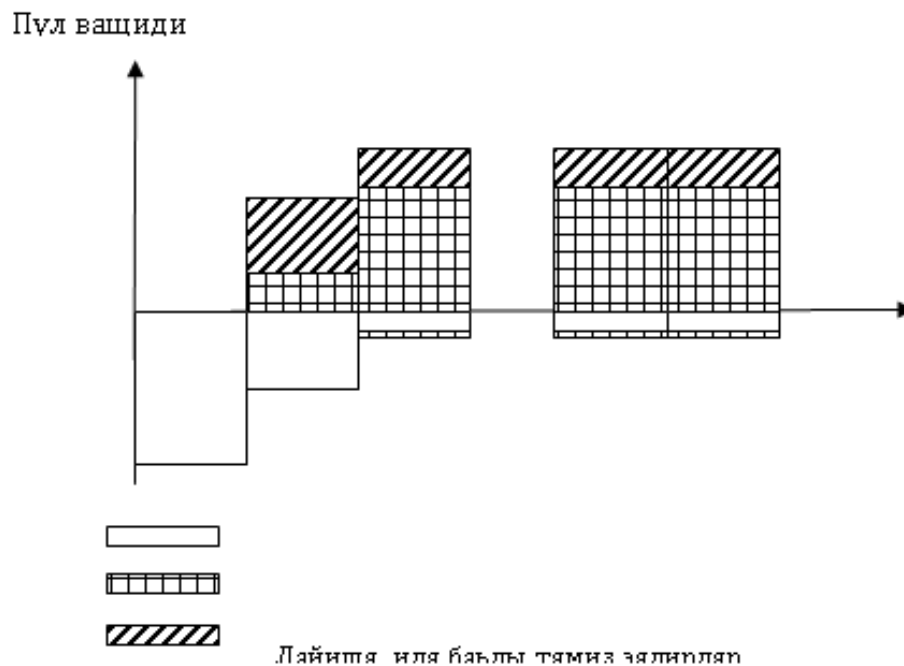


Figure 1: Schedule of Net Cash Flows (currency, time, project expenditures and project incomes)

Tariff rates (as indicated in figures) can play a role in the value of time. Due to the use of discount rates, this tariff is called the discount rate, which indicates the change in monetary value per unit of time. If the discount rate is  $r$ , the value of the amount of  $m$  brought to the present time after  $t$  is calculated as follows:

$$M(0) = M(t) \frac{1}{(1+r)^t} \quad (4)$$

When examining this formula, it becomes clear that when evaluating a project with a discount criterion, real income is less than when evaluating a non-discount criterion. As a result of the advancement of expenditures (by time), it is precisely that the income is discounted and therefore the income is reduced. Discounting is used to calculate project effectiveness to avoid uncertainty and the impact of data scarcity. The study of the project shows that interest rates are neither significant nor important. Although it is a risk factor for foreign investment, it is important to study each indication for accurate projections and project research. Inflation, alternative capital handling, risk and uncertainty have a significant impact on tariff rates.

They can be expressed as follows:

$$r = IR + MRR * RI \quad (5)$$

Here: IR- Inflation copy, MRR - The real minimum rate of return, RI- Interest rate, taking into account the degree of investment risk.

## 2. APPLICATION OF RISK RATE IN THE INTERNATIONAL CAPITAL MARKET

When working with a specific project, you can take a credit interest rate as the starting price of the risk rate. If there is no information on this, then you can take bank rates as the rate. In other words, it is not possible to include tariff rates for project analysis. It should be taken into account that in banking practice (market economy), the rate (or discount rate) for equity is determined by the deposit interest rate. If all capital is withdrawn, the (deposit) interest rate is equal to the relevant percentage. This percentage is determined by the percentage given and the withdrawal of the deposit. This interest rate can be taken as the average interest rate of a long-term bank loan. Generally, when capital is mixed, the interest rate can be calculated as the average cost of capital. - WACC (Weighted Average Cost of CAPITAL). In other words, if you have such capital, if the value of each (after tax) equals  $E_i$ , and the total share capital is  $A_i$ , then the rate ( $i=1,2,n\dots$ ) will be calculated as follows:

$$q = \sum_{i=1}^n \frac{E_i}{A_i} \quad (6)$$

Western companies use this formula to calculate tariff rates:

$$WACC = Wd * Rd + Wp * Rp + Ws * Rs \quad (7)$$

WACC- The weight of each source is the total investment.  $Wd * Rd$ - Interest rates on loans attracted.  $Wd * Rp$  - Interest paid on preferred shares.  $Ws * Rs$  - Private equity income.

According to these fundamental principles, an investment project can be adopted:

1. accounting of time value of money;
2. accounting for alternative expenses;
3. project risk reporting;
4. possible changes to the project parameters;
5. accurate and consistent reflection of inflation.

When choosing an investment project, the time value of money may be that it is more profitable than the two projects with the same value. In the course of the project consideration, revenues not invested (projected) by the enterprise must be taken into account. The application of an alternative value-based principle means avoiding project costs. Any investment project is a risky investment because any uncertainty about future income creates a risk. In addition, project calculations are based on real income and expenditure rather than on account transfers. This can be done based on real and nominal prices. Discounting reasons: NPV (Net Present Value) - net discounted income - T.D.G. - IRR (Internal Rate of Return) - Internal Rate of Return - RDN. PBP (Payback Period) - Payment period. PI (Profitability Index) is an index of income.

Net present discounted income is calculated as the difference between all the cash inflows and project implementation costs = NPV. Let us assume that B and C are the resulting values of project revenue and output:

$$B = \sum_{t=1}^T \frac{b(t)}{(1+r)^t}, \quad C = \sum_{t=1}^T \frac{c(t)}{(1+r)^t} \quad (8)$$

Here: b (t) - comes from the term t, c (t) - Expenses from t, r is a discount rate that reflects the time value of money, t - (1 ... T) time duration. In this case, the net discounted income is as follows:

$$NPV = B - C = \sum_{t=1}^T \frac{b(t)}{(1+r)^t} - \sum_{t=1}^T \frac{c(t)}{(1+r)^t} \quad (9)$$

For the appropriateness of project evaluation and analysis, it is necessary to calculate the dependence of NPV on the discount rate, as the impact of discount rate (interest rate r) on NPV is very high. This issue illustrates the project's individual impact on cash flow. According to the author of the project, this criterion has a greater authority than others. The disadvantages of NPV are: complexity of calculations; lack of accounting for capital efficiency; the impossibility of contracting the same net discounted income or projects with different capital capacities; no cost accounting (including initial); have the ability to attract 2 different projects with the same NPV, although the costs of one are less than that; inability to allocate resources due to the importance of projects in limited space. The criterion of "internal profitability rate" is IRR discount rate. In this discount rate, the present value of expected project revenue is equal to the present value of costs. In other words, the income will pay off the investment in the project. The graph below shows the dependence of NPV on the change in interest rates (r is a negative value), and let's look at the r-rate when NPV is equal to zero.

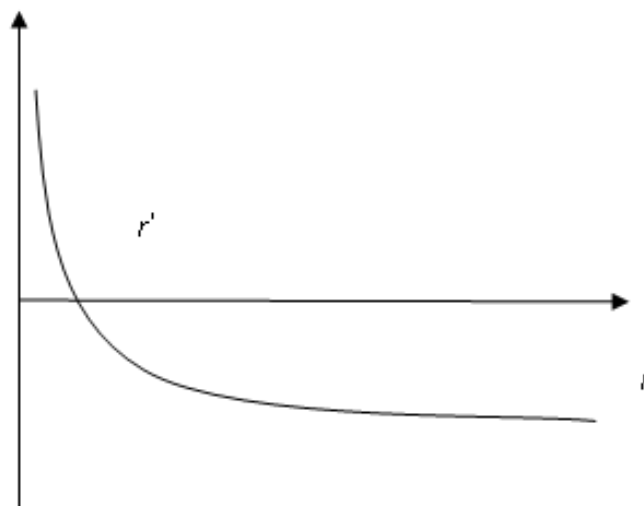


Figure 2: Showing the finding of IRR

Irrigation according to the internal rate of return mentioned above  $IRR = r^*$ .

$$IRR = r^* : \{NPV(r^*) = 0\}$$

Hence, and its value is set as follows:

$$NPV = \sum \frac{b(t) - c(t)}{(1 + IRR)^t} = 0 \quad (10)$$

The significance of the criterion is the maximum possible discount rate. A decision is made when comparing IRR with normative profitability. The bigger the difference between the internal rate of return and the discount rate, the stronger the project. This criterion is an important factor for investors. The payback period of the project is equal to the initial repayment period of capital (with real income flow).

Analytically:

$$PBP = t^* : \{NPV(t^*) = 0\} \quad (11)$$

The graph below shows the time dependence of NPV. As you can see in the graph, the project is “blooming” - it comes at a time. At the same time, the amount of discount costs is deducted entirely from the revenue stream. This is the PBP project's self-repayment period.

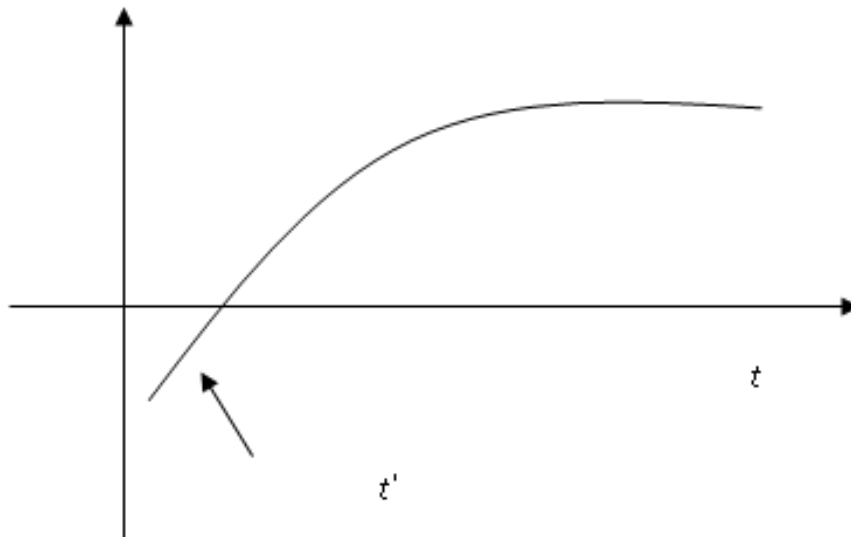


Figure 3: Time relations of NPV

If the project's self-repayment period does not exceed the project's livelihood, the project will be accepted. The calculation of the self-repayment period of the first investment is made during the first phase of the project implementation and is therefore criticized for this method. This criterion, along with other discount specifications, plays the same role in project acceptance. [1. Page 1.458.]. The profitability index (PI) - indicates the relative feasibility of the project (discount rate). This index equals the ratio between discount income and discounted cash flow:

$$PI = \frac{\sum \frac{b(t)}{(1+r)^t}}{\sum \frac{c(t)}{(1+r)^t}} \quad (12)$$

This criterion reflects the efficiency of the contributions, and only one top result can be accepted. Note that in the literature this criterion is called the B / C ratio (the ratio between the discounted cash flow and the discounted cash flow). When choosing criteria, borrowers and investors want to be convinced of these criteria: Criteria will allow them to make the right choices: to help them make the right decisions; will evaluate the project correctly. It should be noted that, based on the methodological advice, the final correct decision should be based on the development of discount criteria (because a serious approach to time value does not allow for a malicious project). These criteria reflect the dynamics of the project development process. The criteria for NPV, IRR, PI are different versions of the same concept. That is why their results are interdependent. So one can expect the fulfillment of these mathematical relationships for a project:

$$\begin{aligned}
 &NPV > 0, \quad PI > 1 \quad \text{and} \quad IRR > r \\
 \text{if } &NPV < 0, \quad PI < 1 \quad \text{and} \quad IRR < r \\
 \text{if } &NPV = 0, \quad PI = 1 \quad \text{and} \quad IRR = r
 \end{aligned}$$

r- required rate of return (alternative cost of capital). Specialists often face problems with these criteria. These problems cannot be solved by calculations. In addition, the "human-machine" method emerges in investment decision making. This method has its own set of tools: time-based cash flow model; project efficiency criteria system; project risk analysis. The main criteria for evaluating the effectiveness of the investment project, whether it is "silly" or classic, have been investigated by us. There are several modifications made to the literature found in the literature. These modifications will help critics adapt to the project's practical needs. In addition, it is necessary to know not only the accuracy of the method used in this work, but also the limits of technical capabilities, as these technological limits may adversely affect the outcome. The efficiency criteria used for the analysis of an investment project require additional processing. This is also an important factor in terms of project risk analysis. The best method for evaluating the financial status of an investment project is the net discount income method. Therefore, the best method for making investment decisions (on competitive projects) is NPV - calculation method. However, NPV of projects with certain discount rates and high internal rate of return are less than low-cost IRR projects. Note: In the early years of the implementation of large cash flow projects, they are sensitive to changes in the discount rate (capital cost). For large cash flow projects, the recent net present value (associated with changes in capital pricing) will be influential. In another case, the application of the internal rate of return method may not be corrected. Let's take a separate look at these situations - the normal (standard) profile of the investment project - just a pure cash flow (type of first-round) profile. Following this process, net income is generated. This profile is called non-standard if it implies a virtual project implementation, or if there is some clean flow in the middle, end, or project life of the project. In the non-standard project, there are some problems with the use of RDN criteria (for investment decision making). These problems are related to cash flow characteristics and are reflected in the TDG budget, depending on the interest rate. Often these are related to the following: reflect the cash flow; no cash flow variable, no negative sign of cash. [5 page 129]. The key issue in evaluating alternative projects is the role of the RDN in evaluating limits. Within these limits, there may be a discount rate (discount rate); This probability is even greater in the uncertainty of the value of money. If projects are implemented independently of each other, they are allocated by the RDN method for more efficient allocation, but still, all disadvantages must be taken into account. In view of the problems mentioned above, there is a need to create a new criterion that is consistent with the content of the internal repayment, but



without fault. Today, this criterion exists - it has changed its modified internal rate of return - (modified internal rate of return) - MIRR. This indicator is calculated as follows:

$$\sum \frac{COF(t)}{(1+k)^t} = \frac{\sum CIF(t)x(1+k)^t}{(1+MIRR)^T} \quad (13)$$

Here are: - capital pricing, COF (d) - cash flow, project implementation costs, CIF (d) - cash flow. The formula from the left of the formula allows you to calculate the flow value of the movements. This formula is derived by discounting the flow rate of capital cost. The left-hand figure shows the future value of the revenue stream (at the end of the project). It is assumed that cash flow is re-invested at the price of k - equity. The value of the cash flow in the literature is called the TD. The discount rate, which reflects the flow of traffic and the present value of the TD, is called: MIRR, which has changed the project's internal revenue. MIRR's internal rate of return compared to the RDN has the following advantages:

- 1) The calculation of the MIRR is based on realistic conditions: they consist of the reinvestment of income, not by the internal rate of return, but by the rate of capital;
- 2) The problem can be solved with the help of a modified internal rate of return. This problem is due to the high return rate of the domestic rate.

Analysts take a very serious approach to calculating inflation, analyzing efficiency, and analyzing the risks involved in cash flow generation. There are two ways to solve this problem:

- 1) All cash flows can be expressed as real cash flows (taking into account inflationary processes). And then the capital price should be cleared of inflation. The disadvantage of this method is that it is assumed that the rate of inflation does not change from year to year;
- 2) The nominal value of the capital price remains constant (equal to the market value of the capital) and the cash flow is set up to reflect inflation. For example, it is assumed that the sale price of a commodity and costs increase at a certain rate each year, while depreciation deductions do not change.

Discount-based methods are considered affordable (though not from a universal perspective). Changes in the form of assessment methods and their combinations weaken the impact of defects. Therefore, it is necessary to use a lot of criterion in the selection of projects. If the investment project meets the Pareto-optimal vector criterion, the project is considered to be efficient. Discount rate is a factor that undermines efficiency. The discount rate changes along with the currency market and the economic situation. The above-mentioned revenue and cost analysis method can be used in many projects. But the feasibility of some projects cannot be calculated. In this case, cost-effectiveness analysis allows evaluating the project option. Cost efficiency analysis can help you choose the most cost-effective and feasible project. These projects include projects in health, food, community management, education, housing construction, water supply, and other areas. In many cases, accessibility is characterized by the achievement of goals set out in economic policy. In other cases, it is a figure that shows the convenience expressed by quantities. In some cases, convenience is a physical expression. It is also selected from financial expenses. In this case, an expense statement is kept in the income statement. Of course, the focus is on cost and the cheapest way to achieve the goal. Cost-effectiveness analysis should be used to select the most effective way to achieve your goals. This analysis includes calculations (calculations) of all expenses (capital expenditures and current costs) and discounted cash flow (to calculate the cost of all current costs). The best option is to achieve the desired result at least discounted costs or achieve the lowest cost per unit of product. This criterion assumes that all comparable options are the same.

On the other hand, if there is a qualitative difference in the services provided (the project), this difference must be taken into account in the selection of the optimal option. When analyzing the project step-by-step, the problem of irrevocable expenses is revealed. Costs that precede the project analysis are called irrevocable costs (sunk cost). These costs cannot be reimbursed (unpaid expenses). In deciding whether to continue the project, such costs should be deducted from the project cost; The major role at this stage is the costs ahead. The cost of another project that is designed to save the project from the beginning to the end, does not depend on the previous costs, but also on the cost of completing the second project. Similarly, the income from the previous incomplete activity is considered the income of the new project. Such an explanation of irrevocable costs can lead to a significant return on capital investment for project completion, and this approach reflects the true nature of the decision. For example, it may take 5 years for a decision to be made today, and the positive effects of a project implemented over time will manifest itself. It is not enough to find the funding source for the cost of the project. All aspects (life expectancy) should be assessed prior to project implementation. Cost estimation for the whole period of operation is the basis of the project analysis based on the calculations. Evaluating all aspects is a deterrent to the project's unwanted appeal. Such projects: bring in quick revenues but then show long-term negative effects or develop late.

### **3. WAYS TO IMPROVE AZERBAIJAN'S CAPITAL MARKET EFFICIENCY**

In modern Azerbaijan, the practice of justifying a project in investment practice is more commonly used in the document "business plan". The term began to be used in the early 1990s, during the transition to a market economy and replaced the term "feasibility study" (TES), which is typical of the planning period. Often those who mistakenly think that a feasibility study is an "investment project" or a "business plan" but they forget that the feasibility study is only the technical and economic part of the entire project complex. (In terms of efficiency calculations), let us note that the "investment project" and "business plan" are not synonymous. Translated from the English language, our business plan is a business plan. [3 page 398]. If you look at the Dictionary of Investment and Innovation, the word business plan is: "the basic form of the plan used by commercial organizations in the market economy." Its standard structure includes 10 sections:

- 1) Introduction;
- 2) description of the firm or organization;
- 3) product description (work, service);
- 4) Market and competitor analysis;
- 5) marketing plan;
- 6) production plan;
- 7) organization plan;
- 8) financial plan;
- 9) investment plan;
- 10) addition.

Other options such as a business plan for the production of a new product may be:

- 1) a description of the product or service being produced;
- 2) product sales market;
- 3) competitors;
- 4) marketing plan;
- 5) production plan;
- 6) organization of production;
- 7) legal plan;
- 8) financial plan;

- 9) financial strategy;
- 10) understanding;
- 11) addition.

The business plan's annexes provide legal documents. Logical analysis of the article seems to have a clear connection with the aspects of the experiment. During the development of business plan principles in foreign countries, a number of business plan preparation techniques have been developed and published. One of the main objectives of the business plan is to justify the attraction of long-term investments in foreign funding (with the aim of producing a new product); by means of production facilities or by increasing production on moderation basis. Therefore, the business plan implies long-term investments in real assets (buildings, machinery, consumer goods). Currently, the following functions are used in the development of business plans in the Republic of Azerbaijan:

- 1) Used in the main strategy of the company, in the development of the general concept;
- 2) The principles for evaluation and control of the Company's key business development processes are established;
- 3) Promotes the attraction of funds.
- 4) Helps to attract potential partners who have their own capital and technology. It should be noted that with the emergence of the business plan, both tactical (project planning and investment motivation) and strategic (the tool for managing the project's life expectancy) are solved. So the main purpose of your business plan is to attract investors. Currently, financial institutions prefer to have their own standards (for paperwork) for lending purposes. The purpose is to provide the financial viability of the project based on the business plan, ie the need to confirm that the money invested in the project will be profitable.

In the creation of such a project, it is necessary to first investigate the project's revenue (product, prices, market, sales) and then move on to costs (materials, wages). The project efficiency analysis is then carried out, taking into account the business laws and the variants of the financial scheme. Because it is a promising and strategically important document, the business plan should be reviewed frequently in relation to the changing environment. This is due to the fact that the business plan is the main tool of business management. [4 page75]. Thus, the business plan reflects not only the statistical aspect of the object, but also the dynamics of its development. The project risk analysis method plays a key role in this process and enables strategically correct decision making. The business plan is a model of the project itself, with specific requirements for its development. These requirements include: compliance with the truth (the exact opposite of the institution's work situation); Sufficiency of time (minimum amount of information); whether the information is sufficient to understand the quality of understanding; clarity and logic; persuasion of archetypes; concrete; justification and attractiveness of all items;

- 1) It is not recommended to create or overload a large business plan.
- 2) Determine the size of the business plan and its features.
- 3) It is important to remember that justifying an investment project is a laborious and time consuming process;
- 4) When it is ready, the business plan should include the analytical notes and the report section.

Thus, it can be called a product form because it acts as an attraction factor for investors. In addition, the business plan is a very important document for the project manager and plays a major role in the operation and management of the project. Whereas a business plan is a product, much depends on design and design. The key role in the creation of such a "product" is played

by specialized software products used in computing. It is impossible to function without clarifying the accuracy of all the above, without analyzing investment strategies and financial liabilities in the economy.

№	Contents	Short Content
1.	An investment project definition is proposed. It describes its essence and describes the project risk factors.	The project of financial investment and other related activities provides the following conditions: a) formulated goals; b) limited financial and time resources during the life cycle; c) The impact of a number of students (political, economic, legal, institutional); and (d) stockpiling and achieving results
2.	The basic principles of the design of the formulated and grounded projects based on methodological guarantees	1. Alternative. 2. Multidisciplinary aspects. 3. Net supplementary income account. 4. Use of international criteria for project effectiveness. 5. Project risk analysis.
3.	For the first time, the division of the external environment into contexts has been applied, founded, and shaped. In the future, these will be used in risk analysis..	Mega-zone-global systems (society, economy, politics, technology, science). They are realizing in these areas: labor market, capital, raw materials, land, production markets; Experience and knowledge in project design and implementation; engineering; law etc. Mezzone - mega-zone information and resources are transferred to meso-zone systems (they are transferred to the project) (business coverage, labor and finance, production, construction) are the elements of the project that are subject to external environment and project impacts.
4.	The project analysis aspects have been identified for the purpose of the project risk study.	1. Technical and technological. 5. Institutional. 2. Commercial. 6. Finance. 3. Public. 7. Economic. 4. Environmental.
5.	The functional principles at the heart of the project risk analysis have been formulated by the author.	1. Time accounting of money. 2. Alternative cost accounting 3. Project risk accounting. 4. Record of possible changes in project parameters 5. Calculations based on actual cash flows or expenditures, not accounting. 6. Accurate and consistent inflation rate.
6.	For the first time, a multi-use concept of a business plan is introduced.	1) Documents that allow you to plan project activities. 2) As a project model. 3) As an important document for investment attraction. 4) As a key tool for project management.

*Table 1: The result of the above analysis*

#### LITERATURE:

1. N.A. Hasanov "Strategic Business administration" ("Biznesin strateji idarə edilməsi") Baku. 2019.
2. N.A. Hasanov "Problems of improvement of formation and modernization of the investment strategy" ("İnvestisiya strategiyasının formalaşması və modernləşdirilməsinin unkişafı problemləri") Baku. 2003.
3. Bayramov.A.İ. "History of the World Economy" («Dünya iqtisadiyyatının tarixi») Textbook. Baku-2010
4. Alirzayev A. G. "Concept and program of economic development of Azerbaijan" («Azərbaycanın iqtisadi inkişafının konsepsiyası və proqramı»). "Odlar yurdu" Baku. 2013.
5. Shakaraliyev A.S. "International capital loan system" ("Beynəlxalq valyuta kredit sistemi") Baku

## ECONOMIC BASES FOR PROVISION OF SUSTAINABLE DEVELOPMENT

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### **ABSTRACT**

*The article was analyzed issues such as economic bases of sustainable development, analyzes and assessments in terms of efficient management, impact of socio-economic development of the country on environmental improvement and international cooperation in the field of environmental protection. Today, the development of many countries and regions is accompanied by changes in the structure of public production, especially the gradual transition from the industrial society to the post-industrial society occurs. Increasingly, the greater part of the working population is employed in the non-material sector and a small number in the industrial and agricultural sectors. Areas called as base areas can no longer play that role and never be able to play. Consumption is becoming individualized, production balance declines, process for loss of production mass occurs. Intelligence of production is deepening and information resources become the main production factor. Additional value is mainly created in the non-material sphere, and then labor gets new lines: the creative functions at work begin to prevail, the dominant type of worker is a creative personality who is connected to his/her work and is trying to bring new elements to his/her work. Differences between high and low technological areas are increasingly eliminated and all areas are beginning to become more scientific, combining the flow of management, financial and commercial innovation. Employees' habits and progressive technologies are becoming more important than the low cost of manpower and other traditional factors of competitiveness. Traditional advantages of countries and regions are increasingly beginning to lose their importance. All these tendencies manifest themselves to some degree in almost all countries of the world. Training of specialists based on modern knowledge is very important in ensuring sustainable development of Azerbaijan. In this regard, reforms conducted in the country are considered to be important. It is known that the development and quality improvement of education directly affects the socio-economic development of the country. Thus, only quality education level provides the favorable basis for the sustainable development of any country.*

**Keywords:** *sustainable development, efficient management, environmental improvement, international cooperation*

### **1. INTRODUCTION**

As we know, the Ministry of Economic Development of the Republic of Azerbaijan has prepared the relevant Concept for economic and social development of the Republic of Azerbaijan for 2014-2017. The main purpose of Concept is to achieve the development of socially oriented market economy that ensures efficient allocation of free competitive and limited resources, acceleration of the diversification of the country's economy through the use of modern forms and methods of state regulation of the economy, dynamic development of the non-oil sector, full employment, fair distribution of profits, protection of environment and as a result, sustainable economic growth and decent living standards of the population. According to the concept, the middle-term priorities for the future of the country are defined. Practices show that the service of the program-based approach is undeniable as a key tool in enhancing regional competitiveness in ensuring sustainable development.

Local programs are very important and important here. In other words, effective decision-making and the impact of decisions on social, economic and environmental welfare depend on educated, creative citizens. In terms of sustainable development, there is a need to improve the management skills related to the effective activities of local executive and local self-government authorities, the development and implementation of new programs. As we know, the development of local self-government system is one of the requirements for ensuring sustainable development.

## **2. ECONOMIC BASES OF SUSTAINABLE DEVELOPMENT**

The sustainable socio-economic development of Azerbaijan is reflected in the change of its macroeconomic indicators more clearly and distinctly. In recent years, the overall macroeconomic indicators of the country have increased significantly. In this regard, it has not been possible to eliminate territorial clumsiness in the regional development inherited from the Soviet era. Along with all these successes, it made necessary the policy for acute clumsiness inherited from the Soviet era and created in the territorial structure of the economy, new territorial planning and management system. So, over 70% of the country's economy (85% in the industry) fell to Absheron economic region's share. Even in the direction of changing the abnormal territorial organization of the economy, a strategy of purposeful socio-economic development was launched to be carried out in the country. During this period, the unemployment rate in the republic declined from 49% to 5%. Most of the permanent and temporary workplaces were opened in regions outside Absheron. As a result, profits of the population in places increased, their social status improved and living welfare rose as a whole. Efficient use of natural resource, logistical and labor potential of the regions has obviously affected the reduction of their dependence on centralized financial resources. In this regard, in order to ensure sustainable socio-economic development in the regions in future years, the relevant regional development programs in the direction of involvement of existing potential to full economy should be prepared by the local government authorities and gradually realized. In this direction, the creation of competitive clusters on the basis of industrial parks and centers in the regions is of particular importance. Naturally, programs prepared for the regional development purpose must be an integral part of the unified regional development strategy of the country [1].

## **3. ANALYZES AND ASSESSMENTS IN TERMS OF EFFICIENT MANAGEMENT**

The practice of democratically developed countries proves that the existence of public administration authorities in the country to fully and effectively utilize the natural and socio-economic potential of each region, territory and on this basis, to improve the material welfare of the population is not enough and basic issues of the civil society, democratic, legal state building in the country may be only settled in the case of the existence of an advanced system of local self-government. The local self-government is also important for the effective implementation of social functions, proper regulation of social processes, analysis of social issues being within the competence of local self-government on various methods for the purpose of meeting of social needs and proper adoption of management decisions. Analysis and assessment should be carried out in all areas, which the organization concerns from the achievement of the management authority's objectives to the effectiveness of the implemented measures and from the improvement efforts to the quality of service. Because certain decisions are made as a result of the analysis process, the analysis should have both macro and micro goals. The probability of the achievement of the implemented measures should be continuously monitored, and in case of shortcomings, necessary amendments should be made. Problems that may arise as a result of the analysis should be exactly analyzed.

The most common methods for analyzing social processes in the management, including local self-government are as follows: – SWOT analysis means as an analysis for strengths, weaknesses, opportunities, threats. The purpose of this analysis is to determine strength and weak features of the analyzed element, also upcoming opportunities and threats related to the environment and based on these data, to identify goals and direction of development [2].

#### **4. IMPACT OF SOCIO-ECONOMIC DEVELOPMENT OF THE COUNTRY ON ENVIRONMENTAL IMPROVEMENT**

As a result of the development of all areas of socio-economic life of the country, including the daily care rendered to the environmental improvement issues and the implemented measures, the ecological situation in our country has improved considerably. The elimination of ecological problems inherited from the past and creation of effective management system has contributed to the growth of Azerbaijan's image in the international arena. Achievements obtained in recent years have further strengthened the economic bases of the state, created condition for ensuring ecological safety and expanded its opportunities in the direction of implementation of more effective measures. Ecological problems that have arisen for long years were analyzed, the national and state programs aimed at their comprehensive solution and based on sustainable development principles were approved and their execution was started. The main purpose of these programs is to ensure systematic and effective implementation of state-owned investment projects aimed at protecting the environment [3].

#### **5. INTERNATIONAL COOPERATION IN THE FIELD OF ENVIRONMENTAL PROTECTION**

Within the visit of the country's leadership to the Islamic Republic of Iran, "Memorandum of Understanding between the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan and Ministry of Roads and Urban Development of Islamic Republic of Iran on meteorology and related issues" was signed. "Memorandum of Understanding between the Government of the Republic of Azerbaijan and the Government of the Republic of Bulgaria on cooperation in the field of environmental protection" was signed in Baku city on 20 February 2014. Azerbaijan joined to the International Union for Conservation of Nature (IUCN). The 3<sup>rd</sup> session of the "Regional Fisheries and Aquaculture Commission in Central Asia and the Caucasus" was held in Baku city. Within the framework of the IV Summit of the Heads of Caspian-littoral states held in Astrakhan last year, "Agreement on Cooperation in Hydrometeorology of Caspian Sea" was signed by the relevant ministries of Caspian-littoral states. The 5<sup>th</sup> anniversary international exhibition in the field of environmental protection "Caspian: Technologies for Environment (CTE 2014)" was held at "Baku Expo Centre". This exhibition has gained the status of an important event held on ecology and environmental protection in the Caspian-littoral and Caucasus regions for five years. 323 companies have demonstrated their new developments in the field of ecology over these years. 77 companies from 11 countries, including Azerbaijan, Great Britain, Germany, Greece, Denmark, Italy, Sweden, Russia, Turkey, United Kingdom and other countries participated in the Anniversary exhibition of "CTE". At the same time, during the 5<sup>th</sup> Party Conference of the "Framework Convention for the Protection of the Marine Environment of the Caspian Sea" held in Ashgabat, the Secretariat of the Convention was decided to place in Azerbaijan from 2015.

#### **6. CONCLUSION**

Today, the development of many countries and regions is accompanied by changes in the structure of public production, especially the gradual transition from the industrial society to the post-industrial society occurs. Increasingly, the greater part of the working population is employed in the non-material sector and a small number in the industrial and agricultural

sectors. Areas called as base areas can no longer play that role and never be able to play. Consumption is becoming individualized, production balance declines, process for loss of production mass occurs. Intelligence of production is deepening and information resources become the main production factor. Additional value is mainly created in the non-material sphere, and then labor gets new lines: the creative functions at work begin to prevail, the dominant type of worker is a creative personality who is connected to his/her work and is trying to bring new elements to his/her work. Differences between high and low technological areas are increasingly eliminated and all areas are beginning to become more scientific, combining the flow of management, financial and commercial innovation. Employees' habits and progressive technologies are becoming more important than the low cost of manpower and other traditional factors of competitiveness. Traditional advantages of countries and regions are increasingly beginning to lose their importance. All these tendencies manifest themselves to some degree in almost all countries of the world. Training of specialists based on modern knowledge is very important in ensuring sustainable development of Azerbaijan. In this regard, reforms conducted in the country are considered to be important. It is known that the development and quality improvement of education directly affects the socio-economic development of the country. Thus, only quality education level provides the favorable basis for the sustainable development of any country. Sustainability and sustainable development are managed. There are objective and subjective mechanisms, algorithms and technologies to regulate this process. In this context, the management of sustainable development process intends the implementation of quantitative and qualitative changes that the purpose of these changes is to achieve a higher level of social and economic development and to fully meet the needs of the population provided that harmful impacts to the environment are minimized. Also, consideration of the local ecological, economic and social features in the management of sustainable development, processing of indicators in these spheres of the territory, determination of criteria, selection of optimal indicators, their application and monitoring are very important and significant.

#### **LITERATURE:**

1. Improvement of human resources for sustainable development: Azerbaijani model. Baku – Science Development Fund – 2018
2. <http://www.yap.org.az/az/view/interview/170/creation-of-effective-administration-system-contributed-to-the-improvement-of-azerbaijan%60s-international-prestige-in-the-field-of-environment/>
3. <http://shirvan.cls.az/front/files/libraries/2474/books/833469799.pdf>
4. [http://e-qanun.az/alpdata/framework/data/11/f\\_11514.htm](http://e-qanun.az/alpdata/framework/data/11/f_11514.htm)
5. <http://eco.gov.az/en/ministry/international-employment>
6. <http://extwprlegs1.fao.org/docs/pdf/aze32661.pdf>



## THE INFLUENCE OF TOURISM ON THE ECONOMIC DEVELOPMENT OF AZERBAIJAN

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### ABSTRACT

*In the Republic of Azerbaijan, tourism has been given the status of one of the main state priorities. The country has created all the necessary conditions for the development of international tourism. In this regard, the issues of the study of tourism development and evaluation of its role in the modern economy of Azerbaijan are very relevant today. The impact of tourism on the economy of a country or region is difficult to overestimate. In general, we can state that the complexity of the economic analysis of indicators of the tourism industry is due to the lack of a holistic concept, methodology and methodologies for analyzing statistical indicators of tourism. Today there are no generally accepted unified approaches to isolation from the totality of generalizing indicators of such indicators that would characterize the tourism industry. Economic and statistical research methods, particularly correlation-regression analysis, are often used in modern research. When the national income per capita increases, the incomes of the tourist industry increase in direct proportion, as the increase in tourism incomes also directly affects the growth of the gross domestic product. In the article, a correlation analysis was made between such socio-economic categories as paid tourist services, per capita income and gross domestic product.*

**Keywords:** *correlation and regression analysis, dependent and independent variables, statistical indicators of tourism, income per capita, the volume of paid tourist services*

### 1. INTRODUCTION

Active development of tourism in the world is characterized by an annual increase in the tourist flow, as well as a high proportion in the global gross product. According to the World Tourism Organization (UNWTO), the number of international tourist arrivals in 2015 was 1184 million. Press release (2016). and the share of the tourism sector in the world economy reached 9%, every eleventh employee works in the tourism industry, the total income from tourism in 2015 year amounted to 1 245 billion dollars. Chernukha (2016, p.41). According to the forecast estimates in 2020, the total revenue from tourism and the number of international tourist arrivals are expected to amount to \$ 2000 billion and \$ 1,561.0 million. UNWTO (2015). The tourism industry is an important part of the economy, both for developed countries and for developing countries. The development of tourism contributes to the creation of additional jobs, the renewal and expansion of the infrastructure of the territory, the increase of the national income, the attraction of foreign currency and the formation of a favorable image in the territory. Thus, tourism occupies an important position in the economy and yields only on yield and extraction and refining of oil. The tourism industry is characterized by a high level of efficiency and a rapid return on investment and significantly increases the demand for locally produced products, which improves the business climate and contributes to the welfare of the population. In this context, the tourism sector occupies a significant part of the service sector. Kiseleva (2011). One of the priorities of the national economy development strategy is the tourism sector. According to official statistics, tourism is one of the constantly growing sectors in Azerbaijan. Over the past five years, the average annual growth rate was 4.5 percent and 8.5 percent of the number of foreign citizens arriving in the tourism sector in Azerbaijan.

Currently, the direct share of the tourism industry in GDP and employment in the country is 4.5 and 3.3 percent, respectively. “The strategic road map for the development of a specialized tourism industry in the Republic of Azerbaijan” was approved by Decree of the President of the Republic of Azerbaijan No. 138 of December 6, 2016, as a result of achieving the targets for the period up to 2020, real GDP in 2020. Accordingly, 293 million and 172 million manat a total of 35,000 people, and 25,000 jobs will be created directly in the tourism sector. Strategic Roadmap (2016) In this regard, the issues of the study of tourism development and evaluation of its role in the modern economy of Azerbaijan are very relevant today.

## **2. LITERATURE SUMMARY**

The impact of tourism on the economy of a country or region is difficult to overestimate. In Allen, Long, Perdue and Kieselbach (1988), Buckley (2012), Cater (1987), Farrell and McLellan (1987), Nash and Butler (1990), Smith,(1977) the definitions of sustainable tourism in the context of the social and ecological consequences of tourism development are presented. The conceptual basis of sustainable tourism was laid in the works Casagrandi and Rinaldi (2002), Lane (2009), Sharpley (2000). Aall (2012) considers the history of sustainable tourism and related concepts. In Smith (1977), Gill and Williams (1994), the concepts of sustainability are used in relation to the relationship between tourism and the population, the impact of tourism on economic growth and changes in the population size. Some studies Smith (1977), Casagrandi and Rinaldi (2002), Lane (2009) on the basis of tourist spending are estimated by the economic impact of tourism. Improvements in intercultural understanding through tourism, the social consequences of tourism are examined in the works. Choi and Murray (2010), Stronza and Gordillo (2008), West and Bayne (2002). The economic analysis of the impact of sustainable tourism was conducted by Vellas (2011), where he estimated the economic impact of tourism on GDP, employment, the supply of goods and services in some sectors of the economy, as well as the impact of tourism on the recovery of economic growth and the reduction of global macroeconomic imbalance Shishkin (2009) estimation of the contribution of a recreational and tourist complex to the economy of the region (its share in GRP, employment, investments, budget revenues, etc.). Eagles, McCoo and Haynes (2002) focuses on the planning of protected areas for tourism, the development of infrastructure and services, the management of tourism in protected areas, in particular, risk management and safety. The methods of ana- lization of the multiplier effect on tourism were investigated by West and Bayne (2002). Mathieson and Wall (1982) allocate the impact of tourism on the economy by using indicators of the volumes and expenditures of foreign tourists. Frechtling (1994) in his research on measuring and interpreting the economic impact of tourism, focuses on measuring economic benefits from tourism at the national or regional (ie subnational) level. Stynes (1997) explores the economic consequences of the activities of the industria of tourism ó by tracking and grouping financial flows. "Recommendations on tourism statistics" (1993) adopted in by the UN Statistical Commission and containing concepts, concepts and classifications in the field of tourism, as well as practical recommendations for conducting tourist surveys and other methods of data collection. Methodological development "Auxiliary account in tourism: recommended methodological basis", adopted in 2000, and later approved and approved by the World Tourism Organization (UNWTO) and Eurostat (26).

## **3. METHODOLOGY**

In general, we can state that the complexity of the economic analysis of indicators of the tourism industry is due to the lack of a holistic concept, methodology and methodologies for analyzing statistical indicators of tourism. Today, there are no generally accepted uniform approaches to distinguishing the whole aggregate of indicators of such indicators that would characterize the

tourism industry. There are various methods for assessing the contribution of the tourist complex to the economies of countries. The most common are:

1. Calculation of the total income from tourism. The calculation methodology includes two areas: the assessment of the direct and indirect impact of tourism on the economy of the region;
2. Estimation of the multiplicative effect of tourism and its impact on other sectors of the economy. There is no perfect methodology for calculating the full multiplicative effect, since a complete account of all effects is unattainable.

The research revealed that the presented methods do not make it possible to make a fairly correct economic assessment of the contribution of the whole tourist services complex to the economy of the region. The use of the multiplicative method of calculation requires simplification of real interconnections. A more probabilistic approach is more complicated. Economic-statistic models take into account the probabilistic nature of economic processes and make it possible to automate the calculation processes, and the probabilistic approach (econometrics) allows to quickly and effectively model the research process. Econometrics gives a quantitative expression of the interrelationships of economic phenomena and processes. The key task is the filling of the a priori economic evidence by the empirical content (quantitative characteristic of known qualitative economic phenomena), Shishkin (2009). The interrelationship between certain factors affecting the sustainable development of tourism is still not sufficiently explored. Economic and statistical research methods, incl. correlation-regression analysis, are often used in modern research. Advantages of correlation-regression analysis:

- revealing the influence of certain factors on the resulting sign;
- simplicity of calculations;
- the possibility of forecasting the prospects for economic growth.

Correlation-regression analysis begins with the definition of a model that is constructed taking into account the relationship between the variables. For this purpose, among the whole range of factors influencing the resultant feature, it is necessary to identify the most significant factors. At the first stage, we perform the necessary calculations and interpret the results obtained. To start, the wakeup table is a pair of correlation coefficients. It is worth remembering that the paired coefficients of correlation are used to measure the tightness of the relationship between the two variables without regard for their interaction with other variables. Further to verify the significance of the correlation coefficients obtained, the observed values of t-statistics for all coefficients are calculated, and the matrix is constructed on this basis. When the national income per capita increases, the incomes of the tourist industry increase in direct proportion, as the increase in the incomes of tourism directly affects the increase in the gross domestic product. In the article, a correlation analysis was made between such socio-economic categories as paid tourist services and services of collective accommodation facilities and monetary incomes per capita, gross domestic product. The purpose of the study is to assess the impact of the tourism sector on the development of the economy of Azerbaijan on the basis of correlation-regression analysis.

#### **4. ANALYSIS OF THE CURRENT STATE OF THE TOURISM SECTOR IN AZERBAIJAN**

In the current conditions of development of the economy of Azerbaijan, the market of tourist services plays an important role in the formation of the internal economic space of the state.

In this context, increasing the share of the country's non-extractive exports, increasing the tourist flow and financial revenues from the tourism industry acquires a strategic importance.

Currently, the tourism potential of the Republic is not fully disclosed, as evidenced by a small share (2.6% (2016)) of hotels and restaurants (the main indicators of the development of tourism) in the sectoral structure of value added. Analysis of the sectoral structure of gross value added in 2010-2016. allows us to talk about the stability of the tourist industry in comparison with other sectors of the economy. During the period 2010-2018. the share of revenues from hotel and restaurant activities in Azerbaijan remained stable and amounted to 2.6%, while in many other industries income was unstable and tended to decrease. National accounts of Azerbaijan (2019). In the Republic, the existing market of tourist services basically satisfies the demand for outbound tourism (83.4%) and only 16.6% of the provided services provide tourist reception. However, recently this ratio began to change in favor of domestic tourism, Tourism in Azerbaijan (2019). In 2010, the total amount of tourist and excursion services amounted to 95968.0 thousand manats, in 2014 - 156466.5 thousand manats, and in 2016 - 195,243,900 manats. Compared to 2010, the volume of tourist and excursion services in the country increased approximately twice in 2016 and by 24.8% compared to the same period in 2014. During the analyzed period there was a constant dynamics of per capita income. Thus, in 2018, per capita income increased by 64.3% compared to 2010 and by 7.5% compared to 2015, Statistical indicators of Azerbaijan (2019). GDP is the region's most commonly used indicator of development. This is due to the availability of statistical data, the objectivity of the indicator and the simplicity of the study of its dynamics. GDP is a generalizing indicator of the socio-economic development of countries, which led to its use in the work. GDP characterizes the results of the process of production of goods and services on the territory of the republic. The volume of GDP, which is an important macroeconomic indicator of the country's economic development, in 2010 amounted to 42.4 billion, in 2014 59.4 billion and in 2016 60.4 billion manat. Compared to 2010, the change in this indicator was 142.4% in 2016 and 101.7% in 2014. Comparable prices of the country's GDP in comparison with the previous year were 102.8% in 2014, 101.1% in 2015 and 96.9% in 2016 respectively, Statistical indicators of Azerbaijan (2019). Resource opportunities of the regions of the republic allow actively developing tourism activities, thereby activating the life of the local population and attracting tourists from neighboring regions and countries. Azerbaijan is an attractive region for the development of tourism. To develop strategies and plans for regional development, to take effective measures to develop a recreational and tourist complex, and to make effective management and investment decisions on the part of business, it is necessary to assess the contribution of the recruitment and tourism complex to the economies of countries (its share in GRP, employment, investments, budget revenues, etc.).

## **5. CORRELATION-REGRESSION ANALYSIS**

The revealed tendencies testify to the need to choose a corresponding and sufficient number of observations for regression and correlational analysis. This method involves the disclosure of causal dependencies. In the process of correlation-regression analysis after the selection of the corresponding factors, their multicollinearity is checked and the most significant of them are identified using correlation coefficients. Using the program SPSS in the study based on the dynamic series (2010-2018), the coefficients of pair correlations of the following indicators were calculated: 1. money incomes per capita and the volume of paid tourist services; 2. GDP and volume paid tourist services.

*Figure following on the next page*

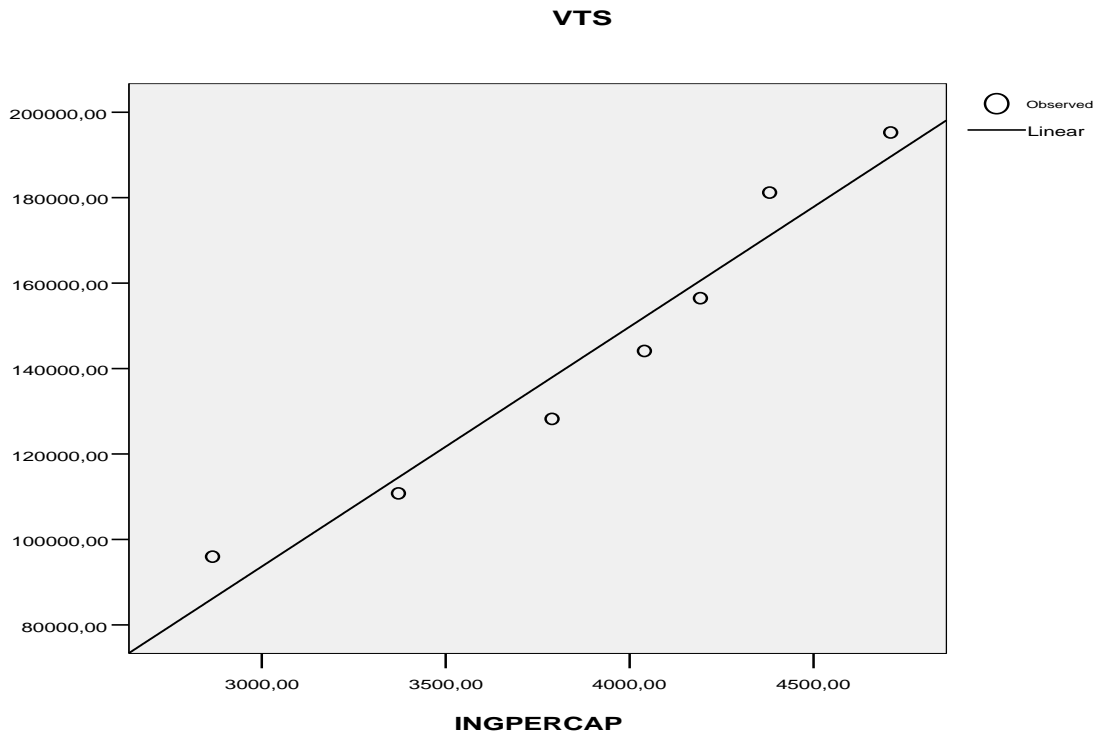


Figure 1: Correlation field of the dependence of the volume of paid tourist services on monetary incomes per capita

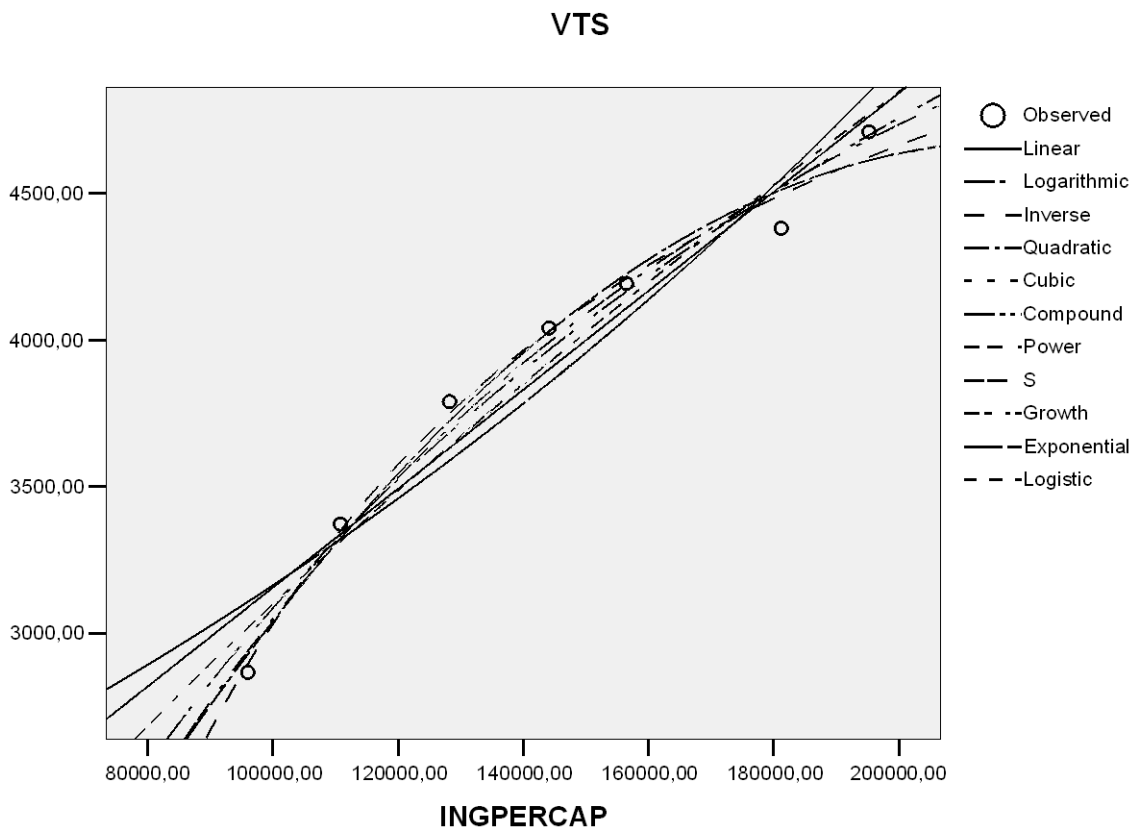


Figure 2: For all regression models, the correlation field of the dependence of the volume of paid tourist services on monetary incomes per capita

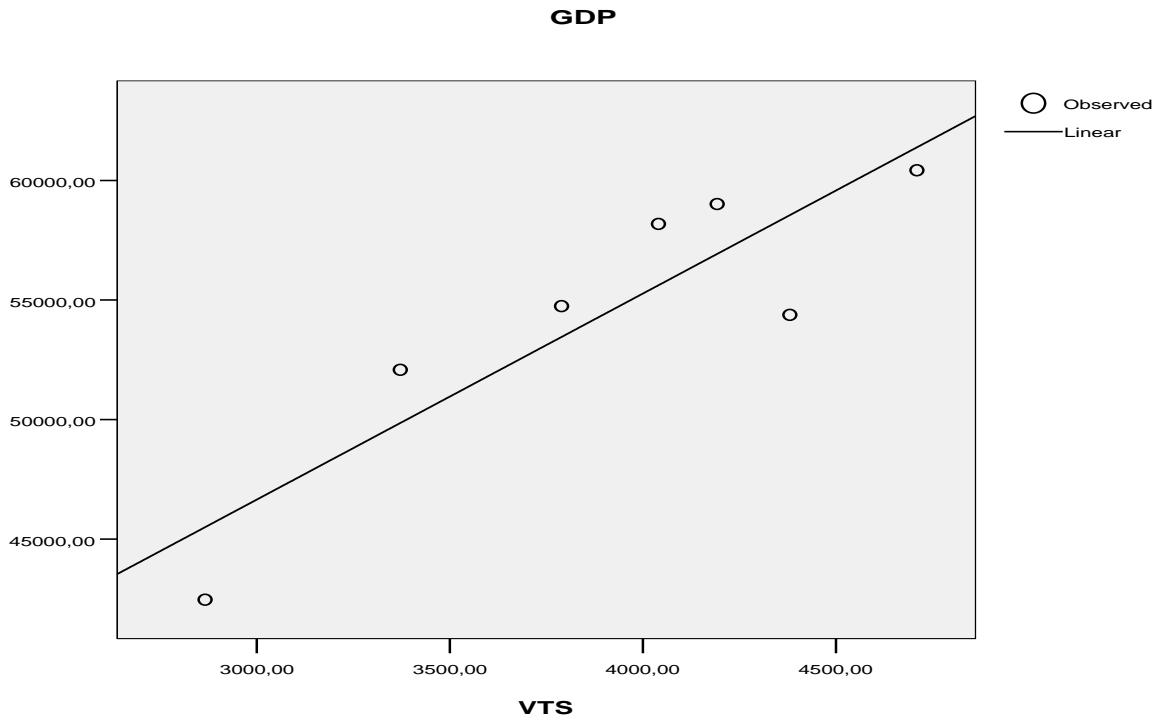


Figure 3: Correlation field of GDP dependence on the volume of paid tourist services

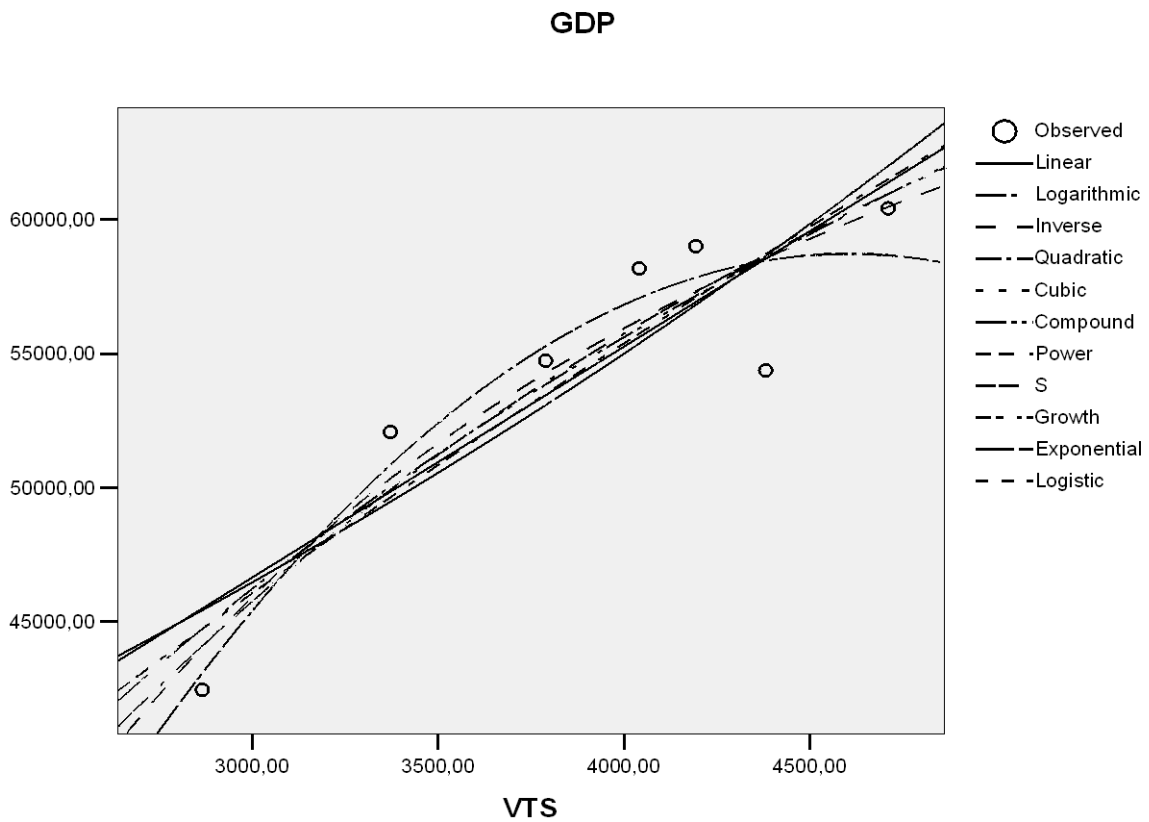


Figure 4: For all regression models, the correlation field of GDP dependence on the volume of paid tourist services

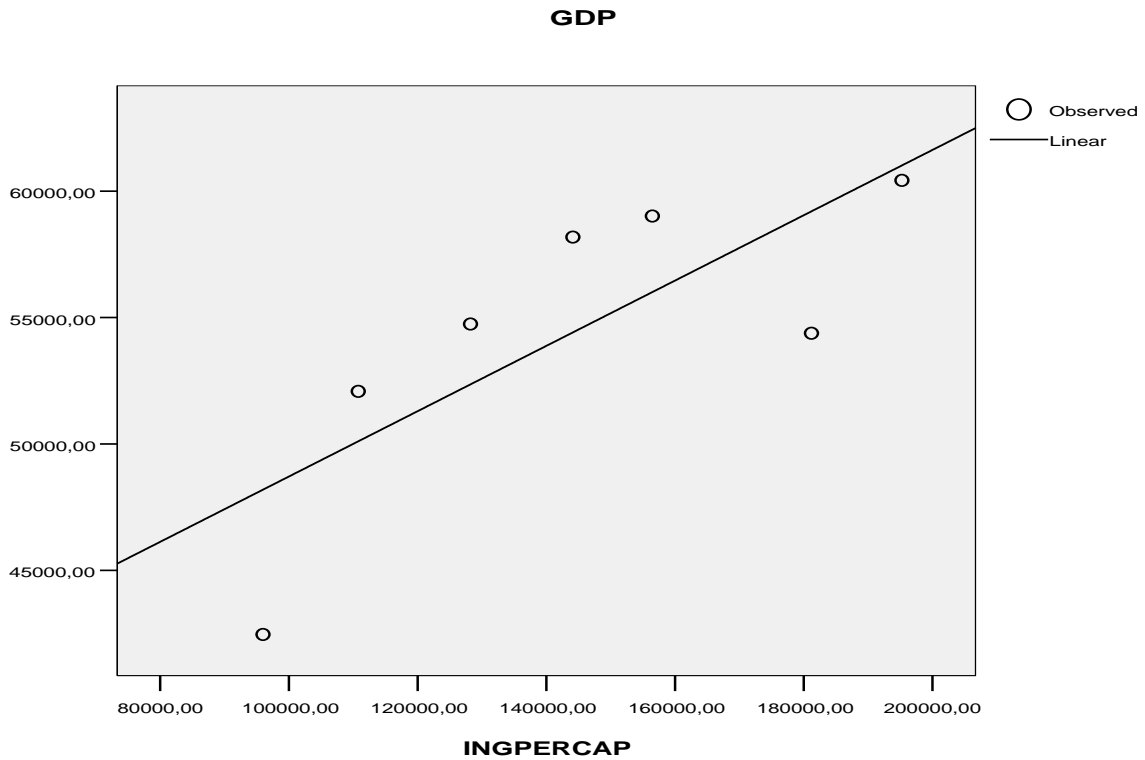


Figure 5: Correlation field of the dependence of monetary incomes per capita and GDP

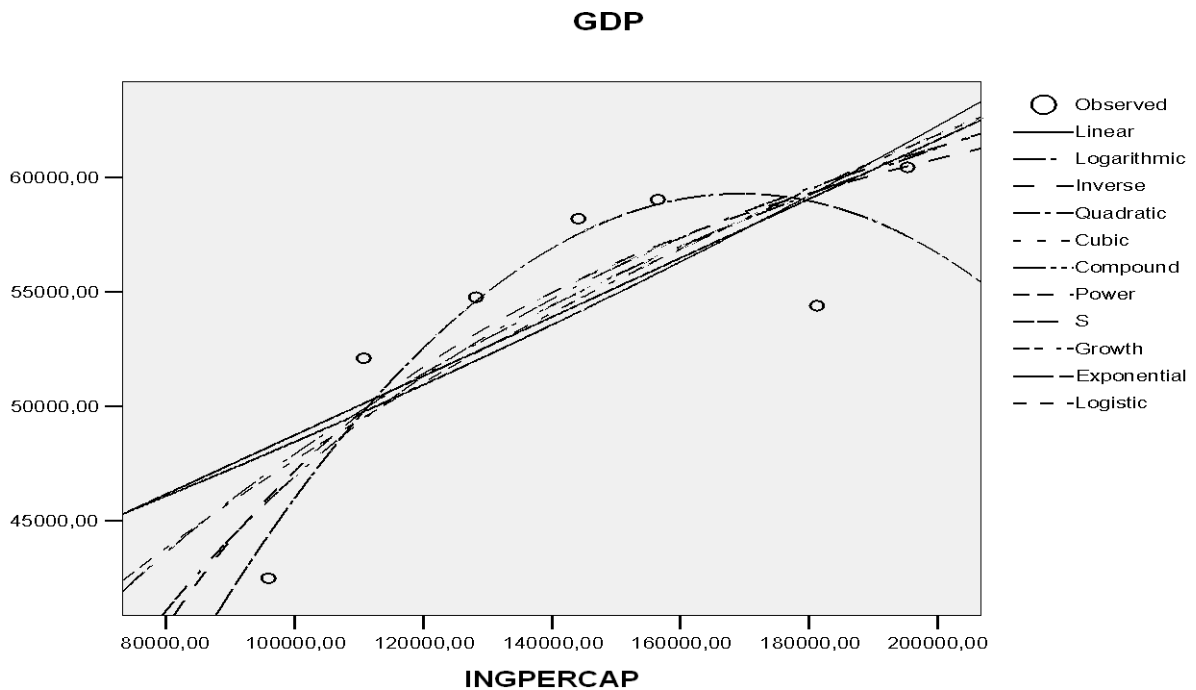


Figure 6: For all regression models, the correlation field for the dependence of monetary incomes per capita and GDP

The following data were obtained during the study. From the separate and all regression models, the correlation field shows that between the variable being considered there are significant correlation dependencies.

The higher the incomes of the population, the more the population is spent on tourist services and on the services of collective accommodation facilities, and the more tourist services are rendered, the greater the contribution of the tourist industry to the gross domestic product, and the greater the volume of the gross domestic product, the higher the monetary income of the population (Table 1).

Regression models	Dependence of the volume of paid tourist services on monetary incomes per capita			Dependence of GDP on the volume of paid tourist services			Dependences of monetary incomes per capita and GDP		
	R Square	F	Sig.	R Square	F	Sig.	R Square	F	Sig.
Linear	.947	88.654	.000	0.795	19.384	.007	0.594	7.314	0.043
Logarithmic	.978	220.133	.000	0.834	25.058	.004	0.671	10.221	0.024
Inverse	.990	495.171	.000	0.864	31.850	.002	0.743	14.469	0.013
Quadratic	.984	120.322	.000	0.888	15.914	.012	0.823	9.331	0.031
Cubic	.984	120.322	.000	0.888	15.914	.012	0.823	9.331	0.031
Compound	.913	52.327	.001	0.784	18.188	.008	0.579	6.871	0.047
Power	.958	113.178	.000	0.828	24.095	.004	0.660	9.687	0.026
S	.985	324.833	.000	0.864	31.826	.002	0.736	123.913	0.014
Growth	.913	52.327	.001	0.784	18.188	.008	0.579	6.871	0.047
Exponential	.913	52.327	.001	0.784	18.188	.008	0.579	6.871	0.047
Logistic	.913	52.327	.001	0.784	18.188	.008	0.579	6.871	0.047

Table 1: Main parameters that characterize the adequacy of regression models

For all regression models, the coefficient of determination shows that the regression model obtained is adequate to the data. In other words, the coefficient of determination shows that the model describes the data quite well, since  $R^2$  is close to 1. The coefficient of determination indicates their strong interconnectedness. This is confirmed by the fact that the main shares of their dispersion (the dependence of the volume of paid tourist services on the monetary incomes of the population: Linear-94.7%, Quadratic-98.4%, Exponential - 91.3% and so on. Of GDP from the volume of paid tourist services: Linear-79.5%, Quadratic-88.8%, Exponential-78.4%, etc., depending on the monetary incomes of the population and GDP: Linear-59.4%, Quadratic-82.3% etc.) are due to changes in the variables included in the model under consideration. The values of the correlation coefficients are presented in Table 2. Table 2 shows the relationship between the three categories: per capita monetary income and the volume of paid tourist services, cash income of the population and GDP, the volume of paid tourist services and GDP. The degree of tightness of the connection between the selected parameters is estimated from the value of the linear coefficients. The obtained values of the linear coefficients of the pair correlation show a high connection with the chosen parameters. Since the values of linear coefficients between cash incomes per capita and the volume of paid tourist services are  $r = .973$ , between the monetary incomes of the population and the GDP  $r = .771$ , between the volume of paid tourist services and GDP  $r = .892$ . This confirms the high link selected parameters with the resulting sign.



		INCPERCAP	VTS	GDP
INPERC	Pearson Correlation	1	,973 (**)	,771 (*)
	Sig. (2-tailed)		,000	,043
	N	7	7	7
VTS	Pearson Correlation	,973 (**)	1	,892 (**)
	Sig. (2-tailed)	,000		,007
	N	7	7	7
GDP	Pearson Correlation	,771 (*)	,892 (**)	1
	Sig. (2-tailed)	,043	,007	
	N	7	7	7

Table 2: Correlations

\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

The results of the regression correlation analysis of some indicators characterizing the tourism sector and economic development of Azerbaijan were as follows (Table 3). Dependence of the volume of paid tourist services on monetary incomes per capita. The task of the variance analysis is to test the null hypothesis  $H_0$  about the statistical insignificance of the regression equation as a whole and the tightness of the connection. Dispersion analysis (Table 3) shows that the equation is significant at a significance level of  $\alpha = 5.05$ . The coefficient of determination  $R^2 = .947$  estimates the proportion of the result of the result at the expense of the factors presented in the equation in the overall variation of the result. Here this share is 94.7%. This means that 94.7% of the variation of the result (the volume of paid tourist services) is explained by the variation of factor variables (monetary per capita income). Consequently, there is a very close relationship of factors with the result. The coefficient indicates a very high (more than 94%) determinism of the result of the volume of paid tourist services and monetary incomes per capita. The resulting equation describes the interrelationship between factors well enough.

	Model parameters	R Square	F	Sig.	t	Durbin-Watson
Dependences of the volume of paid tourist services on monetary incomes per capita	1468.193 .017	.947	88.654	.003 .000	5.552 9.416	1.154
Dependence of GDP on the volume of paid tourist services	20793.715 8.619	.795	19.384	.043 .007	2.689 4.403	1.771
Dependence of GDP on cash income per capita	35793.512 .129	.594	7.314	.004 .043	5.050 2.705	1.582

Table 3: Indicators of correlation-regression and variance analysis

To test the null hypothesis, we apply the Student's test. The critical value ( $t_c$ ) is found from tables of Student's t-distribution. Gorelova and Katsko (2005), Eliseeva, Kuryшева, Gordeenko and others (2002). With a significance level  $\alpha = 0.05$ . and the number of degrees of freedom  $df = 5$ , the results obtained show that the coefficients of regression are statistically significant, they can be based on analysis and forecast. Level of significance is a permissible error in our statement, in our derivation. Sig - p-level of significance of coefficients (probability of

erroneous acceptance of the hypothesis about the existence of non-zero coefficients of regression).  $P\text{-value} = 0.000 < 0.05$ , we reject  $H_0$  and conclude that there is a significant linear relationship between the volume of paid tourist services and monetary per capita income. We also estimate the significance of the regression equation and the coefficient  $R^2$  with the help of the criterion-Fisher. The observed or actual value was 88.654. With a significance level  $\alpha = 0.05$  and the number of degrees of freedom  $df = 5$  from the table of values of the F-Fisher criterion, Yakovlev (2005), Berenson, Levine and Krehbiel (2012), the critical value is 4.39. Since  $F_{cal.} > F_{cr.}$ , Then the null hypothesis about the insignificance of the quantity  $R^2$  is rejected, that is, the regression equation and  $R^2$  are statistically significant. So, the required regression equation has the form:  $\hat{Y} = 1468.2 + .017X + \varepsilon$  Dependence of GDP on the volume of paid tourist services. The results obtained show that the equation is significant. 79.5% ( $R^2 = .795$ ) of the variation of the resultant characteristic (GDP) is explained by the variation of factor variables (the volume of paid tourist services). The coefficient indicates a very high (more than 79%) determinism of the result of GDP and the volume of paid tourist services. The resulting equation describes the interrelationship between factors well enough. With a significance level  $\alpha = 0.05$  and the number of degrees of freedom  $df = 5$  for the two-sided critical region  $t_c. = 2.01$ . Compare  $t_{cal.}$  with  $t_c.$ . According to the results of Table. 3 the values of  $t_{cal.} = 4.403..$  From there  $t_{cal.} > t_c.$  Consequently, the regression coefficients is statistically significant, the results show that the regression coefficients are statistically significant. According to the correlation-regression analysis of the relationship between GDP and the volume of paid tourist services, the observed or actual value of the Fisher test was 88.654. With a significance level  $\alpha = 0.05$  and the number of degrees of freedom  $df = 5$  from the table of values of the F-Fisher criterion, the critical value is 4.39. Since  $F_{cal.} > F_{cr.}$ . Then the null hypothesis about the insignificance of the quantity  $R^2$  is rejected, that is, the regression equation and  $R^2$  are statistically significant. So, the required regression equation has the form:  $\hat{Y} = 20793.7 + 8.619X + \varepsilon$ . The results obtained (Table 3) allow us to state that there is a correlation between the indicator of GDP ( $Y$ ) and the indicator of monetary incomes per capita ( $x$ ). With the help of the F-Fisher criterion and the Student's t-criterion, the regression model ( $\hat{Y} = 35793.5 + .129X + \varepsilon$ ) is estimated adequately and the results show that the regression coefficients are statistically significant. All regression models value Durbin-Watson does not go beyond the boundaries [1.5, 2.5], so we can say that there is no autocorrelation, Belokopytov and Smirnov (2011).

## 6. CONCLUSION

The conducted regression analysis gives the basis with 95% of the probability of assuming that the country's economy is contributing to the sustainable development of tourism. The development of tourism in the country has a great impact on the welfare of the population and the territory, which in turn affects such socio-economic processes as providing recreation and recreation, providing transport and communication services, creating additional employment and increasing wages, raising cultural awareness of the population. The correlation analysis revealed that the volume of paid tourist services and monetary incomes per capita, GDP, the volume of paid tourist services and monetary incomes per capita, are positively correlated. The reason for this is an increase in the mobility of the population with an increase in living standards and an increase in incomes. Thus, the main factor influencing the volume of activity in the tourism industry in the Republic of Azerbaijan is money income per capita, as well as an increase in the volume of paid tourist services, including the structure of consumer spending of the population. From the resulting regression equation it follows that with an increase in monetary income per capita 1 AZM, the volume of paid tourist services will increase by an average of 0.017 AZM, and the cost of GDP 0.129 AZM. With an increases in monetary incomes per capita 1%, the volume of paid tourist services increases by an average of 0.62%.

If we increase the volume of paid tourist services by 1%, then the result indicator, i.e. GDP on average will increase by 0.34%. The results of correlation-regression analysis have an important scientific and practical value. This is manifested in the fact that factor analysis is greatly deepened, the place and role of each factor in the formation of the level of the investigated indicator is established, plans, forecasts, management decisions are more reliably substantiated. The use of the econometric approach has revealed the relationship between the indicators of tourism development and the economies of countries. In the course of the study, the following conclusions were drawn:

1. The method of correlation-regression analysis is one of the tools for the study of a group of indicators for identifying cause-effect relationships;
2. The most important indicator for the study is the level of GDP and the volume of paid tourist services as they are related to the income of the population. The mobility of residents depends on their financial well-being;
3. It is confirmed that between the indicators of the development of tourism and the economy there is a strong relationship.

In order to strengthen the influence of the tourism sector on the economies of countries, it is necessary: to stimulate the sphere of investment and tax policy by measures of state support, to increase the amount of extra-budgetary investments in the development of modern tourism infrastructure in the Republic, including on the basis of public-private partnership; support of initiatives of the local population for the construction of small hotel enterprises, guest houses for the purpose of developing rural and active tourism; to expand tourism facilities and infrastructure in the Republic etc.

#### **LITERATURE:**

1. Aall, C. 2012. Sustainable Tourism in Practice: Promoting or Perverting the Quest for a Sustainable Development? *Annals of Tourism Research*, 39(2): 528–546.
2. Allen, L.R., Long, P.T., Perdue, R.R., Kieselbach, S. (1988). The impact of tourism development on residents' perception of community life. *Journal of Travel Research*, 27(1): 16–21
3. Belokopytov A. V. Smirnov V.D. 2011. *Methods of correlation and regression analysis in economic research.* - Smolensk, -150 p.
4. Buckley, R. (2012). Sustainable tourism: research and reality. *Annals of Tourism Research*, 39(2):528–546.
5. Cater, E. (1987). Tourism in the least developed countries. *Annals of Tourism Research*, 14(2):202–226.
6. Casagrandi, R., Rinaldi, S. 2002. A theoretical approach to tourism sustainability. *Conservation Ecology*, 6(1): 13.
7. Chernukha D.S. 2016. The influence of tourism on socio-economic processes, in: *Young Scientist.* - №5.4. - p. 41-46.- URL <https://moluch.ru/archive/109/26784/> (date of circulation: May 28, 2018).
8. Choi, H.C., Murray I. 2010. Resident attitudes towards sustainable community tourism. *Journal of Sustainable Tourism*, 18(4): 575–594.
9. Commission of the European Communities, Organization for Economic Cooperation and Development, United Nations and World Tourism Organization. 2001 *Tourism Satellite Account: Recommended Methodological Framework.* - Luxembourg, Madrid, New York, Paris

10. Eagles, P.F.J., McCool, S.F., Haynes, C.D. 2002. Sustainable Tourism in Protected Areas Guidelines for Planning and Management. Prepared for the United Nations Environment Programme, World Tourism Organization and IUCN - The World Conservation Union Adrian Phillips, Series Editor // cmsdata.iucn.org.
11. Farrell, B., McLellan, R. 1987. Tourism and physical environment research. *Annals of Tourism Research*, 14(1): 1–16.
12. Frechtling D. 1994. Assessing the Impacts of Travel and Tourism – Measuring Economic Benefits / J.R. Brent Ritchie, Charles R. Goeldner. *Travel, Tourism, and Hospitality Research: A Handbook for Managers and Researchers* (J. Ritchie and C.Goeldner eds) / Chapter 32. New York, pp. 333–351.
13. Gorelova G.V, Katsko. A. 2005. *Theory of Probability and Mathematical Statistics in Examples and Tasks with Excel: Proc. manual for universities*. - Ed. 3rd, add. And pererab. - Rostov, Phoenix,.
14. Gill, A., Williams, P. 1994. Managing growth in mountain tourism communities. *Tourism Management*, 15:p. 212–220.
15. Kiseleva I.A. 2011. Modeling of risk situations [Text]: teaching method. *Complex* / I.A. Kiseleva; The Eurasian Open Institute. - M.: MESI, - 152 p.
16. Lane, B. 2009. Thirty years of sustainable tourism. In: S. Gossling, C.M. Hall & D.B. Weaver (eds.). *Sustainable tourism futures* (pp. 19–32). New York: Routledge.
17. Mark L.Berenson, David M.Levine, Timothy C/Krehbiel. 2012. *Basic Business Statistics: Concepts and Applications*, twelfth edition, 859 p
18. Mathieson A. 1982. *Tourism: economic, physical and social impacts* / A. Mathieson, G. Wall. Harlow: Longman Group Limited, . 208 p.
19. Nash, D., Butler, R. 1990. Towards sustainable tourism. *Tourism Management*, 11(3): 263–264.
20. National accounts of Azerbaijan. 2019, Official publication, Statistical yearbook, State Statistical Committee of the Republic of Azerbaijan, Baku, 154 p
21. "On the development of specialized tourism industry in the Republic of Azerbaijan Strategic Road Map ". 2016. approved by Decree No.1138 of the President of the Republic of Azerbaijan dated December 6,
22. Press release of January 18, 2016. // <http://media.unwto.org/ru/press-release/2016-01-19/chislo-mezhdunarodnykh-turistskikh-pribytii-v-2015-godu-vozroslo-na-4-i-dos>
23. Eliseeva I.I, Kuryshva S.V, Gordeenko N.M, and others. 2002, *Practical work on econometrics*. / - Moscow: Finances and Statistics.
24. Smith, V. 1977. *Hosts and guests: The anthropology of tourism*. Philadelphia: University of Pennsylvania.
25. Stronza, A., Gordillo, J. 2008. Community views of ecotourism: Redefining benefits. *Annals of Tourism Research*, 35(2): 444-468.
26. Sharpley, R. 2000. Tourism and sustainable development: Exploring the theoretical divide. *Tourism of Sustainable Tourism*, 8(1): 1–19.
27. Stynes D.J. 1997. *Economic impacts of tourism: a handbook for tourism professionals*. IL: University of Illinois, Tourism Research Laboratory, . 32 p. URL: [http:// www.onestopmba.com/mba –download /upload /economic %20 impacts %20of% 20 tourism.pdf](http://www.onestopmba.com/mba-download/upload/economic%20impacts%20of%20tourism.pdf)
28. Statistical indicators of Azerbaijan, 2019. Official publication, Statistical yearbook, State Statistical Committee of the Republic of Azerbaijan, Baku, , 812 p
29. Shishkin A.I, Shishkin A.A. 2009. Experience in managing the socio-economic development of the region (on the basis of the implementation of the concept of "Revival of Karelia") // *Economics and Management*. Russian economic journal / St. Petersburg Publishing House. Academy of Management and Economics -. - № 11 (49). - p 31-35.

30. Tourism in Azerbaijan. 2019. Official publication, Statistical yearbook, State Statistical Committee of the Republic of Azerbaijan, Baku, , 146 p
31. UNWTO Tourism Highlights, 2015 Edition // [http:// mkt. unwto. org/publication/unwto-tourism - highlights-2015-edition](http://mkt.unwto.org/publication/unwto-tourism-highlights-2015-edition). - 2016. - №5. 4. - p. 41-46. - URL [https:// moluch. ru/archive/ 109/26784/](https://moluch.ru/archive/109/26784/) ( 28.05.2018).
32. Vellas, F. 2011. The indirect impact of tourism: an economic analysis. Toulouse University - TED AFL. Third Meeting of T20 Tourism Ministers. Paris, France, [t20.unwto.org](http://t20.unwto.org).
33. West, G., Bayne, B. 2002. The economic impact of tourism on the Gold Coast: Gold Coast Tourism Visioning Project 3.1 (Part Ia) // [citeseerx.ist.psu.edu](http://citeseerx.ist.psu.edu).
34. WTO. 1994. Recommendations on Tourism Statistics United Nations and - United Nations publication, Sales No.E94.XVII.6, Part One.
35. Yakovlev V.B . 2005. Statistics. Calculations in Microsoft Excel. - Moscow: Kolos

## THE ROLE OF THE STATE IN ENSURING FOOD SECURITY

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### **ABSTRACT**

*The problem of food security is one of the most important problems in the modern world economy. It is becoming more and more relevant to the interests of different countries, social and political forces with the deepening of the international division of labor, the development of world trade in agriculture and food, the acceleration of globalization. However, food security remains one of the most debated issues. In recent discussions on food security, the role of government regulation has become increasingly important. This development stems from the idea that decisions or approaches to food security need to take into account not only the technical and environmental aspects of the problem, but also the social, economic and political aspects. Emphasizing the role of the state, it is argued that private entrepreneurship and market mechanisms cannot ensure the state's food independence priorities. This issue is solved only by the system of state economic regulation, and in this case, the private sector of the economy is given a secondary, subordinate role. In food security, the state has a dual function: on the one hand, it forms the country's food complex, regulates its activities in the market, on the other hand, provides favorable legal, political and organizational conditions for sustainable development, food security from internal and external risks and protects from threats. The latest situation makes the state's regulatory role as a guarantor of food independence and security especially relevant.*

**Keywords:** *Food, Food safety, global problems*

### **1. INTRODUCTION**

One of the main issues in the theory of food security is the methods and mechanisms of its provision. First of all, we are talking about both domestic and foreign support for agricultural production and the food market. Both directions are complex systems that cannot operate in a free market regime and require effective government intervention. Theory and experience show that the level of food security depends on the degree and role of state regulation in industry. The following dependence is observed: the higher the level of state regulation, the higher the level of food self-sufficiency of the country. On the contrary, the type of market regulation manifested itself in the late nineteenth century with insufficient efficiency. He was characterized by the scale of local production and low supply of goods. In this regard, the basic principles and methods of non-market regulation of food markets in developed economies have already begun to take shape in the mid-1930s. Fundamental issues of food security and reducing the risk of food shortages will be the most important function of the agricultural sector of the economy in the future. In this regard, it is necessary to take certain measures to protect domestic production and provide assistance to farmers in order to ensure food security of the country. The main task of state regulation of agriculture is to create a legal framework, economic, social conditions, protectionist climate that helps to stimulate agricultural and food production. Based on the complex, multilevel, and multifaceted nature of the problem, many researchers often point out that it is therefore difficult to offer a single definition of the scientific category of "food security" [Крылатых, 2014]. The peculiarity of this concept, scientific category, concept is that it is non-static and has changed over time depending on the level of development of the world economy, the activities of international organizations and a number of other factors [Ревенко, 2003].

In recent years, food security has received great attention from both scientists and ordinary people (Lang and Barling 2012; Allen 2013). This increase is particularly noticeable after the 2007-2008 and 2010 global food price crises and the 2008 report on global development, which called for increased investment in agriculture in developing countries. These events clearly show that despite decades of efforts to eradicate hunger and malnutrition, food insecurity is still a serious problem. In addition, it is becoming increasingly clear that food security is closely linked to other issues such as global environmental change and energy markets, and that its political environment is undergoing transformation and globalization (Lang et al. 2009; Ingram et al. 2010). For these reasons, food security has become a concept that resonates widely among academic institutions and political considerations. (Mooney and Hunt 2009; Candel et al. 2014).

## **2. EVALUATION OF THE ROLE OF THE STATE IN ENSURING FOOD SECURITY**

In recent discussions on food security, the role of government regulation has become increasingly important. This development stems from the common perception that food security decisions or approaches should take into account not only the technical and environmental aspects of the problem, but also the social, economic and political aspects (Maye and Kirwan 2013; Von Braun 2009; FAO 2012; Wahlqvist et al. 2012). For example, it is said that food security cannot be achieved only through idealistic plans or new technologies. This requires advanced management strategies involving governments, as well as companies, NGOs and citizens. (Kropff et al. 2013). The main features of the management of the agricultural complex are related to the specific weakness of this sector of the economy, high dependence on climate and natural factors, historical traditions of the population, migration processes and other factors of uncertainty affecting the results of agricultural activities. In this regard, the correct and scientifically justified choice of methods to achieve the goals of the state's agrarian policy plays an extremely important role. When it comes to domestic policy, it takes into account such mechanisms as financial and price support of the agro-industrial complex, the use of compensation and subsidy systems, preferential taxation and lending, investment process, price and procurement measures. The most productive agriculture in the world (America and Europe) cannot survive without subsidies and protectionism (Райнерт 2015). Another aspect of the problem is the use of foreign economic mechanisms of state regulation of the agricultural sector. The modern national economy operates in the context of globalization, the development of international economic relations and the fact that the process of reproduction goes beyond national borders. As part of agrarian policy, foreign policy in the field of trade in agro-food products is to protect the domestic market of agricultural raw materials and food from excessive competition with foreign countries to ensure food security, and the most important function of state regulation is to protect national agricultural producers. to help provide access to food markets. World experience has developed many methods and mechanisms to stimulate agricultural development, state support and protection of the interests of local food producers. The main provisions of the state agrarian policy of the leading Western countries coincide, but at the same time, the need to achieve sustainable agricultural development by supporting national farming from the initial postulate, modern mechanisms to ensure safe food for human health, stimulating harmonious rural development and the need to tighten environmental protection measures. However, in this case, the set of tools used in general similarity, as a rule, consists of individual features in each country. In recent years, the concept of state regulation is increasingly applied to the concept of food security. All people must have access to a diet that is physically, socially and economically adequate, safe and nutritious at all times to meet their dietary needs and preferences for an active and healthy life (FAO 2003), which includes food availability, food availability and food utilization. it also contains elements of their stability over time (FAO 1996).

These interactions occur both within and outside food systems (Ericksen 2008; Ingram 2011) and cover factors such as food prices, agricultural trade, poverty reduction, infrastructure, education, and crisis management. In addition to improving food security, food security regulation is linked to the aging of the population in the context in which this interaction occurs (Jessop 2003). Surprisingly, despite these various challenges to food security regulation, it is still unclear what food security regulation is, what its key features and characteristics are, and how it can be strengthened. The role of the state in ensuring food security and food security probably has a deep history (Diamond 2005). In developed countries (USA, Germany, France, Japan) great importance is attached to solving food security problems. However, in these countries, this issue is considered in terms of a high level of food security. In Germany, for example, food security is an important issue that only arises when market regulation cannot solve the problem. In fact, in Germany, the approach that analyzes this problem in terms of the crisis situation in the country prevails. In the United States, food security is assessed, firstly, as support for the stability of sales in the domestic food market (primarily national production), secondly, as a form of food aid to the poor, and thirdly, to stimulate agricultural exports and use food supplies for foreign policy interests (FoodSecurityActof1985). In addition, in the United States, food security is understood as "food safety for human health." (Черняков1997). Over the past two decades, the United States has increasingly understood the problem as a set of measures within the WTO to create a global system to regulate food production and trade, including programs to reduce subsidies to farmers, reduce tariffs, and open up agricultural markets. As for the problem of food independence, it is left out of the analytical work and research of American economic thought. The main threats and risks to food security in the world include the following (Revenko2013): (These factors determine the long-term development dynamics of the food market and agro-industrial complex):

1. natural-climatic factors (for example, there is a risk of non-fulfillment of obligations under contracts for the supply of agricultural products in non-productive conditions);
2. population growth, as well as increasing solvent demand for food against the background of rising living standards in developing countries;
3. reduction of growth rates of investments in the agricultural sector of the economy;
4. cyclical nature of the economy (the optimal condition for achieving food security is stability, which is not only natural and climatic conditions, but also economic development. At the same time, the adoption of strict regulatory measures by the state in the period of recession leads to a sharp deterioration in food security indicators);
5. volatility of prices, which play a special role in the destabilization of the food market, including in the context of overlapping agro-food and general economic crises.

This volatility is an integral feature of food prices. The mechanism of volatility in food prices was discovered in the 1990s, its distribution patterns were found among food products, and it was linked to oil prices, exchange rates, reserves and productivity. Recently, speculative deals in the food and related products market have played an increasingly important role in increasing price volatility. The impact of speculative factors on price changes in the basic raw materials market of food products is on average up to 10%. These factors determine the long-term development dynamics of the food market and agro-industrial complex.

### **3. INFORMATION IN THE FIELD OF FOOD SECURITY IN AZERBAIJAN**

The government of Azerbaijan implements measures in many areas to ensure a reliable food supply to the population and large-scale state programs aimed at developing the agricultural sector, on which food security depends. At present, reliable food supply of the population in the country is one of the main directions of the state's economic policy. The foundation of the policy of reliable provision of the population with basic foodstuffs and the development of the



agricultural sector, where the majority of the country's employed population works, was laid by the Great Leader Heydar Aliyev in the mid-1990s. In 2001, the "Food Security Program of the Republic of Azerbaijan" was approved. As a result of the work done under this program, agricultural and food production has increased significantly. Later, as a result of rapid economic development in Azerbaijan, the measures taken to further develop the agricultural sector were expanded. The development of the agricultural sector is one of the main directions of the strategy of economic diversification. The development of the agricultural sector is one of the main directions of the strategy of economic diversification. The establishment of large farms in the country will not only meet the demand for basic food products in our country, but also allow its consumption to exceed the world level. The level of self-sufficiency in cereals (excluding paddy) in Azerbaijan reaches 70%, and the country's reserves in this area in recent years amounted to 1-1.2 million tons. As a rule, the residue on cereals at the beginning of the year is more than 40% of the product used for food production: "In 2019, the level of self-sufficiency in potatoes was 87.8%. In Azerbaijan, as a rule, the balance of potatoes at the beginning of the year is always more than 70% of the product consumed as food. The level of self-sufficiency in our country is 112% for vegetables, 100.8% for melons, 123.1% for fruits and berries, 82.5% for meat and meat products, 101.8% for eggs, 86% for milk and dairy products, 2%, 111.4% for salt and 100% for bread and bakery products. According to the reports of influential international organizations, Azerbaijan's food security has significantly increased in recent years. It is enough to look at the Global Food Security Index prepared by The Economist Group. According to this report, Azerbaijan's overall food security index has risen steadily over the past seven years. According to the report, this increase was 12.7% over 7 years, and our country leads the list on this indicator. In other countries, this figure was 6-7% at best. In 2019, Azerbaijan moved up three places in this report to 53rd place. At present, Azerbaijan is in the top ten countries in Asia and the Pacific for food security. Our country is also ahead of many republics of the former USSR in this ranking. It should be noted that according to the report, the increase in the global food security index in Azerbaijan over the past 7 years is the highest in the world. One of the latest measures in this area is to improve the existing legislation in terms of agricultural development, develop incentive mechanisms and implement public awareness measures in this area, noting that the issue is a priority. According to the General Collective Agreement for 2020-2022 signed between the Cabinet of Ministers, the Confederation of Trade Unions of Azerbaijan and the National Confederation of Entrepreneurs (Employers) of the Republic of Azerbaijan, the parties agreed to establish a specialized information and monitoring system on food safety. They also undertook to ensure the systematization of the database.

#### **4. CONCLUSION**

Although the importance of state intervention and state regulation to ensure effective food security is increasingly accepted, knowledge about the role of the state in the field of food security and its definition has been quite fragmented. For this reason, the role of the state in ensuring food security is still a relatively closed area that offers great potential for future research. In particular, the researcher needs to look for new approaches or regulatory paradigms based on other countries in the future. Approaching food security as a serious problem can provide valuable information in this regard. In addition, there is a need for a more empirical study of existing state regulation and governance mechanisms, especially at the subnational level. As a result, this area of research should help develop reasonable regulatory and management mechanisms that can address the problem of food security more effectively than is currently possible.

**LITERATURE:**

1. Богданов С. М. Продовольственная безопасность. Исторический аспект. – М.: Весь Мир, 2012. – 332 с.
2. Черняков Б. А. Аграрный сектор США в конце XX века / Под ред. Б. А. Чернякова. – М.: РИЦ «Пилигрим», 1997. – С. 301
3. Крылатых Э. Н. Концепции и методологические основы изучения продовольственной безопасности // Никоновские чтения. – 2014. – № 19. – С. 3
4. Мальцева В. А. Государственная поддержка сельского хозяйства в зарубежных странах: эволюция теории и практики реализации. Екатеринбург: УМЦУПИ, 2015. – 228 с.
5. Назаренко В. И. Продовольственная безопасность (в мире и в России). – М.: Памятники исторической мысли, 2011. – 286 с.
6. Ревенко Л. С. Мировой рынок продовольствия в эпоху «генной» революции. – М.: Экономика, 2003. – С. 37
7. Lang, T., & Barling, D. (2012). Food security and food sustainability: Reformulating the debate. *Geographical Journal*, 178(4), 313–326.
8. Allen, P. (2013). Facing food security. *Journal of Rural Studies*, 29, 135–138.
9. Lang, T., Barling, D., & Caraher, M. (2009). *Food Policy: Integrating Health, Environment & Society*. Oxford: Oxford University Press.
10. Ingram, J., Ericksen, P., & Liverman, D. (Eds.). (2010). *Food Security and Global Environmental Change*. London: Earthscan.
11. Mooney, P. H., & Hunt, S. A. (2009). Food Security: The Elaboration of Contested Claims to a Consensus Frame\*. *Rural Sociology*, 74(4), 469–497.
12. Candel, J. J. L., Breeman, G. E., Stiller, S. J., & Termeer, C. J. A. M. (2014). Disentangling the consensus frame of food security: The case of the EU Common Agricultural Policy reform debate. *Food Policy*, 44, 47–58.
13. Von Braun, J. (2009). Addressing the food crisis: governance, market functioning, and investment in public goods. *Food Security*, 1(1), 9–15.
14. FAO (2012). FAO calls for strengthened food security governance. <http://www.fao.org/news/story/en/item/162391/icode/>. Accessed 5 June 2013.
15. Wahlqvist, M. L., McKay, J., Chang, Y. C., & Chiu, Y. W. (2012). Rethinking the food security debate in Asia: Some missing ecological and health dimensions and solutions. *Food Security*, 4(4), 657–670.
16. Maye, D., and Kirwan, J. (2013). Food security: A fractured consensus. *Journal of Rural Studies*, 29, 1–6.
17. Kropff, M. J., Van Arendonk, J. A. M., & Löffler, H. J. M. (Eds.). (2013). *Food for all: Sustainable nutrition security*. Wageningen UR: Wageningen.
18. Райнерт Э. С. Как богатые страны стали богатыми и почему бедные страны остаются бедными. – М.: Издательский дом ВШЭ, 2015. – С. 180
19. FAO. (2003). *Trade Reforms and Food Security*. Rome: FAO.
20. FAO. (1996). *Rome Declaration on World Food Security*. Rome: FAO.
21. Ericksen, P. J. (2008). Conceptualizing food systems for global environmental change research. *Global Environmental Change*, 18(1), 234–245.
22. Ingram, J. (2011). A food systems approach to researching food security and its interactions with global environmental change. *Food Security*, 3(4), 417–431.
23. Jessop, B. (2003). Governance and meta-governance: on reflexivity, requisite variety and requisite irony. In H. P. Bang (Ed.), *Governance as social and political communication* (pp. 101–116). Manchester: Manchester University Press.
24. Diamond, J. M. (2005). *Guns, Germs and Steel: A Short History of Everybody for the Last 13,000 Years*. London: Vintage.

25. FoodSecurityActof1985–Modeof access:  
<http://www.ers.usda.gov/publications/aib-agricultural-information-bulletin/aib498.aspx>.

## THE MODERN STATUS OF EMPLOYMENT IN THE REGIONS IN POST-OIL ERA

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### **ABSTRACT**

*The social policy of the modern state should have a content that covers the most important aspects of public life. The objective of effective social policy is to build the social protection system enabling to expand the ability of population to meet their needs, to maintain stability in the society, to create a confident life for every citizen, to reduce the social tension and to support the overall regular reproduction process in the society. The successful economic policy implementing in the country has a powerful impact on the development of the economy of regions along with the increase in the economic growth of the country. The major steps have been taken to ensure the balanced development of regions of Azerbaijan. The four state programs for the socio-economic development of the regions have been adopted so far and the latter one is being successfully implemented at the moment. One of the main directions of the state social policy is the case with employment. The Azerbaijan's independence and the transition to a market economy had major positive effects on the employment of the population. The status of the employment should also be considered as an indicator of the demand to the workforce in the country. One of the main goals of the state programs in Azerbaijan is to bring the regional development to the highest level and achieve its sustainable growth. Within the framework of the mentioned programs, a number of solutions are planning to be taken to resolve the problem of employment in the regions by reducing the dependence of the economy from the oil sector and stimulating the development of the non-oil sector. One of the key directions in the implementation of the employment strategy is to eliminate the factors that limit the opening new workplaces and to create the institutional condition that stimulates the increase of the level of employment. From this point of view, the effective implementation of the fiscal and monetary policies, which are the main components of the state regulation mechanism and the adoption of measures aiming the development of entrepreneurship, especially small and medium-sized businesses are very crucial. Strategic Road Map includes the planning to increase an employment, to achieve the macroeconomic stability, to improve regional development, to upgrade the structure of economy and to increase the share of the private sector in the economy. It is planning to implement much more work to achieve more sustainable, diversified, inclusive economy and to increase the development of social sector in the country.*

**Keywords:** *social policy, balanced development, SWOT, employment, economic policy, regional policy, social welfare, diversification, fiscal and monetary policy, social sector*

### **1. INTRODUCTION**

Azerbaijan's economic and social development encompasses a sustainable development strategy, including population welfare, settlement, economic security, and a global integration system. The main factor of development is human capital, its behavior, the system of skills that affects the growth of economic activity and spiritual and material resources. The system of people's needs in different periods, the effective organization of their measurement and payment methods are used as a criterion of the strategic planning and management system in modern conditions. The social base of the Azerbaijani economy has expanded since 1996 with sustainable development and high growth rates. The socially oriented policy founded by the Great Leader Heydar Aliyev has been deepened by new qualitative changes by President Ilham

Aliyev. Ilham Aliyev's long-term strategy is based on social stability, a fair distribution system, and a development strategy for every Azerbaijani citizen. Ilham Aliyev regulates the model of creation and organization of the human factor, human capital and conditions for realizing human activity, which is the main direction of social policy, with its own criteria and indicators. The principles that shape its policy are based on resources based on secularism and resource potential. In modern conditions, Ilham Aliyev solves the mechanisms that solve the social problems of young people, students, the elderly and the disabled, taking into account the reality of Azerbaijan. Employment policy, being a leading social sector, is possible through favorable population growth in the country and the regulation of production and consumption in line with market-type development. Employment is used as a key criterion for regional and regional development. Demographic growth forms the labor force. The demand for labor resources in the country necessitates the organization and management of vocational and vocational education and vocational training, which are necessary for the development of production and services in market conditions [4].

## **2. THE REGIONAL NATURE OF EMPLOYMENT AND UNEMPLOYMENT REGULATION**

The dynamic economic development of the country in the post-oil period, the effective deployment of productive forces in the regions, the proper use of economic and social resources in the country are primarily the economic policy pursued here and its proper implementation. One of the most important problems to be solved in our country today is to further increase the socio-economic development of the regions, to eliminate the existing and sharp differences between the regions and to achieve productive employment in the regions. Based on research, we can say that the socio-economic development of the regions is an important indicator of the progress of each country in this direction. From this point of view, the socio-economic development of the regions occupies an important place among the economic priorities of the state. It is possible to control the development of the regions by influencing the political, socio-economic and environmental development of the territories. The main goal here is to achieve balanced development of the economy, fair distribution of income, improvement of living conditions, social status and welfare in the regions. In order to achieve balanced, dynamic development of the regions, first of all, it is planned to eliminate regional disproportions and rationalize proportions. The level of employment is an important macroeconomic indicator to characterize the effectiveness of economic policy in the country and the degree of economic development of the country. Many factors can affect the state of employment. They can be grouped as follows:

- Socio-demographic factors include: population size, age and sex composition, demographic situation in the country, migration, education level and classification of able-bodied population;
- economic factors: the structure of the country's economy, the level of development of productive forces, the ratio of state and non-state property, the regulatory framework and socio-economic environment for the formation of entrepreneurial activity, the conditions of initial capital accumulation, the state of scientific and technical progress opportunities to apply its results ;
- international factors: the country's place in the international division of labor and the volume of foreign investment in the country's economy;
- political factors: political-economic and military-political stability in the country and its regions, the level of democratization of society;
- regulatory factors: budget-tax, monetary-credit, anti-crisis, structural, investment, antitrust, etc. of the state economic policy. measures. [7]

The principle of productivity and fairness must be ensured in the implementation of regional development strategies. Regional policy and regional structural policy are important tools in ensuring these two principles. The principle of productivity means the efficient use of the economic potential of each region, the rational placement of production, taking into account the existing conditions in the regions. The principle of fairness implies the creation of equal opportunities and conditions (income levels, job creation) for the entire population of the regions in order to ensure the socio-economic development of the regions. The main condition for the successful development of the regions is the implementation of development policies in accordance with the conditions of the regions and using international experience. Regional development policy can be considered as an integral part of state policy. As employment is both an economic and a social category, it is important to best achieve goals in both areas when regulating employment. That is, it requires the harmonization of the production process and the measures taken for the development of the population. The state must achieve maximum employment of people with economic progress and ability to work. Another way to regulate employment is to reconcile supply and demand with labor. For this, it is important for the working population to undergo professional development courses and technical and vocational training, to further improve their skills. In the field of harmonization of supply and demand in the labor market, the state can influence this work in several ways:

- organization of social projects;
- opening of new business enterprises for the work of socially vulnerable groups;
- to support and stimulate the development of entrepreneurship and individual business.

It is necessary to take into account the impact of some factors on the socio-economic development of the state, as well as regional development policy. These include internal and external factors. Internal factors include the level of economic development within the borders of the country, the development rates of economic activity and forms of ownership and the relationship between them, the living standards of the population of each region, the level of employment and maintenance, etc. can be shown. External factors are to maintain and strengthen the country's food and economic security, to maintain and strengthen the country's economic and political prestige and position in the international arena. [6]

### **3. THE CURRENT STATE OF EMPLOYMENT AND UNEMPLOYMENT IN THE REGIONS**

The policy of socio-economic development pursued by the state is implemented by regulating the socio-economic development of each region in a comprehensive manner. Thanks to a comprehensive design, various elements of the economic mechanism (organizational structure of regional government, economic incentives, self-government) together help these regions to achieve their current and long-term development goals. The main goal of the social policy implemented in the country is to improve the living conditions and living standards of the country's citizens, as well as the population living in the regions. The main directions of the measures taken here are to improve the social situation of socially vulnerable groups, increase the social benefits of the poor, to eliminate poverty in the regions and at the national level in general. Ensuring employment depends on a number of factors, both in developed and developing countries. Examples are structural changes in the country's economy, the type of socio-economic policy, the level of development of productive forces. The level of employment is also an indicator of the demand for labor in the country. The level of this demand reflects the level of development of market relations and economic reforms in this area. Economic reforms ultimately affect the structural changes in the economy, the creation and development of the economic environment, which in turn significantly affects the employment of the economically active population.

As we know, improving the welfare of the people, increasing the income of the population is one of the main conditions for economic progress. This can be achieved through effective employment. Effective employment strikes a balance between job demand and job supply, which ultimately lays a fertile ground for socio-economic progress. Low levels of employment lead to acute socio-economic problems. In order to eliminate the destructive consequences, it is important to apply at least partial state regulation to the market. The role of the state here is to regulate the relations between the legislation and economic entities, to organize education and vocational training of the population, to apply benefits for those who are engaged in entrepreneurship and those who want to engage in entrepreneurship, and so on. It should be noted that measures aimed at reducing unemployment also play an important role in ensuring social stability. The level of employment does not depend only on the diversity of economic forms created in the country and their activities. It is also important to train new qualified personnel and provide them with jobs in accordance with their specialties. In the conditions of market relations, this system creates the basis for the social protection of people, the growth of the skills of workers in various forms of economy over time. This manifests itself as an objective requirement of modern times. The normal level of unemployment in a market economy is one of the characteristics. Unemployment can be caused by several factors. One of them is the economic crisis. Economic crises in a market economy can occur for a variety of reasons. Ultimately, this is one of the most important factors leading to unemployment. It is becoming commonplace for economic entities that will be the result of these crises to produce low-quality products and provide services due to the cessation of their activities or their inability to work at full capacity. This leads to a decline in incomes. As a result, the majority of the population lives solely on state benefits [2]. Problems in the employment of economic entities operating in various sectors of the market economy, the reduction of workers leads to a further increase in unemployment. This work does not pass without a negative socio-economic impact on society. It is important to use employment policy as an integral part of the state's economic policy to eliminate and effectively neutralize such destructive consequences. The most important component of employment policy, both now and in the future, is to achieve the efficient use of labor resources. Employment policy, one of the most important economic tools of the state to regulate the economy, is not ultimately seen as a means of putting pressure on market self-regulation. On the contrary, it is important for the further revival of the economy with the help of the state. The experience of developed countries also shows that in countries with market economies, the state employment policy is implemented with extensive socio-economic programs. Targeted financing programs are implemented here in many sectors of the economy, both from the state budget and the budget of non-state funds. These programs are aimed at reviving various sectors of the economy, creating new jobs and increasing investment in the economy. Research shows that the employment policy implemented in the country to reduce unemployment is bearing fruit. The state programs adopted for this purpose have also played an important role in reducing unemployment, especially in the regions. Also, the state programs adopted consistently since 2004 have played a special role in accelerating the socio-economic development of the regions. As a result, conditions are created in the regions for the creation of new jobs and further improvement of living standards. Socio-economic reforms implemented in the country should cover all regions, and regional development should be carried out at the state level. From this point of view, the President has adopted a number of laws and signed decrees. For example, the State Programs for Socio-Economic Development of the Regions of the Republic of Azerbaijan (2004-2008, 2009-2013, 2014-2018 and the ongoing 2019-2023), the Employment Strategy of the Republic of Azerbaijan (2006-2015- ), "State Program on Poverty Reduction and Sustainable Development in the Republic of Azerbaijan for 2008-2015" and their implementation, in turn, continue to play an important role in socio-economic development.

These laws have played an important role in bringing the regions to a new stage of development. The main purpose of these programs is to make efficient use of labor resources, existing economic and natural resources in the regions, to achieve further development of the non-oil sector of the economy, to further improve agricultural reforms, reduce unemployment and poverty, increase employment, has been to create new jobs. Ensuring the employment of labor resources and the formation of its optimal structure is one of the main macroeconomic problems. Employment is an indicator that depends on demographic factors on the one hand, and macroeconomic factors on the other. The process of state regulation of the labor market can be divided into three main blocks: state macroeconomic policy, employment policy and unemployment protection policy [10]. As a result of successful implementation of the “State Programs for Socio-Economic Development of the Regions of the Republic of Azerbaijan (2004-2008, 2009-2013 and 2014-2018)” there has been an increase in macroeconomic indicators in the country, intended for socio-economic development. As a result of the successful implementation of the work undertaken, economic prosperity has increased significantly. As a continuation of the programs, the development of the regions is an important part of the sustainable socio-economic strategy successfully implemented in the country. Additional measures on socio-economic development in the regions for 2019-2023 adopted in the field of regional development are aimed at sustainable development of the non-oil sector in the country, improving the quality of utilities and social infrastructure in the regions, further improving the business environment, increasing investment, new enterprises, has created jobs and, as a result, increased employment and reduced poverty. Based on experience, we can say that the socio-economic development of the regions is an important indicator of the progress of each country in this direction. From this point of view, the socio-economic development of the regions occupies an important place among the economic priorities of the state. The program states that: "To develop all regions of the country at a high socio-economic level, to increase the efficiency of using the existing potential in the regions to further improve the livelihood of the population, to create new jobs, to develop certain industries, the agricultural sector, to expand agricultural processing and more." measures must be taken"[5]. Employment can be considered as a socio-economic category necessary for the existence of human life. Employment means taking advantage of the work of individuals, their actual employment, as well as having a certain corporate relationship. From this point of view, employment can be assessed as a socio-economic process. Employment can also be seen as a reflection of unemployment. Employment can also be seen as a reflection of unemployment. Taking all this into account, achieving effective employment is one of the main tasks of the state, private sector and local self-government bodies and one of the most important solutions for the socio-economic development of the regions. Table 1 shows the change in the number and weight of the employed population over the years. The table covers the years 2016 - 2018. Based on this, the growth of the employed population has been observed for almost 3 years. If we compare between economic regions, the highest growth can be seen in Baku, Sheki-Zakatala and Ganja-Gazakh economic regions. The growth was 3.3%, 3.7% and 3.2%.

*Table following on the next page*



*Table 1: Number of employees by economic regions (in thousands)*

Urban and economic regions	2016	2017	2018	Growth (in percent)
In the republic, (in total)	4759.9	4822.1	4879.3	103.0
Baku	1140.5	1153.5	1172.8	103.3
Nakhchivan	233.5	235.5	237.4	101.7
Absheron	277.4	279.7	281.8	101.6
Mountainous Shirvan	148.6	150.3	151.1	101.7
Ganja-Gazakh	630.9	644.3	650.8	103.2
Kalbajar-Lachin	120.4	121.8	122.2	101.5
Sheki-Zagatala	306.8	310.7	314.7	103.7
Upper Karabakh	288.7	292.3	294.1	101.9
Lankaran	423.9	429.5	435.5	102.7
Aran (lowland)	936.7	948.9	960.1	102.5
Guba-Khachmaz	252.5	255.5	258.4	102.3

Absheron - 1.6%, Kalbajar - Lachin - 1.5%, Upper Karabakh - 1.9%, Lankaran - 2.7%, Aranda - 2.5%, Nakhchivan - 1.7%, Mountainous Shirvan - 1, 7% and 2.3% in Guba-Khachmaz. [9] One of the most important problems to be solved in our country today is to further increase the socio-economic development of the regions, to eliminate the existing and sharp differences between the regions and to achieve effective employment in the regions.

#### **4. ECONOMIC DEVELOPMENT OF STRATEGIC GOALS OF EMPLOYMENT AND UNEMPLOYMENT IN THE DIRECTION OF SWOT**

Strategic roadmaps for the national economy and key sectors of the economy will ensure the competitiveness, inclusion and further increase of social welfare of the economy on the basis of sustainable economic development in Azerbaijan. Responding to global challenges, Azerbaijan will strengthen its position in the world economy and join the group of high-income countries as a result of attracting investment, a free competitive environment, access to markets and the development of human capital. A total of 12 strategic roadmaps covering 11 sectors of the national economy have been compiled by the Presidential Decree "On approval of the main directions of the strategic roadmap for the national economy and key sectors of the economy and the issues arising from it." Covering the short, medium and long term, the project includes the development of a development strategy and action plan until 2020, a long-term review until 2025, and a vision for the post-2025 period. The document covers not only the principles and goals of development, but also international trends in development, measures to be taken, investments to be attracted and their results. The implementation of the short-term priorities will be the basis for future periods. The private sector will play a key role as an object of economic development, and public investment will act as an accelerator of this development process. Relevant government agencies will be responsible for the implementation of the measures and projects provided for in the document. Focusing on new economic sectors that can ensure sustainable economic development, such as the existence of private entrepreneurship instead of the state, areas with high qualification of low-skilled labor, the development of processing industry instead of production will be a great help in this work. Improving the structure of the economy is possible through the development of the financial and banking sector, the revitalization of the business environment, integration into foreign markets. For this purpose, four strategic goals have been identified, the third and fourth of which are aimed at

developing human capital and improving the business environment. Strategic vision for the national economy until 2020 To stabilize the Azerbaijani economy in the short term to overcome the negative effects of external shocks, to restore the line of development through diversification and new drivers in the medium term, and to increase competitiveness by further integration into the world economy. is to achieve [3]. The goal of diversifying the economy and increasing specialization is to increase the amount of income generated by the development of non-oil sectors and ensure a fair distribution. Necessary regulations will create conditions for better and more efficient growth in the production of local goods and services by strengthening competition. At the same time, attention will be paid to stimulating the development of small and medium enterprises. All this will ultimately play a leading role in solving the problem of employment and unemployment in the regions. The vision, which will cover the period after 2025, envisages the creation of favorable conditions for the realization of human potential. The prerequisites for a quality life are health, prosperity and education. More than three-quarters of the value created in the country's economy will fall to the non-oil sector. The Strategic Roadmap envisages an average annual real growth of more than 3 percent of GDP by 2025 and the creation of more than 450,000 new jobs. The creation of these jobs will be possible due to the influence of 3 factors:

- 1) Measures taken within the framework of the Strategic Road Map;
- 2) other additional measures
- 3) increase in economic growth rate as a result of improvement of the general economic environment. [3]

The Strategic Roadmap plans to increase employment, achieve macroeconomic stability, improve regional development, improve the structure of the economy, and further increase the share of the private sector in the economy. Work will be done to achieve the development of a more sustainable, diversified and inclusive economy in the country, as well as the development of social sectors. There are four priority goals for the development of the national economy. In modern times, international influences and variations in oil prices make it necessary to strengthen financial stability and efficient use of revenues from natural resources. In the implementation of measures for economic development, the state strives to harmonize monetary and fiscal policies to achieve its goals.

## 5. CONCLUSION

The main directions of the employment strategy are related to the development of commercially profitable industries, along with the involvement of socio-economic resources of the regions and the production of products and services necessary for the welfare of the population. In terms of global values, poverty reduction, living standards, social protection system and the most favorable smoothing policy of social polarization for the country are of theoretical and practical importance. The economic rationale for poverty reduction is made possible by rising incomes, rising wages, and the effectiveness of social protection. These mechanisms are evaluated by President Ilham Aliyev at the meetings of the Cabinet of Ministers on the results of modern economic and social development and prospects are determined, and the policy pursued in social development forms new aspects of the concept of regional vision. The development of social infrastructure in the regions, the welfare of the population, the creation of new jobs, education and the formation of a model of modernization of health and education in accordance with modern requirements [8]. During the implementation of the Employment Strategy, the unemployment rate decreased from 7.3% to 5%, the poverty rate decreased from 29.3% to 4.9%, the population's income increased 5.2 times, the minimum wage 3.5 times, the average monthly nominal wage 3.8 times. Appropriate measures have been taken to strengthen the social protection of the unemployed and citizens who have difficulty finding employment, to

improve the labor market, to improve the quality of labor resources and increase their competitiveness, to create favorable conditions for increasing economic activity. In this regard, 38,000 jobs were created by Sustainable operational social security agencies last year. More than 45,000 of our citizens have been provided with temporary employment here. 28,000 jobs were created by state enterprises. As a result of the implementation of these programs, a very large part, that is, in fact, 64 thousand people were employed during the year. In general, I would like to note that in 2019, 47,000 people were hired for 38,000 jobs. At the same time, further strengthening of social protection of workers in the country, formalization of employer-employee relations, improvement of control mechanisms over the organization of labor remuneration, as well as ensuring effective protection of other labor rights and guarantees of labor relations participants are not identified as one of the main priorities. Today, the country's long-term development goals are aimed at developing quality indicators in the field of employment, creating decent jobs, ensuring inclusion in employment and increasing the participation of socially vulnerable groups in the labor market. Employment Strategy "Improving the legal framework and institutional structure to regulate the labor market, which will promote employment and ensure decent work, increase the skills of the workforce, increase labor productivity, expand the scope of active employment measures and strengthen the integration of socially vulnerable groups into the labor market It will ensure the transition of employment policy from an extensive to an intensive phase, reflecting the issues of continuous social dialogue, updating labor standards, development of the labor market monitoring and forecasting system. The main objectives of the employment strategy:

1. To ensure the transition of employment policy from extensive to intensive stage, increase the level of employment, ensure full employment, support decent work and increase labor productivity;
2. Implementation of employment-oriented economic development policy, support of micro, small and medium enterprises;
3. Improving the regulatory framework and institutional structure in the field of labor market regulation;
4. Improving labor standards by developing the skills of the workforce;
5. Expanding the scope and increasing the effectiveness of active employment measures, strengthening the integration of citizens with special needs for social protection and difficulties in finding employment into the labor market;
6. Development of labor market monitoring and forecasting system. [1]

Directing investments to the regions will create conditions for solving their employment problems and increasing solvent demand. This will increase the demand for the product, and ultimately increase the demand for labor.

Thus, the regional development strategy implemented over the past 15 years is an important part of the development policy implemented in the country.

#### **LITERATURE:**

1. "Nation" ("Xalq") newspaper, November 30, 2019, № 266, Collection of Legislation of the Republic of Azerbaijan, 2019,
2. Reports of the Cabinet of Ministers of the Republic of Azerbaijan for 2004-2019
3. "Strategic road map on the perspectives of the national economy of the Republic of Azerbaijan Order of Ilham Aliyev dated December 6, 2016, Baku 2016
4. Heydar Aliyev strategy of economic development of Azerbaijan. UNEC. Baku 2019
5. Conference materials dedicated to the results of the first year of implementation of the "State Program of socio-economic development of the regions of the Republic of Azerbaijan in 2019-2023", 03.02.2020

6. Ali Nuriyev “Sustainable and balanced regional development” Baku, 2017
7. G.Azizova. Azerbaijan's labor market: problems, prospects
8. <http://www.president.az>
9. [www.stat.gov.az](http://www.stat.gov.az)
10. <http://www.economy.gov.az>

## TRENDS IN THE DEVELOPMENT OF AGRITOURISM IN AZERBAIJAN

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### ABSTRACT

*The tourism industry is currently one of the largest and highly profitable organically developing sectors of the global economy. About 10% of the world's gross national product, investment, jobs and consumer spending in the world account for tourism. In recent years, income from the tourism industry has increased annually by an average of 7.9%, according to the World Tourism Organization. Living and taking rest in rural homes, staying away from urban environments, and eating ecologically clean food is a favourite activity of tourists. Fresh mountain air, ice founts, forests, high mountain peaks, waterfalls and streams, as well as mineral springs make everyone feel good. One of the reasons tourists prefer the countryside is that hotels and hostels in some cities are too expensive. However, the prices are quite reasonable in the villages. Today, rural tourism is developing not only in economic areas, but also in remote mountain villages. The development of rural tourism, in addition to strengthening the economy, means increasing the incomes of the population and, most importantly, the socio-economic development of the regions. In this regard, the regions of Azerbaijan, which are rich in flora and fauna, provide great opportunities for rural tourism. Rural tourism also plays a key role in promoting the region's traditions, cuisine and other cultural spaces. When local people see that the tourist is interested in the culture of the area, they pay particular attention to it, and in a short time this attitude is spread among other members of the community. The growing interest of tourists in customs and traditions, encourages local people to gather more information and improve their knowledge. This article is devoted to the analysis of the problems of agrotourism development in Azerbaijan. The main trends in the organization of this relatively new branch of the agricultural economy are outlined, examples of successful projects in the field of agritourism in various regions of Azerbaijan are given.*

**Keywords:** *agrotourism, ecotourism, sustainable development, recreational activities, rural settlements*

## 1. INTRODUCTION

Agritourism, depending on the motivation of the consumer, can be classified into rural tourism, ecotourism, ethno-tourism, culinary tourism, geotourism, country recreation. Along with the concept of agritourism, there are such types of tourism as rural, farm, soft, green, ecological. Often, agro, rural and farm tourism are interchangeable, synonymous. This is explained by the fact that rural culture serves as a determining component of the tourism product in this segment. Agritourism and rural tourism at the moment has several definitions: “Agritourism is tourism that supports the development of agricultural regions, preservation of cultural heritage, and the revival of local traditions and products. Regional identification defines this type of tourism and serves to meet the needs of tourists in accommodation, food, leisure, everything that contributes to the sustainable development of the social sphere of the village (definition of specialists from the European organization Euroter). Rural tourism is a concept that includes all tourism activities, which are organized and managed by the local population and based on a close relationship with the environment: natural and man-made (P. Nistureanu)” [1]. The main characteristics of agritourism are:

- satisfaction of human needs related to practical participation in the production process, in the life of a rural family, as well as rural society;
- meeting human needs in the field of agricultural production or ethnography;
- satisfaction of emotional needs based on the desire of direct contact with pets, satisfaction of needs associated with the rural atmosphere.

## 2. RESEARCH

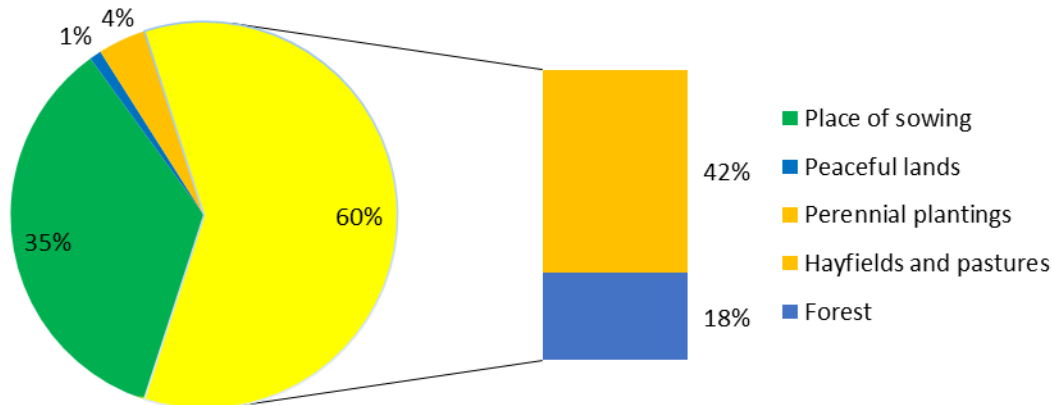
The environmental and social component is a factor in the active development of agritourism, which has received support in the economic sphere as an opportunity to acquire additional earnings. Due to the rapid development of megacities, agriculture, having lost its previous attractiveness due to falling incomes, prompted farmers to look for new sources of income. For tourists, agritourism was an attractive way to spend leisure time outside the traditional beach and hotel. Agritourism acts as a synthesis of special types of tourism:

- on ¼ it consists of ethno-tourism, the purpose of which is to visit ethnographic sites to get acquainted with the culture, architecture, life and traditions of the population;
- 35% falls on the share of ecotourism, a form of stable tourism, focused on visiting natural areas not affected by relatively anthropogenic impact;
- 15% agritourism includes cultural and educational tourism, which consists in visiting historical, cultural, geographical attractions;
- 1/4 falls on the share of active tourism, prevailing in unique landscape areas and mainly aimed at active types of travel [2].

Recently, agritourism has become increasingly popular, when travelers receive accommodation and meals in one country or another in turn for their own labor. In the world there are a number of similar programs, united under the general name "Volunteers on farms." Currently, they are supported by 33 countries of the world. In the course of the study, it becomes clear that the first step for the development of agritourism is the development of a special state program. It should be noted that the purpose of the “Strategic Roadmap for the Development of the Specialized Tourism Industry in the Azerbaijan Republic”, approved by the Decree of the President of the Azerbaijan Republic from December 6, 2016, is the development of tourism in general. Today, agritourism has become popular in Europe, thanks to tourists who prefer to spend their holidays on farms, and in this direction the number of farms has exceeded 600,000 in the world. Azerbaijan has great potential for the development of mountain tourism, agrotourism and ecotourism. The socio-economic goal of agritourism is to generate commercial income, use local resources and expand infrastructure for the welfare of the population.

Agritourism, as a field of activity, creates the conditions for entrepreneurship. Agritourism is expanding as an object of business and corporate governance. The social meaning of agritourism is the duty of creating jobs, developing households and organizing the socio-economic development of rural areas. The problems of economic and social development are organized in accordance with the using of these resources efficiently and increasing employment. Agritourism is a service sector that meets the needs of tourists. First of all, it is necessary to take into account the current state of agriculture as a factor in the development of agritourism. According to statistics, as of September 2019, 52.9% of the country's population are urban, 47.1% rural and 36.4% of employment is rural population. This proves that in terms of providing employment and food security agriculture is the main area in the country. 99.8% of agricultural land is privatized, 66.8% is owned by family farms, and 32.8% is owned by farms that produce for their own family needs. Only 0.2% of agricultural land is on the balance sheet of agricultural enterprises. The main component of the unified land fund of the republic is perennial plantings, arable land, hayfields, pastures and forests (Fig. 1.).

Figure 1: The main component of the single land fund of the republic



Source: Data of the State Statistics Committee of the Republic of Azerbaijan 2019

In terms of contribution to the Azerbaijan economy, the distribution of value added in the non-oil sector, agriculture sector comes after construction. Despite the fact that the share of agriculture in GDP is 9%, 39% of the total workforce is employed in this area. For comparison, only 1% of the total labor force is employed in the oil sector. Tourism, in general, contributes to economic development, increases local incomes, strengthens the economy of the society, expands employment opportunities, improves the welfare of the population, increases product integration and marketing etc., considered as one of the main conditions. Thus, the agricultural industry with production capacity of \$ 2.7 billion, or 41% of industrial production, can play a decisive role in the development of agritourism. It should also be noted that in recent years, fluctuations in oil prices, dependence on imports and high food prices, agricultural and rural development programs have become necessary and are being implemented. An analysis of the data of the State Statistics Committee of the Republic of Azerbaijan shows that, compared with previous years, agricultural development trends have been observed previous years. (Table 1).

Table following on the next page

*Table 1: Indicators for agricultural areas*

Years	Agriculture, forestry and the number of workers in the fishing industry, in thousands	Percentage of value added in GDP at current prices of respective years, as a percentage	Percentage of value added in GDP at current prices of respective years, as a percentage	Investments in millions of manats
2013	1677.4	5.4	322.2	574.3
2016	1729.6	5.6	3386.8	325.1
2018	1752.9	5.6	3949.3	617.8

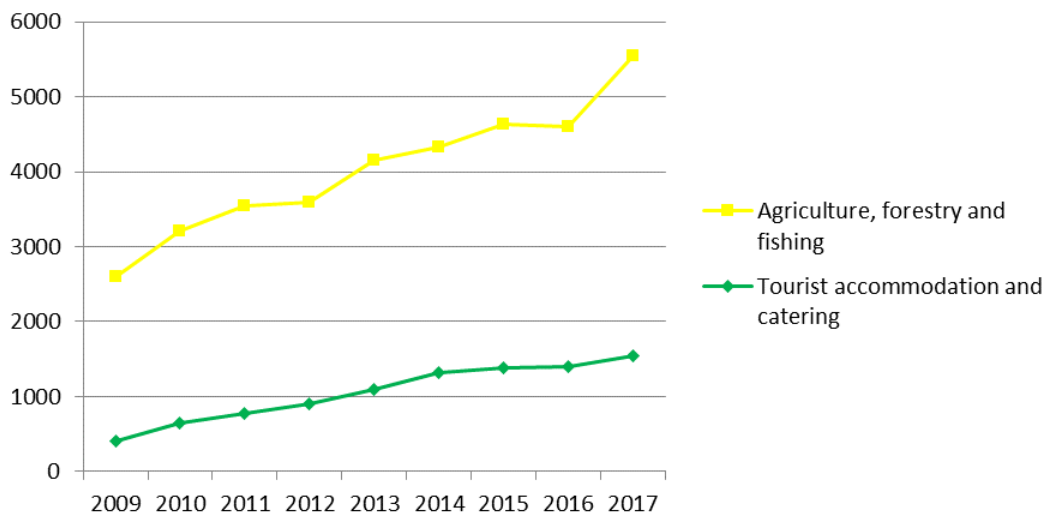
*Source: The 2019 data of the State Committee for Statistics of the Azerbaijan Republic*

As the table shows, over the years there has been observed an increase in the number of agricultural workers and GDP. Recently, agricultural parks have been created to stimulate the development of the agricultural sector. It is important to create agricultural parks and modern large-scale farms in the country. In accordance with the President's order, work is underway to create 51 agricultural parks and large farms with a total value of 2.2 billion manat on 257 thousand hectares in 33 regions of the country. At the same time, documents were issued to stimulate investment on 32 projects in 19 agricultural parks and large farms. On the area of 96 thousand hectares, 17 agricultural parks and large farms were launched with total state support of 604 million manat. It is expected that 10 agricultural parks and large farms will begin to work in 2019. Design and construction work is ongoing in 24 agricultural parks and large farms with a total state support of 1.3 billion manat in an area of 130,000 hectares. During 2018, the value of gross agricultural output in actual prices amounted to 7010.0 million manat, of which 3186.0 million manat accounted for crop production and 3824.0 million manat for livestock products. Comparing to the same period of last year, agricultural production increased by 4.6 percent, including 6.8 percent for crop products and 2.7 percent for livestock products. Over the past year, the total amount of funds directed to fixed assets in agriculture, forestry and fisheries increased by 20.7 percent compared to the same period of the previous year and reached 771.0 million manat. Azerbaijan, one of the main producers of agricultural products among the CIS countries, recently targeted its intention about import substitution, including further development of agriculture and the food industry for export. For this, in our country there are natural and anthropogenic factors. Together, these factors create ideal conditions for the development of agritourism and its main segment - ecotourism. There are family farms and farms that create the conditions for the development of agrotourism and ecotourism, which are enough in our country. The development of these destinations in our country is very attractive for foreign tourists, since it is based on traditional technologies that reflect national culture, hospitality and national cuisine. As a good example of this, just look at the main indicators of tourism. The growth in the number of people working in tourism and income indicates that the tourism industry in our country is developing, although it is new. The growth rates of both regions can be determined from the data that you compiled on the basis of the data of the State Committee for Statistics of the Azerbaijan Republic. As can be seen from the figure, growth has been observed in both areas for many years. If both areas are interconnected, then the areas will develop more efficiently and quickly. All these prove that the joint activity of agriculture and agritourism can create conditions for the growth of economic indicators in our regions. The organization of rural guest houses and eco-agricultural farms will create conditions for the development of agriculture, increase employment, which will not allow able-bodied young people to migrate cities, increase employment in the countryside, and restore forgotten traditions and crafts. The high level of conditions created in agritourism farms also attracts foreigners' attention to the countryside.



The foreign tourists' influx will create the need for our youth to learn foreign languages. All this can lead to diversification of labor resources and the region's economy.

Figure 2: growth rates



Source: The 2019 data of the State Committee for Statistics of the Azerbaijan Republic

In connection with the development of agritourism in the regions, using the resources of the village and agriculture, it is possible to achieve the introduction of individual entrepreneurship, the development of public utilities, communication services in rural areas, and increasing the employment of the population, especially youth and women. Rural homeowners, other rural residents who provide direct services to tourists (e.g. guides, transportation, hunting, etc.), as well as service areas that prepare food and souvenirs to meet the needs of tourists, will also benefit. This is important for agritourism (at the micro and macro levels), employment, local food, education, rural and urban integration, cultural heritage and the protection of rural landscapes. Studies show that the interest of Azerbaijani citizens in this area is still weak. The main reason for this is the lack of awareness among the population, as well as the insufficient level of local infrastructure (roads, gas, electricity, water, etc.). At the same time, it should be noted that there are a small number of firms which are engaged in agritourism. Although this is characteristic for many post-Soviet countries, recent years, serious attention has been paid to this in Belarus and Georgia. For example, in Belarus, where economic and financial opportunities are less than in Azerbaijan, some progress has already been made in this area. People who want to do agritourism in this country receive a 7% annual loan for 7 years, inexpensive land and the necessary technical support from the government. The cost of living per capita for 1 day in rural houses with normal conditions for living and recreation, including food, is about 12-14 dollars. All conditions have been created for a normal holiday for visiting tourists. This business area is considered profitable. Thanks to the development of this area, new jobs were created and the flow of labor from the villages was prevented. Unemployment in rural areas in Belarus is 1.3%. There are many favorable conditions for the development of agrotourism in Azerbaijan. Many regions of the country (north, south, north-west) have the necessary geographical and climatic conditions for the comprehensive development of this direction of tourism. These regions are surrounded by high mountains, dense forests, mountain rivers, cool springs and waterfalls. In addition to nature, the rich cuisine of Azerbaijan also makes these regions even more attractive. There are all the conditions for the development of this agrotourism in Azerbaijan, and development of this direction can only be achieved through the joint efforts of the relevant organizations. We believe that the development of agritourism should become a natural and integral element of any long-term plans for the development of

regions in Azerbaijan. We would like to believe that these opportunities will not be missed, and in the nearest future we will see the implementation of the ideas of agritourism with the support of the Ministry of Agriculture, the State Agency for Tourism, the Ministry of Culture, the Ministry of Ecology and Natural Resources, the Ministry of Economy and regional authorities. It is important to understand that agroecotourism will not only attract tourists to the country, bring joy to people, but also work for welfare of the state and our people. According to official statistics, 72.4% of the population of the northwestern Sheki region of Azerbaijan live in rural areas and 27.6% in cities. An economic analysis of the agrarian sector of this region shows that, although our villages produce various types of agricultural products, the income of most households is not sufficient for a normal family life. People working in this sector are trying to get out of the situation, mainly because of government subsidies. Low living standards and lack of jobs are forcing people (especially young people) to migrate to large cities and neighboring countries.

### 3. METHODS

In the process of research: the methods used are: abstract-logical (in setting goals and; tasks, justification, theoretical and-, methodological principles of the formation and development of agritourism); analytical (to assess the activities of business entities and their development directions in the modern market); economic and statistical (in the analysis of trends in sectoral social development); expert assessment methods (for; studying demand for an agro-tourism product); program-targeted (for compiling targeted-comprehensive programs for the development of agrarian tourism); enlarged design calculations (when substantiating draft models for the development of agricultural tourism). As a result, agritourism will have the following important impact on the socio-economic development of rural areas and agriculture: well-organized agritourism will create opportunities for high-quality recreation and rehabilitation at low costs, reduce migration from rural areas due to new employment, family, individual entrepreneurship, and traditions. Therefore, it would be advisable to develop a strategy for the development of agritourism for the development of the local economy and traditional methods of agriculture.

### 4. CONCLUSION

The conditions hindering the development of Azerbaijani agritourism should be pointed out:

- poor infrastructure development (this includes the lack of a wide range of leisure activities);
- Lack of state support and legislation (it is necessary to stimulate the owners of guest houses, reduce the tax rate, provide bank loans on acceptable terms; agritourism requires clear regulation and legislative registration);
- lack of travel brands and their promotion. Support is needed when creating them;
- The formation of an information and tourist base, including an atlas of farm stay in the market of Azerbaijan.

Thus, agritourism is a favorable direction for the development of the agricultural sector of the economy, focused on environmentally friendly product and environmental services, capable of making a sufficient contribution to the regional budget. This is a successful and independent direction, it is interesting in terms of attracting investors to the development and expansion of existing and the creation in the future of modern agro-tourism areas. Agrotourism, acting as an incentive for the establishment of agricultural parks, eco-clusters, contributes to the preservation of the national identity of the country's regions, is one of the factors in the development of rural areas: it helps to increase rural employment, reduce the migration of rural youth to megacities, increase the length of the tourist season and is an affordable type of vacation at a cost.

**LITERATURE:**

1. Kloeze J.W. The Benefits of Rural Tourism, the Role of the State, and the Aspects of Training and Co-operation / J.W Kloeze. Formal Speech held at the Central and East-European Federation for the Promotion of the Green-Soft-Rural Tourism Conference «Rural Tourism Development in Bulgaria and in the Balkan Countries», Karlovo. – 1994.
2. Глаголева Л.Э., Куксова И.В., Жук С.Н., Певнева Д.М. Агротуризм – перспективное направление туристического бизнеса в России // Экономика. Инновации. Управление качеством. – 2016. – № 1(14) – С. 43–48.
3. Агротуризм [Электронный ресурс]. – Режим доступа: <http://www.datscha-booking.com/173/agrotourismo.html>
4. Казначеева С.Н., Челнокова Е.А., Коровина Е.А. Агротуризм как одно из перспективных направлений индустрии туризма // Международный журнал прикладных и фундаментальных исследований. – 2017. – № 3-2. – С. 248-252
5. National Geographic Traveler Awards [Электронный ресурс]. – Режим доступа: <http://www.nat-geo.ru/ngt-awards-2016/nomination/>
6. Blacka, A., Couture P., Coale, C., Dooley J., Hankins, A., Lastovica, A., Mihálik, B. Reed veUysal, M. (2009), Agritourism. Virginia Polytechnic Institute and State University, Virginia Cooperative Extension: USA.
7. Bruch, M. ve Holland, R. (2004), A Snapshot of Tennessee Agritourism: Results from the 2003 Enterprise Inventory. Erişim tarihi: 29. 07. 2012. <http://cpa.utk.edu/pdf/files/PB1747.pdf>.
8. Civelek, M., Dalgın, T., Çeken, H. ve Ekiztepe, B. (2013), Menemen Yöresinde Agriturizm Potansiyelinin Değerlendirilmesi. Uluslararası Sosyal ve Ekonomik Bilimler Dergisi, 3 (2): 1-7.
9. George, H. ve Rilla, E. (2005), Agritourism Enterprises on Your Farm or Ranch: Where to Start, University of California, Division of Agriculture and Natural Resources, Erişim Tarihi: 14. 02. 2013 <http://anrcatalog.ucdavis.edu/pdf/8334.pdf>
10. Hatch, A. D. (2008), Agri-Tourism: A New Agricultural Business Enterprise, LSU Ag Center Research & Extension, United States University: USA. <http://www.mecv.org.tr>
11. Maetzold, J. (2004), Alternative Enterprises and Agritourism: Farming for Profit and Sustainability Resource Manual, Erişim Tarihi: 08.02.201 <http://www.nrcs.usda.gov/technical/RESS/altenterprise/resmanual.html>
12. Sharpley, R. ve Sharpley, J. (1997), Rural Tourism: An Introduction, Thomson Business Press: London.
13. Walker, A. M. (2009). Agritourism: Ideas and Resources, Virginia Cooperative Extension, Virginia Polytechnic Institute and State University: USA.
14. Wicks, B. E. ve Merrett, C. D. (2003), Agritourism: An Economic Opportunity for

## DIRECTIONS OF STRENGTHENING STRATEGIC MARKETING IN FOREIGN TRADE RELATIONS OF AZERBAIJAN

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### **ABSTRACT**

*In the article, the directions of strengthening strategic marketing in foreign trade relations of Azerbaijan are indicated. The problems of expanding foreign trade relations in line with modern challenges and global transformations and increasing its efficiency are elucidated. The significance of strategic marketing in increasing the effectiveness of these relations is researched and its impact is assessed. The issues of planning and organizing strategic marketing are analyzed and their implementation in line with world experience is substantiated. The role and functions of strategic marketing in expanding the range and volume of foreign trade operations are researched. Problems and approaches in the organization of strategic marketing and the optimal development of its main mechanisms have been specified comprehensively. The role of strategic marketing in diversifying foreign trade relations and forecasting efficiency levels has been indicated. In addition to the export of Azerbaijani oil and gas products to the world markets, the problems of increasing the competitiveness of other products and exporting to international markets have also been emphasized. The issues of creating national brands, increasing the production of export-oriented products and export potential were widely covered. The issues of creating national brands, increasing the production of export-oriented products and export potential have been widely explicated. The importance of the formation and implementation of the strategic marketing concept of foreign trade participants in the diversification of foreign trade relations have been emphasized. The essence of the most widely used strategic marketing concepts and approaches at the international level has been indicated. More focus has been on the strategic role of foreign trade operations in achieving Azerbaijan's economic development and economic growth goals and to this end, recommendations and suggestions have been made to strengthen strategic marketing in expanding the geography of foreign trade relations and increasing their effectiveness in the near future.*

**Keywords:** *Azerbaijan, foreign trade operations, foreign trade relations, strategic marketing, strategic marketing concept*

### **1. INTRODUCTION**

In the post-independence period, Azerbaijan, as an independent state, has considered access to world markets and strengthening as a strategic task. Although our country is known mainly for energy products in international trade markets, it is of strategic importance to expand the production and export of other export-oriented products to world markets, as well as oil and gas products. For this purpose, Azerbaijan should firstly take continuous measures at the conceptual level to define and strengthen its position in the international economic relations system. In other words, in addition to the formation of national brands and the production of export-oriented products in accordance with world standards, it is important to examine the sales markets of these products for a planned and long-term manner and to research the market participants' behavior and strategies. Therefore, the use of marketing research in world research is an important consideration. That is, participants in foreign trade operations should have a well-founded optimal strategic marketing concept and activity program. Before the product is produced, it is important to thoroughly examine the sales markets, potential buyers, to

systematically analyze the market data obtained and to develop a strategic marketing concept for each product. Economic reforms in Azerbaijan deepen year by year, and the main goal is to strengthen the country's competitiveness, diversify sources of foreign exchange inflows, achieve greater exports of non-oil products and, consequently, diversify the structure of the country's economy. In the implementation of these strategic tasks, expansion of foreign trade relations and increase of their efficiency are important conditions. Azerbaijan has developed to the level of strategic economic and trade cooperation with many countries and groups of countries. Undoubtedly, all this has allowed diversifying foreign trade relations and significantly expanding its geography. According to the results of 2018, the total trade turnover in Azerbaijan has been about 31 billion dollars, of which about 63% is accounted for by exports. Our country has foreign trade relations with more than 150 countries (The foreign trade of Azerbaijan Statistical yearbook, 2019). Strategic foreign trade relations are provided with a group of countries - Italy, Turkey, the Russian Federation, Great Britain, Ukraine, Belarus, Kazakhstan, Georgia, Belarus and others. Germany, Israel, China and the USA are among Azerbaijan's main foreign trade partners. However, as mentioned earlier, the basis of foreign trade relations are oil and gas raw materials or products from oil refining. These products are in great demand in world markets. The main challenge is to find and strengthen real markets for non-oil products. Thus, in terms of these factors, strengthening in world markets with the effective use of natural and national resources of our country by protecting national and national economic interests should be assessed as one of the main duties of Azerbaijan in the international division of labor. In order to adapt our country's foreign trade relations with modern challenges, large-scale work and measures have emerged as an important necessity. The main approach is to strengthen long-term trade relations that are favorable for the parties and to maintain their position in markets with a large number of buyers. Despite these difficult duties, Azerbaijan is currently in the process of developing and improving its economic development model. The strategic goal is to strengthen the sustainability of the economy in accordance with the experiences of the economically developed countries, to be among the economically stable and strong countries of the world and to reach strategic targets in this regard. All these issues have been indicated in the "Strategic Road Map on national economic perspectives of the Republic of Azerbaijan" approved by the Presidential Decree dated December 06, 2016, which includes the short-term and long-term strategic goals for the development of various sectors of the national economy on the basis of high technologies (Strategic Roadmap for the National Economy Perspective of the Republic of Azerbaijan, 2016). Furthermore, our country has set separate strategic targets for the development of trade and in the near future, significant work is expected in this direction. In the "Strategic Roadmap for development of logistics and trade in the Republic of Azerbaijan", which is another strategic document approved by the Presidential Decree dated December 06, 2016, perspective activity directions on trade development in the period up to 2020, the period up to 2025 and after 2025, have been defined (Strategic Roadmap for development of logistics and trade in Azerbaijan, 2016). Among the strategic approaches, the priorities of strengthening Azerbaijan as one of the important trade hubs at the regional and international levels are particularly noteworthy. There are serious reasons for this. Thus, the establishment of a strong transport and logistics infrastructure in the Alat settlement near Baku, the organization of a free trade port complex, as well as the expansion of international railway transport infrastructure, including the implementation of the Baku-Tbilisi-Kars railway and the Astarra (Azerbaijan) - Astarra (Iran) railway, are realistic and many works have been completed in this direction. Based on contracts with various firms and companies of the world, freight transportation has started through Baku-Tbilisi-Kars railway, which has international trade importance. All this has created additional opportunities for the expansion of international trade operations and the diversification of Azerbaijan's foreign trade relations.

In this case, the formation and development of the strategic marketing concept is one of the important conditions (Aslanov H., 2015). Strategic marketing activities play an important role in the issues, such as the provision of effective use of established and emerging trade and logistics potential in diversifying Azerbaijan's foreign trade relations and increasing foreign trade turnover, the development of new commodity markets and strengthening in those markets.

## 2. LITERATURE REVIEW

In the article, various scientific works of Azerbaijani and world economists and scientists regarding researched issues and problems have been referred. During research, the ideas and opinions formed, as well as the theories and scientific works of prominent economists of our time have been used. Theories, concepts, mechanisms and activities related to the development and organization of marketing, the formation of a competitive environment, the definition of competitive advantages, the analysis of commodity markets, the systematic study of the market participants behaviors and the strengthening of strategic marketing in trade in general, has been studied and researched in the scientific works of P.C. Kotler (1977), P.C. Kotler P.C. (1978), P.C. Kotler and R.Singh (1981), P.C.Kotler (2003), J.M.Hulbert və E.T.Norman (1977), J.J.Lamben (1996). Furthermore, problems of diversification of foreign trade relations and related nuances, and issues of modeling the activities of foreign trade entities, improving and strengthening the marketing strategy in accordance with the requirements of modern times in increasing their efficiency, have been studied in scientific works of a group of researchers, such as D.A.Fedorenko (2019), I.G.Akperov (2017), E.Anisimova (2020) and D.P.Golovanova (2017). The provision of strategic approaches in this regard and the importance of the strategic marketing concept in foreign trade relations has been especially emphasized. The problems of optimal development and implementation of strategic marketing mechanisms have been considered in the scientific works of another group of researchers – S.V.Shishlo (2017), Y.V.Morozov (2016), R.B.Nozdreva (2016), K.A.Kartashov, A.I.Makarenko, A.I.Ladyga (2015), T.N.Egorushkina, V.N.Babanov, K.V. Ignatova (2017) and A.P.Egorshin (2015). The advantages of strategic marketing to foreign trade relations entities in a competitive environment have been especially taken into consideration. In scientific researches of Azerbaijani scientists, the problems of increasing the efficiency of foreign trade relations, the issues of diversification of the structure of trade turnover, the priorities for achieving the productivity of trade relations have also been included. Especially in recent years, the importance of the strategic marketing concept in increasing the efficiency of foreign trade relations by considering modern challenges are mostly emphasized. In the scientific works, monographs and articles of a group of researchers, such as A.S.Shakaraliyev və Z.A.Shakaraliyeva (2019), Sh.T.Aliyev (2016), Sh.T.Aliyev (2018), M.A.Allahverdiyeva (2010), H.Aslanov (2015), F.Alakbarova (2015), N.Hasanova (2015), B.V.Ismayilov (2018), E.Y.Mammadov (2014), G.R.Rustamova (2018) and A.J.Valiyev (2017), Azerbaijan's foreign trade relations have been analyzed, the problems of the effectiveness of these relations have been studied, the problems of bringing national brands to world markets have been researched, the significance of increasing non-oil exports in the structure of foreign trade turnover has been substantiated and the problems of strengthening strategic marketing have been discussed. Additionally, there is necessity for consideration of Azerbaijan's foreign trade relations in the context of new challenges, optimization of the structure of foreign trade turnover, motivation of foreign trade participants to enter the international commodity markets more actively, and comprehensive, systematic and in-depth research of the problems and issues of strengthening strategic marketing and develop and implement productive mechanisms based on the priorities and duties of each foreign trade entity.

### **3. RESEARCH METHOD**

One of the important issues in the economy is to increase the efficiency of foreign trade relations and ensure the longevity of these relations. To this end, conducting marketing research in a systematic and consistent manner, formulating a strategic marketing concept, fundamentally studying the role and functions of strategic marketing in foreign trade relations are necessary issues, and identifying and selecting the related optimal methodological approaches is very important. The scientific works and opinions of scientists from world and Azerbaijan on strengthening strategic marketing in foreign trade relations have been taken as a methodological basis for the research and analysis of necessary problems. However, the use of forms and methods, which are traditionally widely accepted as a methodological approach in economics, has been preferred. In clarifying problems and defining perspectives for strengthening strategic marketing in Azerbaijan's foreign trade relations and providing practical recommendations and suggestions in these directions, a group of economic methods has been used: analysis, comparative analysis, synthesis, evaluation, forecasting and etc. In addition, the author's position and views on the main issues considered are also included. In authors' opinion, measures to formulate and develop an optimal strategic marketing concept should be significantly strengthened in the near future in line with world experience in diversifying Azerbaijan's foreign trade relations, considering the features of national economic development, and moreover, the wide use of more effective mechanisms, methodological principles and criteria are expedient.

### **4. RESULTS AND DISCUSSION**

Diversifying foreign trade relations and increasing their effectiveness require the development of an optimal and reasonable marketing strategy and in this respect, competitive positioning of foreign trade market participants should be taken into consideration. According to P.C. Kotler: "Positioning is to develop the company's own offer and corporate image to take a more important and special position in the imagination of the target customers than competitors" (Kotler P.C., 1978). Furthermore, it is important for the company to implement a number of strategic marketing formats by identifying and evaluating the various segments that make up a single entity: 1) undifferentiated marketing considers that it will be attractive to all segments by producing a product; 2) differentiated marketing offers a different product for each segment, and 3) concentrated marketing focuses on one or more segments (Kotler P.C., 2003). It can be stated that these factors and approaches remain relevant in the foreign trade relations formed in modern times. There is a need to significantly improve the quality of the measures taken to strengthen the Azerbaijani economy in the world economic system. The issues such as the global financial crisis of the last 10 years, the sharp devaluation of the national currency in 2015 and the ongoing economic growth problems and reducing the economy's dependence on oil and gas factors require taking measures appropriate to new economic and global challenges and deepening reforms. Thus, due to the rapid development of the national economic development model, Azerbaijan has become an integral part of the world economic system and continues to integrate into international trade markets. However, the level of economic diversification, the range of competitive national brands and the volume of turnover in world markets are not yet sufficient for the economic and export potential of our country, that is, real resources and sources for the most efficient use of current potential are existing (Aliyev Sh.T., 2016). Firstly, measures should be taken to improve the country's foreign trade policy, mechanisms to stimulate entities involved in foreign trade relations should be developed and their activities should be more motivated to strengthen them in international markets. For this purpose, certain measures have been taken, such as the implementation of state support instruments and the use of fiscal mechanisms, but in order to increase the efficiency of foreign trade relations, the transparency of the country's economic system as a whole should be ensured

and a healthy competitive environment should be created (Kartashov K.A., Makarenko A.I., Ladyga A.I., 2015). Moreover, targeted activity programs and projects should be developed and implemented in accordance with the challenges of modern times and active access of economic entities to international markets. It should be significant to develop well-thought-out and optimal operational concepts and mechanisms for strategic marketing of economic participants. Comprehensively conducting and analyzing trade marketing is very important and in this case, research of all processes from the manufacturer to the final address, ie to the buyers, comparative analysis, collection of necessary data, creation of analytical database, goods and products in the market, market participants and their behavior, the basic tactics and mechanisms demonstrated in the market should be systematically analyzed and synthesized, and on the basis of these, generalizations should be made, relevant conclusions should be drawn and certain areas of activity should be defined, and in this regard, proposals should be developed and substantiated basis for strategic management decisions should be formed.

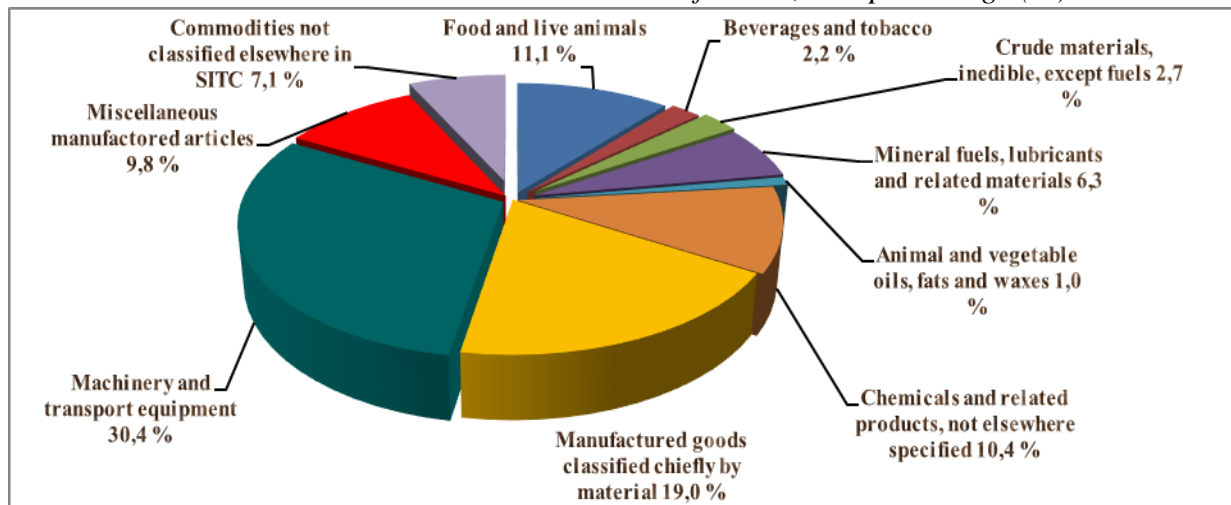
#### **4.1. Factors determining the strengthening of strategic marketing to increase the effectiveness of foreign trade relations**

In foreign trade, strategic marketing includes comparative stimulation of commercial intermediaries, motivation, profitability, briefly, effective performance indicators and criteria of trading firms and companies, in addition to financial issues. Trade marketing can also be considered as an impact of different sales markets on these processes through observation, analysis and results. In terms of these factors, each business should have a strategic marketing concept and strive for its development (Kotler P. Armstrong G., 2012). One of the tasks of strategic marketing is to strengthen the competitiveness of the entities of foreign trade relations. It is known that one of the main problems and approaches in international trade relations is the optimal identification and selection of the method of market analysis (Alakbarova F., 2015). For this purpose, many issues, including market perspectives and its attractiveness, objective assessment of trade market volume, research of the commodity structure of foreign trade market participants, analysis of leading and active market participants, realistic assessment of market demand and supply, market segmentation based on the analysis, and generally, the formation of a market development model and forecasting considering the future period, should be especially examined. One of the main functions of strategic marketing is a comprehensive research of competitive strategies for foreign trade relations and the determination of factors affecting it (Fedorenko D.A., 2019). Similar problems and issues are quite characteristic for Azerbaijan's foreign trade relations. Thus, the export potential of our country in foreign trade turnover depends mainly on the export of mineral fuels. In 1991-2005, the foreign trade turnover of Azerbaijan managed to restore the 1991 level and more than doubled during this period. In 2006-2007, the foreign trade turnover remained at the same level. However, it has reached a record level - 54.9 billion dollars in 2008, due to rising oil prices to \$ 147 per barrel in the same period. In the following years, foreign trade turnover has been unstable and mainly regulated by falling or rising oil prices, as oil was the main export item. In recent years, the growth trend has intensified in 2015-2018, and at the end of 2018, the foreign trade turnover amounted to 31.8 billion dollars. The volume of exports in 2018 has been 20.3 billion dollars, for comparison, in 2008 it has been 47.8 billion dollars. The stability of Azerbaijan's foreign trade relations depends on the oil factor, and therefore there should be a substantiated activity concept for the export of non-oil products to international trade markets (Aliyev Sh.T., 2018). It is clarified from the analysis of the country's imports that machinery and transport equipment dominate with a share of 30.4% and their import is objective. Thus, our country does not have large enterprises for the production of machinery and transport equipment and is not specialized in these sector. But there are some products (for example, food products, chemicals and etc.) for which it is possible to create a local production base in the



country, and these factors make it important to conduct strategic marketing research in Azerbaijan's foreign trade relations (look at Figure 1).

*Figure 1: Structure of imports in the Republic of Azerbaijan for 2018 according to the Standard International Trade Classification, as a percentage (%)*



*Source: Designed by author in accordance with the data of The State Statistical Committee of the Republic of Azerbaijan <https://www.stat.gov.az/>*

In the table below, the structure of exports in the Republic of Azerbaijan at the end of 2018 according to the Standard International Trade Classification has been indicated.

*Table 1: Structure of exports in the Republic of Azerbaijan for 2018 according to the Standard International Trade Classification, as a percentage (%)*

Product sections	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
including:									
Food and live animals	1,9	2,1	2,6	2,7	3,0	4,9	3,6	3,9	3,3
Drinks and tobacco	0,1	0,1	0,1	0,2	0,2	0,3	0,2	0,2	0,2
Non-food raw materials (except fuel)	0,1	0,1	0,3	0,2	0,2	0,2	0,3	0,5	0,6
<i>Mineral fuels, lubricants, similar materials</i>	94,1	94,4	93,1	92,7	92,4	87,9	91,2	90,5	91,9
Animal and vegetable oils, and fats	0,7	0,5	0,8	0,8	0,6	0,8	0,1	0,1	0,1
Chemicals and similar products not included in other categories	0,6	0,9	1,0	0,7	1,1	1,5	1,1	1,2	1,0
Industrial products mainly classified by material type	0,8	1,1	1,2	1,1	0,9	1,4	2,0	2,1	1,7
Machinery and transport equipment	1,0	0,2	0,4	0,7	0,4	1,6	0,8	0,4	0,4
Various industrial products	0,3	0,2	0,2	0,6	0,9	0,7	0,1	0,1	0,2
Goods not included in other categories	0,4	0,4	0,3	0,3	0,3	0,7	0,6	1,0	0,6

*Source: Designed by author in accordance with the data of The State Statistical Committee of the Republic of Azerbaijan <https://www.stat.gov.az/>*

According to the data in the Table 1, mineral fuel resources, that is, oil and gas raw materials, covers an average of 92% of the country's exports during the past five years. The main task of strategic marketing is to fundamentally study the non-oil export potential of Azerbaijan, to identify possible promising markets and to develop and implement effective mechanisms for increasing the competitiveness of foreign trade relations in international markets.

#### **4.2. Issues and perspectives of strengthening strategic marketing in Azerbaijan's foreign trade relations**

Azerbaijan should intensify the measures to raise trade relations to a new level and increase their efficiency in case of modern global challenges and ensure to modernize the management mechanisms, strategic marketing concept and approaches to its implementation. Thus, the problems of actively adopting new commodity markets, entering the world market with competitive products, gaining internationally reliable trading partners should be solved. It is important to develop mechanisms for more optimal study and management of difficulties and risks emerging in these processes. Professor E.Y. Mammadov considers that it is important to prioritize a number of approaches in solving existing problems in management and risk management in foreign trade entities: 1) Determination and evaluation of the competitiveness of foreign trade enterprises with Ansoff method; 2) Determination of the empirical scale of the risk level of foreign trade entities with the Elliot method; 3) Determination of the coefficient of variation by evaluating the risk level of foreign trade enterprises; 4) Calculation of forecasting the targeted profit of strategic marketing planning of foreign trade entities; 5) Calculation of the investment valuation indicator of the market value or innovation projects of foreign trade entities in crisis conditions; 6) Determination of market value added of foreign trade entities, and 7) modeling of dynamic stability (optimality) of management of foreign trade entities (Mammadov E.Y., 2014). In return for these opinions, specific features of Azerbaijan's foreign trade participants, their lack of experience at the international level, as well as the high level of competitiveness problems should also be considered. In other words, determination of the most relevant and favorable partners of our country for international trade entities due to strategic marketing activities, is more suitable for the formation and development of long-term trade relations. One of the important conditions for realizing the strategic priorities of the country's economic development is the functioning of mechanisms and instruments developed in all areas, including the optimization and implementation of the concept of foreign trade. Professor Sh.T. Aliyev states that in order to strengthen Azerbaijan's foreign trade relations, strategic marketing concept and related principles and criteria should be especially important, and deep understanding of strategic marketing, study of world experience and training of highly qualified specialists - marketers in this field should be provided (Aliyev Sh.T., 2015). In this case, it will be possible to effectively organize foreign trade relations and more active and intensive movement of Azerbaijani national brands - goods and products in international markets. As a result, the efficiency of foreign trade operations will increase, international trade relations will expand and the intensity of import-export operations will be ensured, and productive and permanent sources will be formed to bring more foreign currency to the country. In the near future, these issues will be quite relevant for Azerbaijan. Thus, the issues of reducing the dependence of the country's economy on oil and gas raw materials, as well as involvement of other competitive goods and products along with these products in foreign trade turnover should be solved. The development and implementation of a perfect and optimal strategic marketing concept and activity mechanism for entities of foreign trade relations will be crucial in the implementation of these complex tasks. In Azerbaijan, importance is increasing on the management mechanisms and implementation of strategic marketing activities and related methodological approaches, and the formation and development of strategic marketing concept is already emphasized in many enterprises of the country, including enterprises and companies engaged in foreign trade activities. Thus, in the conditions of modern market economy, ensuring the organization and efficiency of production processes of enterprises, modeling and forecasting of economic activities and export directions of the enterprise largely depends on sales tactics and strategic marketing approach (Ismayilov B.V., 2018). In terms of these factors, the strategic marketing concept should be based on complex and systematic mechanisms by considering the targets and long-term goals of the

foreign trade entity, and methodically selected strategic approaches should be defined in accordance with operating criteria of the business (Rustamova G.R., 2017). More effective modeling of trade operations and relations with potential partners, creating reliable activity mechanisms can be achieved by using the research and generalization function of strategic marketing. For example, many Azerbaijani companies, which are quite active in world markets, strive to solve these issues at a professional level. Thus, the “Marketing and Economic Operations Department” is responsible for marketing activities at SOCAR, which actively enters the world markets with the country's oil and gas products, and in this department, more highly qualified staff, including marketers, work than any other companies of the country (Marketing and Economic Operations Department, 2020). The main tasks of this department are to realize strategic marketing activities at the corporate, business and functional levels, to analyze the current state and forecast of demand for products produced by all enterprises of SOCAR, including refineries and to study the demand for oil products and its dynamics both within the country and in countries with export potential. Other important tasks include: 1) Collecting and processing information on the external and internal environment of the enterprise, and disseminating information on all consumer requirements within the full framework of the enterprise; 2) Assessing the sequence of price formation in the world market; 3) Evaluating the terms and features of financial relations; 4) Conducting forecasting research; 5) ensuring timely delivery and payment in accordance with the contracts; 6) Creating “company image” taking a certain position in the market of competitive products and services and creating new products considering the consumers’ requirements and modernizing of launched products; 7) Ensuring uninterrupted operation of the feedback and control system of information received from consumers, partners, suppliers, competitors; 8) Improving labor efficiency by selecting qualified staff for the Marketing and Economic Operations Department (Rustamova G.R., 2018). All of these approaches and mechanisms can be taken as a model for other companies in the country, but the development and implementation of strategic marketing mechanisms in accordance with the development strategy and the important tasks of each enterprise can be more effective. An example of this is the successful launch of a number of non-oil products under the brand “Made in Azerbaijan” in world markets, including European markets, in recent years. Within the framework of these measures, the optimal selection of forms and methods of strategic marketing approaches acceptable for our country is provided. Due to the widespread use of strategic marketing, the approaches that will achieve a synergistic effect with local entrepreneurs in the areas of branding, brand policy, marketing and communication in the business environment of Azerbaijan in the near future will attract more attention. And this, in turn, will create new potential for increasing export potential and access to world trade markets in a wider range and volume (“Marketing summit” dedicated to the development of the Made in Azerbaijan brand, 2017). In addition, the scope of trainings and exercises to promote the products of Azerbaijan's foreign trade relations in foreign markets is expanding, and in this processes, the issues related implementation of digital strategic marketing mechanisms is becoming increasingly important.

## 5. CONCLUSION

In the period of intensifying new challenges and increasing global influence in the world, issues such as creating and motivating new sources of economic development, stimulating local production, strengthening foreign trade activities and increasing export potential should be comprehensively and systematically examined and strategic decisions should be made. However, in order to make such complex decisions, it is necessary to conduct analyzes that reflect objective realities, to examine the level of efficiency of foreign trade relations and to research the possibility of the country's foreign trade activities enter the world markets. In order to consider these issues at a more fundamental level and to strengthen strategic marketing in

Azerbaijan's foreign trade relations as a whole, it is more important to examine a number of activity directions and approaches:

- Firstly, Azerbaijan should do more to ensure the most efficient organization of foreign trade relations in the international division of labor and create a strategic marketing concept in line with international practice.
- In order to make the most efficient use of a number of important international trade routes, including China - Europe, Central Asia - Europe, Central Asia - Black Sea, Russia - Iran and the Black Sea, strategic marketing research should be conducted at the fundamental level on each of these routes, business projects should be developed and effective work should be done to take full advantage of the available opportunities to diversify foreign trade relations;
- In the context of modern challenges and the trend of digitalization of economic processes, it is more expedient to examine foreign markets through digital strategic marketing, research consumer behavior, to develop effective advertising campaigns and to form new mechanisms in the strategies of foreign trade participants in international trade markets;
- In order to diversify foreign trade relations of Azerbaijan and increase its effectiveness, in-depth study of international experience in the effective organization and implementation of strategic marketing in this area should be prioritized and measures for the formation of strategic marketing service centers in the country and the organization of training of national marketing specialists - marketers at the level of world standards should be taken.

#### **LITERATURE:**

1. Akperov I.G. (2017). The organization of strategic marketing in trade: an innovative aspect // Practical marketing, No. 7 (245), P. 26-29. (original in Russian).
2. Alakbarova F. (2015). International marketing and its methodological tools in the system of foreign economic trade. Journal of Silk Road. Baku, No. 2, P. 19-27. (original in Azerbaijani).
3. Aliyev Sh.T. (2015) - Foreign economic policy of Azerbaijan. Sumgait, 2015, P. 185. (original in Azerbaijani).
4. Aliyev Sh.T. (2016) - Conceptual directions of strengthening the industrial sector and export potential in Azerbaijan. Journal of Silk Road, No. 04, P. 35-42. (original in English)
5. Aliyev Sh.T. (2018) - Economics of Azerbaijan. Sumgait, P. 376 (original in Azerbaijani).
6. Allahverdiyeva M.A. (2010) - International marketing. Baku, Publishing House of Azerbaijan State University of Economics (UNEC), P. 444. (original in Azerbaijani).
7. Anisimova E. (2020) - Organizational marketing strategy: why can't it be without it? [https://www.profiz.ru/peo/1\\_2020/marketingovaja\\_strategija/](https://www.profiz.ru/peo/1_2020/marketingovaja_strategija/) (original in Russian).
8. Aslanov H. (2015) - International marketing concept as a theoretical basis of marketing activity. Journal of Silk Road. Baku, No. 1, P. 84-90. (original in Azerbaijani).
9. Department of Marketing and Economic Operations (2020). SOCAR. <http://www.socar.az/socar/en/info/printable/company/organization/marketing-and-operations>. (original in Azerbaijani).
10. Egorshin A.P. (2015) - Marketing organization. St. Petersburg, Peter, P. 350. (original in Russian).
11. Fedorenko D.A. (2019) - Factors that determine the competitive strategy of trade organizations. Journal of Young scientist, No. 48. P. 414-416. (original in Russian).
12. Garibov A., Azizov A., Ahmadova S. (2017) - International trade operations. Baku, P. 256. (original in Azerbaijani).
13. Hasanova N. (2015) - Directions for improving the strategic management of the commodity market. Journal of Silk Road, Baku, No. 4, P. 68-73. (original in Azerbaijani)

14. Ismayilov B.V. (2018) – Strategic management. Baku, Journal of Education, P. 296. (original in Azerbaijani)
15. James M. Hulbert and Norman E. Toy. (1977) - A Strategic Network for Marketing Control. Journal of Marketing, P. 12–20. (original in English)
16. Kotler P.C. (1977) - From Sales Obsession to Marketing Effectiveness. Journal of Harvard Business Review, P. 67–75. (original in English)
17. Kotler P.C. (1978) - Harvesting strategies for weak products. Journal of Business Horizons, 21 (4), P. 15-22. (original in English)
18. Kotler P.C. (2003) - Marketing Management. Prentice Hall, P. 738. (original in English)
19. Kotler P.C. and Singh R. (1981) - Marketing warfare in the 1980s. Journal of Business Strategy, 1 (3), P. 30-41. (original in English)
20. Lambin Jean-Jacques. (1996) - Strategic marketing. European perspective. Translate from French, St. Petersburg, The science, P. 589. (original in Russian)
21. Mammadov E.Y. (2014) - Problems of formation and development of the consumer goods market in modern conditions. Synopsis of dissertation for the degree of Doctor of Economic Sciences, Baku, P. 51. (original in Azerbaijani)
22. Marketing summit dedicated to the development of the Made in Azerbaijan brand (2017). <https://hr-az.com/blog/105-made-in-azerbaijan-haqqinda-marketing-sammiti-2017.html>. (original in Azerbaijani)
23. Morozhov Yu.V. (2016) - The basics of marketing. Moscow, Dashkov and K., P. 148. (original in Russian)
24. Nozdreva R.B. (2016) - Marketing. Moscow, Aspect Press, P. 446. (original in Russian)
25. Rustamova G.R. (2016) - Methods and approaches in the management of marketing activities. Journal of Scientific Review, Moscow, No. 20. P. 156-162. (original in Russian)
26. Rustamova G.R. (2017) - Increasing the role of the cluster approach in improving the management of marketing activities in industrial enterprises. Journal of Silk Road. Baku, No. 3, P. 126-135. (original in Azerbaijani).
27. Rustamova G.R. (2018) - Importance of marketing activity in strategic management. Journal of Silk Road, No. 1, P. 129-136. (original in Azerbaijani).
28. Shishlo, S.V. (2017) - Strategic marketing. Minsk, BSTU, P. 174 . (original in Russian)
29. Strategic Roadmap for development of logistics and trade in Azerbaijan (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 06, 2016, Baku, P. 67. (original in English).
30. Strategic Roadmap for the National Economy Perspective of the Republic of Azerbaijan (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 06, 2016, Baku, P. 111. (original in English).
31. The foreign trade of Azerbaijan Statistical yearbook (2019), Baku, P. 216. (original in English).
32. Valiyev A.J. (2017) - International marketing. Baku, P. 352. (original in Azerbaijani).

## MODERN TENDENCIES OF STRATEGIC MANAGEMENT

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### **ABSTRACT**

*Modern tendencies of strategic management, main features of development strategies and strategic management models are elucidated in the article. The following general requirements shall be observed in the process of realization of strategy. The followings are concerned these requirements: creation of organizational structure of management which shall realize the strategy successfully; reconsidering of budget for allocation of necessary means for activity areas which provide the strategic success of the company; determination of management operations corresponding to the strategy; application of the best practice for providing of permanent development and improvement; reorganization of providing systems which create opportunities for best fulfillment of strategic functions by staff of the company; to provide the coordination of rewarding and encouraging systems with execution of strategy and archiving of purposes at the high level; establishment of environment and corporative culture for support of strategy; provision of management – leadership required for realization of strategy and its permanent improvement. In all cases, the development strategy formed on the firm shall become to reality. The followings are required to involve any firm in the activity in new direction during a short period: determination and distribution of multiple management duties, powers and responsibilities for realization of strategy; determination and selection of variants for realization of strategy; management abilities of employees; demand of perseverance for completion of works started; the ability to overcome resistance against changes and innovations. The environment for realization of strategy is always distinctive from each other in different degree. This diversity appears as follows: diversity of competition environment; diversity of professional practice; diversities in the environment of professional culture and work; diversity in rewarding system; diversities in personal features and motivation of associates, etc. All of these require special approach for process of realization of each strategy. That approach must take into account all features of organization and abilities and opportunities of organizational changes of executor.*

**Keywords:** *strategy, development strategy, strategic management system, development of enterprise*

### **1. INTRODUCTION**

Strategy is multifaceted concept, it is complex-plan defined more precisely and directed to fulfillment of purposes and duties of firm. The strategy of company (firm, enterprise) is management plan that will strengthen its position in the market, also will provide successful competition priority on attraction of consumers and provision of requirements. In other words, the strategy reflects the development ways of the company, conducting of markets, competition methods and business. The means for obtaining of the last result as most important features of strategy; a combination of all parts of the organization in single completion; covering of all important aspects of firm activity; providing of conformity of all plans of firm; the movements directed to victory in the competition struggle, etc. may be classified. Plan may be not realized, but succession of movements shall be provided. It means a connection with its environment. So, it includes the issues such as to see in advance the perspective and condition; determination of the result of analysis of strong and weak sides of work in the firm and opportunities and

obstacles of its development; providing of preventive reaction of the firm against changes of environment.

## **2. MAIN FEATURES OF DEVELOPMENT STRATEGIES**

While preparation of development strategy of firm, it is important to achieve its keeping to several requirements: the general work to be achieved shall be decisive and main purposes; the coordinated management shall be declared; must help to progressive initiative; the advanced forces shall be collected in necessary place and time; guaranteed resources shall be provided; it must take into account the promptness of tactical movements for minimum use of resources at the time of archiving to maximum result. P.Druker divides development strategy to groups for its purpose: to enter first and to inflict a mass blow; to attach quick and unexpectedly; to find and occupy ecological gaps; to change economic characteristics of goods and market or area. According to indications, development strategies may be grouped as follow: attach or leap strategy; defense or rehabilitation strategy; decrease and change strategy of activity of organization. Strategy has different types depending on priority degrees of purposes and organization shall orient its activity on the basis of those strategies. Strategies may be classified as product-market strategy; marketing strategy; competition strategy; areas management strategy; innovations strategy; capital investments strategy; development strategy; foreign investment strategy; winning strategy; the strategy for orientation to expansion of export activity; the strategy for foreign economic intervention. The suppositions on strategic thinking, new development strategy is formed on the basis of analysis conducted in the process of preparation of strategy. The strategic analysis is conducted to show the efficiency of firm's activity, it creates a condition to analyze the present and perspective condition of organization. It is recommended to determine the condition of firm around the following 5 questions: the existing strategy runs efficiently in which degree; which is strong and weak sides of enterprise and which absorption strategy opportunities and dangers may appear before it; do expenses of enterprise and prices fixed for manufactured product is competitive; does competition force of enterprise is strong; which strategic problems stand before enterprise. It is recommended to answer to these questions with four analytic analysis methods. The first of them determines weak and strong sides of enterprise, opportunities and dangers, the second one is analysis of expenses chain in sequence, the third one is strategic analysis of expenses, the fourth one is competition ability. The components of the development strategy are classified in different ways. In this regard, I.Annsoff classifies strategic management systems into three types: control systems, extrapolation systems, and entrepreneurship systems. Strategic management system on the basis of control is a management on the basis of information that results from both quantitative and qualitative performance assessment. As a result of assessment, in the event of removal from norms, standards and others, then elimination of the removal is carried out on the basis of decrees of the head. Strategic management system on the basis of extrapolation is a system of management by extrapolation of the enterprise's past into the future. An entrepreneurial management system based on the idea that future events have no relation with the past is a system for project management, strategic planning, planning of strategic positions, and management of strategic issues [1]. The following general requirements shall be observed in the process of realization of strategy. The followings are concerned these requirements: creation of organizational structure of management which shall realize the strategy successfully; reconsidering of budget for allocation of necessary means for activity areas which provide the strategic success of the company; determination of management operations corresponding to the strategy; application of the best practice for providing of permanent development and improvement; reorganization of providing systems which create opportunities for best fulfillment of strategic functions by staff of the company; to provide the coordination of rewarding and encouraging systems with execution of strategy and archiving of purposes at the

high level; establishment of environment and corporative culture for support of strategy; provision of management – leadership required for realization of strategy and its permanent improvement.

### 3. STRATEGIC MANAGEMENT MODELS

Within the classical theory of strategic management, they differentiate six approaches to defining perspective development of a firm (enterprise). The approaches of K.Endryus, M.Porter, Bennis and Neymus, K.Proalad and G.Khmel, as well as the effective incrementalism approach and approach to escape from the leader differ from each other. Let us look through the brief essence of these approaches. Kenneth Andrews, together with a few scientists from Harvard Business School, suggests defining the firm's future development by adapting the firm's current position to its internal potential and external environment development trends. The main place of his approach is SWOT analysis, that is, a detailed analysis of the firm's strengths and weaknesses, opportunities and threats. Assessment of the firm's strengths and weaknesses, its internal opportunities allows us to reveal its distinctive features. Bennis and Neymus's approach is based on presenting the firm's future situation as a vision of development opportunities of the leader and business in the perspective, as a manifestation of the entrepreneur's ability, that is, a special kind of art. An important contribution to the development of the strategic management theory was the work of K.Proalad and G.Khmel "Different features of the corporation". This work reflects new approaches to determining the firm's future situation. Currently, this approach is highly appreciated by managers and management problem researchers. This approach intends to see the firm's future situation in such level that it has special, distinctive ability to recognize it in the market and in business, to make it attractive to investors and to protect itself against the influence of competitors. In this case, strategic management process means a process aimed at the development of different capabilities. A brief description of these approaches is shown in Table 1.

*Table 1: Brief description of approaches to firm's development strategy*

<b>Name</b>	<b>Brief description</b>
K.Endryus's approach	Determination of the firm's future development by adapting the firm's current position to its internal potential and external environment development trends
M.Porter's approach	Determination of the target position of the firm as a result of competition analysis in the field. In this case, the future situation is linked to the firm's competitive position in the field
Bennis and Neymus's approach	A leader must be able to see the target position of its firm.
K.Proalad and G.Khmel's approach	The firm's target position as a manifestation of different abilities
Effective incrementalism approach	The firm's target position as a rejection of an organizational crisis
Approach to escape from the leader	The firm's target position as a position of field leader

Different classical models are used in strategic management and planning: "Market share increasing speed", "Market attractiveness" and "Market evolution stage" Their brief description is shown in Table 2.



*Table 2: Brief description of strategic management and planning models*

<b>Name</b>	<b>Brief description</b>
«Market – market share increasing speed» model	(BCG model) The firm's situation positions relative to all other organizations operating in the market.
«Market (field) attractiveness – company competitiveness» model (GE/Mckinsey, Shell/DPM) model	The firm's situation is linked to the relative valuation of its strengths in the market and the relative evaluation of that market's prospects.
«Market (product life cycle) evolution stage – company competitive position» model (Khofer Shendel, ADL model)	The firm's situation is determined by evaluating its position relative to its competitors, depending on the market evolution stage (or product life cycle stage).

Describing the models outlined in the table, it can be noted that the BCG model is a logical completion of research work conducted by the specialists of “Boston Consulting Group” Boston Consulting Company. Such empirical fact was determined in the process of the study of the activities of various companies producing 24 major product types in eight industrial fields that costs variable to the production per unit are reduced by 10-30% while doubling production volume. It was also determined that this trend is observed in any market segment [2]. In all cases, the development strategy formed on the firm shall become to reality. The followings are required to involve any firm in the activity in new direction during a short period: determination and distribution of multiple management duties, powers and responsibilities for realization of strategy; determination and selection of variants for realization of strategy; management abilities of employees; demand of perseverance for completion of works started; the ability to overcome resistance against changes and innovations. The environment for realization of strategy is always distinctive from each other in different degree. This diversity appears as follows: diversity of competition environment; diversity of professional practice; diversities in the environment of professional culture and work; diversity in rewarding system; diversities in personal features and motivation of associates, etc. All of these require special approach for process of realization of each strategy. That approach must take into account all features of organization and abilities and opportunities of organizational changes of executor.

#### 4. CONCLUSION

The conducted researches give as a basis to come to such conclusion that variable costs are one of the key factors of business success and determine the competitiveness in comparison of one company with other company. The main attention in BCG model is paid to money flows of the firm or the activity of separate business operations. It is advisable to use the «Boston Advisory Group Matrix» to determine the level of demand for the firm's products and services when studying the market and choosing a competitive position. Matrixes of «General Electric»-«McKinsey»-«Shell» companies other than «Boston Advisory Group» matrix are also used in the practice. But, the matrix of «Artim/pay» Boston advisory group played a key role for all of these and other matrixes. In recent years, the strategy worked by N.N.Trenyov in strategic management models is based on the firm's specific development. Based on the above-mentioned strategic management models, the model proposed by K.Prakhalad and G.Khemel and reflecting the coordination of various production innovations is conditioned by the following: increasing the firm's market access opportunity and successfully competing in several markets; increasing the position of its product in front of the buyer's eye in comparison

with the competitive analogue product; overcoming competitors' achievement in the reproduction process. Therefore, each of the above classified models serves to the development of the firm and senior employees can prefer to use one of them or at the same time a few of them according to the condition formed in its activity.

#### **LITERATURE:**

1. <http://anl.az/el/Book/2018/10/cd/Azf-304417.pdf>
2. B.V.Ismayilov. STRATEGIC MANAGEMENT. For economically oriented university students. 2018
3. S.S.Mammadova. Chapter H. "Theoretical and methodological bases of marketing management" In the book: Fundamentals of commercial science: history, theory and methodology. Volume 1. Baku: Mars - Print. Art. 335-389, 2016.
4. Thomson - ml.A., Strickland A.J. Strategic management: con... and analytical situations. M.: Williams. 2011, 928p.
5. Semenov S.A Strategic management. M.: RAGS. 2010, 170p.
6. Chaplina A.N, Koteleva IV Management in trade. Krosnoyarsk.: KG TEN. 2004, 212p.
7. Shifrin M.B. Strategic management. SPB: Peter. 2010, 240p.
8. Edersheim E.H. The best ideas of Peter Drucker. SPB: Peter. 2011, 384p.
9. [www.economizdat.ru](http://www.economizdat.ru)
10. [www.piter.com](http://www.piter.com)
11. [www.hse.ru](http://www.hse.ru)
12. [www.grebennikov.ru](http://www.grebennikov.ru)
13. [www.azstat.org](http://www.azstat.org)
14. [www.vilyams.ru](http://www.vilyams.ru)

# THE IMPACT OF GLOBAL ECONOMIC INTEGRATION ON NATIONAL NON-OIL EXPORT GROWTH: THE CASES FROM THE UAE AND NIGERIA

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## ABSTRACT

*This paper analyses the impact of global economic integration on national non-oil export growth based on the cases of the United Arab Emirates (UAE) and Nigeria. The article reveals that national export growth and diversification is associated with the degree of international integration, trade, and financial openness of national economies. First, the theory of economic integration is reinterpreted. Then, the cases from the UAE and Nigeria are presented to understand non-oil export growth. This article finds out that while economic integration has influenced the growth rate of non-oil exports in both countries, but the Nigerian economy faces the collapse due to the lack of 'good governance'. Furthermore, the article finds out that Nigeria does not invest its oil revenues in the development of infrastructure and building the capacity of its government institutions. Nigerian political institutions are not consistent with institutions of WTO. This is the main difference between the UAE and Nigerian economies about their policies towards global integration. At the same time, the article discusses that as the success of global economic integration might depend on geographical location of the country, Nigerian economy is exposed to the exclusion from the world economy from its geographical point of view. In the case of the economy of UAE, the article finds out that the global economic integration has positively affected the export diversification in the UAE, which permitted it to decrease its reliance on oil products. Today, the UAE receives 12% of its national revenues from oil sector exports, and 88% of its revenues is provided with non-oil exports.*

**Keywords:** *Economic integration, non-oil export, Nigeria, UAE, diversification*

## 1. INTRODUCTION

The global economy is a place of interconnectedness and interrelated country units and national economies competing for better economic performance. With this in mind, economists and politicians believe that close economic and trade cooperation and integration of economies is one of the key factors that contribute to the development of each country's unit and the global economy as a whole. Co-operation among the economies of the twenty-first century in the global economy is crucial, and countries that are part of the global economy are looking for ways to integrate their economies into the world economy. Today the world depends on economically dependent countries, and no country can develop alone without co-operation with other countries. It should be noted that all countries in the world face the reality of economic integration for development, which in turn contributes to the development of global trade. In addition, the acceleration of globalization over the past decade accelerated global business contacts between countries and the development of information and communication technologies have accelerated the economic integration between the countries into a global

economy and make it an inevitable reality. In addition, global competition and economic integration support national states in terms of reducing budget expenditures and implementing institutional reforms. In order to evaluate the impact of global economic integration on national non-oil export growth it is essential to learn the cases from the experience of successful countries in the world. Along with the successful experiences of these countries, their study gives us ideas for lessons and opportunities to apply the model of economic integration in international practice. Models of the UAE and Nigeria will be studied in this paper after reinterpreting the definition of economic integration. It is important to note that both Nigeria and the UAE are oil producing countries and both countries made large amount of petrodollars from producing and exporting oil resources. At the same time, both countries have chosen the model of free-trade and global economic integration. However, despite the fact that economic integration to the global economy has supported the diversification of non-oil exports in the UAE, but Nigeria failed by choosing the similar path due to its inability and unwillingness to apply the principles of “good governance”.

## **2. THE CONCEPT OF ECONOMIC INTEGRATION**

When analyzing economic literature, one can come across very similar approaches and theories about economic integration into the global economy. In the literature that has been published since the 1990s, economists offer a broader understanding of integration and analyze its positive and negative implications for national economies. Béla Balassa, who was a professor in Political Economics at Johns Hopkins University in the United States, made it clear in his 1961 book on the theory and forms of economic integration of national economies. Thus, Balassa (1961, p.174) notes that, first of all, economic integration does not have a clear understanding of economic literature. Global economic integration refers to some economists as strengthening trade relations between the countries, while others increasing international economic cooperation. According to Balassa, “economic integration means the elimination of all forms of discrimination in economic relations between countries and the establishment of mechanisms for cooperation” (1961, p. 174). According to Ballasa, the theory of global economic integration can be regarded as an integral part of both international economics and international trade (1961, p.175). Meanwhile, Karakaya and Cooke (2002, p. 2) reiterate that “integration of countries into the world economy means eliminating all trade barriers (tariffs, non-tariff taxes and similar barriers) between at least two countries, and establishing a mechanism of cooperation and coordination between them”. Furthermore, Ballasa and Stoutjesdijk (1975, p. 37) argue that developing countries should consider global economic integration as one of the key development theories to increase export potential and achieve economic development. After the World War II, many developing African countries pursued a protectionist policy that planned to prevent from the importation of foreign goods into the country for the development of national economies and the protection of local industrial goods, which resulted in the ineffective industrial sector in these countries. The small size of the domestic market has led to the failure of firms with inefficient and low-income firms (1975, p. 37). In addition, Ballasa and Stoutjesdijk (1975, p. 37) notes that the integration of the national economy into the world economy facilitates the export of finished industrial products from the country to other developed and developing countries in the region. Stimulating the export of the country may lead to the success of the processed goods in foreign markets, but integration into the global economy means greater export revenues for the national economy and firms. With all this in mind, integration by Ballasa and Stoutjesdijk is intended as a development concept that can positively impact the export potential of the economy (1975, p. 37). It should be noted that Ballasa's theory is the first scientific-theoretical work on the integration of economic literature. Ballasa's definition of integration is not comprehensive, but it definitely argues that integration can be a concept in terms of boosting up national exports and export-oriented industries.

However, a broader concept of integration which covers the integration of policies and achievement the harmonization of political institutions goes beyond the initial definition of economic integration. According to Imre Vajda, a world-renowned Hungarian economist, integration is simply market integration, and production integration cannot be included in this list. He says that trade integration means that countries trade freely with each other and create conditions for each other in this area. As for the integration of policies and development, this is a more complex process, and the global integration of national boundaries continues to be a more difficult process (1971, p. 35). Bahruz Babayev (2016, p.1), a researcher and expert international trade and integration at Azerbaijan State University of Economics, writes that the integration of institutions into the world economy only results in successful implementation of reforms in the countries that properly apply the principles of global integration and implement the World Bank's recommendations. There is a problem of good governance in developed countries. If this issue is resolved, it will seem realistic for a long time to achieve economic development in countries. In addition, analysis of country-wide works about economic integration by authors, in the documents of the World Bank, IMF and WTO and cases about successful country-wide integration into the world economy with a modern open economy model provide a number of clear tools for successful integration of national economy into the world economy, but not limited to them. The success of integration remains strongly dependent on the following factors which include competitiveness of the national economy, the adoption of free trade model, rational public revenue management and good governance, harmonization of economic institutions and policies, strengthening of formal and informal institutions, state support for export-oriented national economy as well as country's geographical location and infrastructure. These factors can be considered broader conceptual factors to measure the success of economic integration.

### **3. THE CASES OF THE UAE AND NIGERIA**

#### **3.1. The case of the UAE**

The UAE is one of the richest and most diversified economies in the world. The country became independent in 1971 from the Great Britain. Before the discovery of oil in the country in 1958, the UAE was a poor (Elhiraika, and Hamed, 2002, p. 2). Prior to oil discovery, people living in the UAE were engaged in agriculture, fishing, pearls and other small goods trade (Elhiraika, and Hamed, 2002, p. 2). After the discovery of oil, the UAE government began to invest oil revenues into other sectors of the economy and to implement infrastructure projects on a state level. As noted, the UAE is known worldwide as an oil country and 80% of its revenues were derived from oil and other natural resources (Grant, Golawala and Mckechnie, 2007, p.508). In spite of all this, the UAE today has one of the most diversified economies in the world, and 88% of its revenues come from diversified sources. Tourism, logistics, transport, light industry, exports of raw aluminum and gold, large real estate projects affect the overall health and sustainability of the country's economy. It is important to emphasize that the key factor influencing the development of the UAE is the development model, which is agreed upon by all the scholarly literature. Oil and gas revenues are the primary factors affecting the country's revenues. Of course, the revenues contribute to the government's investment policy to improve the socio-economic status of the population and implement robust infrastructure projects. The second important factor is the adoption of the "free market model" and "global economic integration" by the UAE (Babayev, 2019, p. 46). In addition, the UAE government has implemented successful fiscal, monetary, trade and investment policies to ensure that the export sector of its economy can continue to compete in the global economy. The basis of the UAE's fiscal policy is based on the efficient use of public spending, and when it comes to the policy of protecting the national currency, it is an important step for the government.

In this way, the country attracts private and foreign investments for development (Omaira, 2001, p. 12-13). With regard to trade policy, the UAE's policy is to reduce its dependence on oil exports, and the UAE follows trade liberalization policies adopted by developed countries and abolishes all tariff barriers that impede non-oil sector exports. While summarizing all of the UAE's government policies, it is important to note that one of the world's largest oil producers can obtain early earnings at the expense of oil revenues. The competitiveness strategy based on efficiency, the implementation of efficient financial policies, and the rapid development and diversification of the UAE economy have played an important role. The agreed monetary, trade and investment policies and the priority of boosting the national competitiveness of the economy are all factors contributing to the growth of non-oil exports throughout the UAE. One of the reasons for the UAE's successful experience is its policy to integrate its economy into the global economy from the day the country was created and to build on the basis of a common free market norm in the world. The UAE is a member of WTO. The country's economic public policy has had a few foundational pillars which include strengthening of competitiveness of the country, rationalization of public expenditures, and investment in the infrastructure, integration to global economic institutions as well as liberalization of trade of the country.

### **3.2. The Case of Nigeria**

Nigeria, located in West Africa, is the third largest country in the world that places great emphasis on domestic and international trade and has a population of over 173.6 million. It has one of the largest gas and oil reserves in the world, according to 2013 figures. Nevertheless, the level of economic development of the country is quite low compared to Asian countries such as China, Brazil, India, South Korea, Indonesia, Malaysia and even Thailand (Esther, Lawal and Kamtochukwu, Ezeuchenne, 2017, p. 35). The economy of the Federative Republic of Nigeria is dominated by agriculture, with about 3/2 of the country's population living in poverty and, like many African countries, the agricultural sector of the country consists of poor and poorly developed farms. The country's economy is dominated by state-owned companies, which cover all areas of the economy, with very few small international companies operating in the country and a small number of poorly developed local industries (Thomas, Saji and Canagarajah, 2002, p. 4). Nigeria has a lot of land, oil and other national wealth, but its population remains poor. Between the 1970s and 1980s, it earned \$ 200 billion in oil sales and some of it was invested in the local economy, but these investments did not have a significant impact on people's lives and social welfare (Thomas, Saji and Canagarajah, 2002, p. 4). Oil exports alone provide up to 90% of the national income, and in addition to oil, the Federal Republic of Nigeria continues to export rubber, cocoa and other non-oil products (Thomas, Saji and Canagarajah, 2002, p. 4). In spite of all this, diversification of its economy and its integration into the world economy remains an important goal for Nigeria. The country became a member of the World Trade Organization in 1960. The Government of Nigeria, which has been trying to transform its economy into the world economy since 1986, has begun structural adjustment reforms and is given various programs to achieve agricultural development, and the economy is opening to the world (Adebile and Amusan, 2011, p. 142). Nigeria's structural reforms are based on trade policy liberalization, trade openness, and integration into the global economy. In addition, reforms have created a rule that local agricultural producers have the right to earn 100% of commercial income, but the condition is that this earned money were to be kept in local accounts (2011, p. 143). In general, Adebile and Amusan write that the implementation of trade policies has had a positive impact on the growth of agricultural exports as liberalization encourages producers to export more products. All these reforms have had a positive impact on the export of agricultural products in Nigeria. Despite all of these problems, Nigeria, the most populous and largest African economy, has taken many steps to integrate the

country's economy into the global economy. The most obvious example of this policy is Nigeria's accession to the Tariff and Trade Agreement since 1960, and its accession as a founding member of the World Trade Organization in 1995 (Nwodo and Fredrick, 2017, p. 59). In addition, Nigeria has come a long way to develop its industrial base. Nigeria's economy, which is open and has made its way to integrate into the world economy, has managed to attract capital from all parts of the world. Despite its economy opening up, the country's GDP and non-oil exports continue to decline. If Nigeria fails to diversify its revenues today, its economy may face frequent recession (Nwodo and Fredrick, 2017, p. 59). Although Nigeria has had solid oil reserves since the 1960s and earned \$ 200 billion thanks to oil, its economy has chosen an open trade model and financial openness. In addition, as one of the WTO's creative members, Nigeria has chosen a model of integration into the global economy. Despite all this, it remains one of the poorest countries in the world. The analysis shows that the integration and openness of Nigeria's economy to the world economy has led to a slight increase. However, Nigeria's difference with the UAE is that Nigerian institutions are not compatible with WTO institutions, the country is not properly managed and good governance remains a problem in the country. Unlike the UAE, the government does not invest money in infrastructure projects. In addition, it should be noted that the success of the integration also depends on the geographical location of the country, which may have a negative impact on the isolation of Nigeria from Africa.

#### **4. CONCLUSION**

Comparative analysis of the cases of the UAE and Nigeria show that both countries have chosen the path of free trade policies and integration of their economies as well as export sectors into the global economy. Furthermore, both countries are dependent on the oil industry in the world. Unlike Nigeria, the main goal of the UAE in terms of integrating its exports to the world economy is to emphasize the importance of free trade while increasing the competitiveness of its economy and demonstrating its comparative advantages in the global market. The paper also evaluated the role of good governance in the economies of both countries. Nigeria, in spite of its open economic policies and WTO membership, is not a competitive economy. Institutions fall below WTO standards and country wealth is not properly managed, but despite all this, open policy and integration have also led to small scale of economic growth in Nigeria. It can be concluded that WTO membership plays a very important role in terms of enhancing the non-oil sector's capacity to integrate into the world economy, but in spite of all this, it is important to consider the integration of political institutions in the world economic in accordance with universal norms while increasing competitiveness of the economy. Economy diversification also plays a very important role in increasing the export potential of the non-oil sector. As for the UAE, investing in the right sectors and increasing the competitiveness of the economy has played a vital role in the development of the UAE. The UAE has been able to successfully integrate the non-oil sector into the global economy. Although Nigeria pursues an open policy, its limited ability for application of good governance principles has created serious problems and barriers to diversifying the Nigerian economy. Given all these analysis, integration can be a successful development strategy when it is strengthened along with enhancing the competitiveness of the country's economy and the formal and informal institutions in the country must be governed by the principles of good governance. Being an integral part of the global economy positively affects non-oil export capacity of countries as the discussed cases explicitly show.

#### **LITERATURE:**

1. Adebile, Olukayode & Amusan, Simeon. (2011). the Non-Oil Sector and the Nigeria Economy a Case Study of Cocoa Export Since 1960. *International Journal of Asian Social Science*. 1. 142-151.

2. Babayev, B (2019) Studying The Case Of The UAE In Economic Diversification And Non-Oil Export Growth: Public Policy Lessons For Azerbaijan, *Journal of Economic Sciences: Theory & Practice*, (76): 2
3. Babayev, B. (2015): The Rise of New Institutional Economics and Assessment its Contributions to the Post Washington Consensus. the *Journal of Economic Sciences: Theory and Practice* , vol. 72, no. 2 : pp. 87-97.
4. Balassa, B. 1961. *The theory of Economic Integration*. Homewood, Ill.: Richard D. Irwin.
5. Balassa, B. 1976. "Types of Economic Integration"
6. Balassa, B.; Stoutjesdijk, A. (1975) "Economic Integration among Developing Countries," *Journal of Common Market Studies*, 14 (1): 37–55.
7. Delgado, P. (2016) "The United Arab Emirates Case of Economic Success. the Federal Government Economic Policies", available at <https://pdfs.semanticscholar.org/2467/2a568fe540734ac66bd7471b4bafb2e1d93b.pdf>.
8. Elhiraika, A. and Hamed, A. (2002) "Explaining Growth in an Oil-dependent Economy: the Case of the United Arab Emirates", paper for the workshop on the global research project "explaining growth", December 13-14, 2001, Rio de Janeiro.
9. Esther O. Lawal and Kamtochukwu Ezeuchenne (2017) "International Trade and Economic Growth in Nigeria", *Journal of Humanities and Social Science*, volume 22, Issue 6, Ver. 8 (June. 2017) PP 35-43.
10. Grant, J., Golawala F., Mckechnie, D. (2007) "The United Arab Emirates: the Twenty-First Century Beckons", *Thunderbird International Business Review*, 49, [4 ]: 507–533.
11. Karakaya, Etem & Cooke, Andrew. (2002). *Economic integration: an Overview of the theoretical and empirical literature*.
12. Nwodo, Ozoemena & Asogwa, Fredrick. (2017). *Global Integration, Non-oil export and Economic Growth in Nigeria*. 3. 59-67.
13. Omaira, M. (2001) "The Economy of the State of the United Arab Emirates: Achievements and Prospects", *Journal of Economic Cooperation*, 22, (4 ): 1-22.
14. Pinder, J. (1968). 'Positive Integration and Negative Integration', in the *World Today*, pp. 88--110.
15. Simai, Mihilily, 'Exports and Export Performance', in *Foreign Trade in a Planned E'conomy*, ed. I. Vajda and M. Simai (Cambridge: Cambridge Utniversity Press, 1971), pp. 113-31.
16. Thomas, Saji and Canagarajah, R. Sudharshan, *Poverty in a Wealthy Economy: The Case of Nigeria* (July 2002). IMF Working Paper, Vol., pp. 1-37, 2002. Available at SSRN: <https://ssrn.com/abstract=879854>



# STABILITY OF NON GAS & OIL SPHERE AND THE ECONOMIC GROWTH

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## **ABSTRACT**

*The fluctuations in world economy and global financial sphere that we can see these days are the results of instability in oil-producing industry and uncertainty in its future perspectives. They both directly impact on behavior of leading global actors. Along with it is necessary to notice that these very factors are the consequences of the fundamental changes which took place in two last decades. Saying this, we mean the global shifts in position of the main actors in gas & oil production that became possible because of “breakthrough” achievements in discovering new technologies and their large-scale using. These achievements provided profitability of producing shale gas and oil that was earlier economically impossible. As a result, the USA became № 1 in the gas world production, driving out such producers as Russia and Iran, and later, in 2019, according to the preliminary data of the International Energy Agency, has won the first position in the oil production. So we can state that the new stage of scientific-technical progress in XXI century has led to global changes in world energy production, where the previous “picture” was rather “calm” in a long period. But also in other branches – first of all, of non gas & oil sphere – the former resources of providing economic growth on old base have been expired and the qualitatively new resources on newly technological base occupy their place. The very non gas & oil sphere plays key role in providing technological breakthroughs because it includes the main scientific potential and the majority of discoveries which impact on stable and qualitative growth of the whole economy.*

**Keywords:** *shifts in gas & oil sphere, stable development of non gas & oil sphere, resources of economic growth*

## **1. INTRODUCTION**

The fluctuations in the global economy and financial sphere that we have been observing since February of this year, 2020, are caused not only (and perhaps not so much) by the outbreak of coronavirus, which has now affected most of the countries of the civilized world. This event only served as an additional negative factor that affected the turbulence of the world economy. A much more important role was played by the well-known fluctuations in the oil market related to the lack of unity among the main producer countries and exporters of “black gold”, and, which is more important, to the growing uncertainty in the mainstream directions in which the world economy is going to develop.

## **2. TECHNOLOGICAL BREAKTHROUGH IN ECONOMY AND THE ROLE OF THE NON-RAW-MATERIAL SPHERE**

However, in our opinion, the noted factors themselves have already become derived from the profound changes that are taking place in the world economy and international economic relations in recent years. The very uncertainty that we have just mentioned is precisely caused by the fundamental changes that have already taken place in the entire technological basis of modern production, on the one hand, and the fact that they are not yet completed, on the other hand. These changes are associated with a global redistribution of roles in the global production of basic hydrocarbons, and they, in turn, became possible due to breakthrough achievements in the field of new technologies and their large-scale use in the extraction of oil, gas condensate

and natural gas. Thus, it can be stated, that already in front of our eyes, in the 21st century, a new stage of scientific and technological progress has led to a planetary change in the picture customary for the last third of the past century that has developed in the field of production of main energy sources. For Azerbaijan, as a country with significant reserves of high-quality oil and significant reserves of natural gas, logistically convenient not only for development, subsequent processing, but also for export deliveries, everything that happens on the global energy market and around it seems extremely important for determining the prospects for the whole social economic development in the foreseeable future and finding ways of guaranteeing growth. The beginning of changes we mentioned was initiated by the latest breakthrough technological developments, which were implemented and subsequently introduced by American companies about 20 years ago. These developments and the combination of the latest technologies, in the first place, made it possible to provide profitability in the extraction of both natural gas and oil from oil shale, which was previously simply impossible. Thus, the industrial development of new rich, but at the same time physically difficult to reach deposits of energy resources - such as the same shale gas and US shale oil, oil deposits of Canada or the Norwegian shelf, until more recently turned out to be economically unprofitable even for such technically advanced and rich western powers. Thus, achievements of scientific and technological progress in only one - energy - field in a relatively short time has led to truly revolutionary changes in the largest economy in the world, creating a situation where the cost of shale production has become less than offshore production. As a result, shale production currently provides for more than half of US oil and gas production, as a result of which, for the first time in almost the entire post-war period, hydrocarbon surpluses have appeared in the United States that this country can afford to export. As a consequence of these changes, back in 2009, according to the International Energy Agency, the United States took first place in the world in natural gas production, at the expense of such countries as Russia and Iran [3, p. 37]. Ten years later, according to preliminary results of the International Energy Agency for 2019, the United States was ahead of Russia in annual crude oil production, ranking first in the world also in terms of this indicator [2]. Thus, it becomes obvious that only the possession of new, modern technologies – even not “loose” ones, in separate industries and spheres of the economy, but embedded in an integrated system of scientific and technological development within the entire national economy, allows to have a significant impact on the overall economic situation, moreover, on the position of a particular country in the world economy. In other words, the previous resources of economic growth, associated with attempts to increase efficiency within the existing system without changing the technological basis turn out to be exhausted. It should be noted right away that our example concerns only one, although extremely important for the entire global economy sector, the state of affairs in which for many years was based on practically unchanged interdependence within the framework of the energy status quo that was once achieved on the basis of previous technologies, both on a global scale and national economies. However, in other areas of the world economy as well (primarily associated with communication systems and telecommunications, but also with manufacturing industries, transport, etc.) the former relatively “quiet” development based on the achievements of scientific and technological progress, received a lot decades ago, gives way to innovative solutions based on the latest breakthrough, revolutionary technologies that radically change the situation. Or, to put it more bluntly, the possibility of providing sustainable growth based on and by finding the best managerial, “operational” decisions, internal reserves, etc. cease to play a significant role, giving way to qualitatively different solutions based on technological acceleration. And this is seen in the example of a role reversal and caused by this reversal cardinal changes in the balance of power in the global energy market. However, as we have already mentioned above, the most important role in providing technological breakthroughs belongs to the sectors of particularly non-raw-material spheres, since the main scientific

potential is concentrated in them and the associated scientific organizations; in the same place, a large part of scientific and technological discoveries takes place that are directly of practical importance and have a major impact on the sustainability and qualitative "filling" of economic growth. Based on the above, it is possible to draw a reasonable and generalizing conclusion that in modern conditions, in order to gain and subsequently maintain worthy positions in international competition, it is necessary to provide sustainable innovative development of the economy and society as a whole. Such development requires, of course, adequate to the given tasks, material and technical, and scientific and technological base, which is formed, first of all, by those realized "in practice" (that is, in the form of already produced tangible physical objects and advanced means of communication and control) discoveries and inventions, *secondly*, effectively distributed funds for the purpose of scientific and technological development, allocated from various sources. Sources can be both state and local budget funds, and private investments, as well as bank and various corporate loans. From this point of view, speaking of modern Azerbaijan, we can say that our country possesses the necessary theoretical and applied scientific and technical potential and the necessary groundwork for creating and applying the necessary technologies at the same time for:

- firstly, the qualitative reconstruction of the oil and gas complex of our republic;
- secondly, the achievement of structural changes in the entire national economy, which would make it possible to radically provide a qualitatively different paradigm for its growth, based on the generation and application of innovations, primarily in non-raw-material industries.

### **3. INNOVATIVE BUSINESS AND ITS SUPPORT**

To achieve these goals, in our opinion, it is necessary to single out such a thing as "innovative business" - the most technologically equipped part of the national business that possesses the scientific and technical base and corresponding groundwork. This may include both private companies (large and related small enterprises), and state-owned companies, as well as partnership agreements between the former and the latter, in other words, public-private partnerships. However, in addition to the material base, in order to provide innovative development, human, more precisely, staff capacity is needed. To be more precise, this is the creative potential necessary for any scientific breakthrough and consolidation of its results in the development of the economy and society. Therefore, the most important question is how, in modern conditions, to best form the creative potential of innovative development? Of course, the decisive role here belongs to education, first of all, to higher education, where the final formation of a qualified specialist is taking place. Therefore, expenditures on the education system are, in the final analysis, not only recoupable, but also providing strategic benefits item of expenditure for both private business and the government, and more broadly, from the point of view of the interests of the whole society. We can say that the support of modern education is at the same time the support of the above-mentioned innovative business, since in this way modern staff ready for international competition, is prepared for it. As for the importance of organization of education in the modern government, the authority recognized by almost all scientific schools even in the past century - a prominent American theoretical economist J. Galbraith, noted: "Since technical and scientific successes are a generally accepted measure of social achievement, then ... the organization of education and other types of assistance in these areas are not only correct, but also highly desirable use of public funds "[1, p.98]. Today, it is precisely on the actions of specialists, on their ability to catch the "pressure point" of the next stage of scientific and technological progress, the development of its most promising areas depends, which, accordingly, determine the content and stability of this type of economic growth, which would not depend on fluctuations in the commodity market. Accordingly, the sustainability of the directly non-raw-material sphere of the economy in which the new reserves

of the growth stability of the entire national economy are concentrated and the efforts of innovative specialists are accumulated, which, through their discoveries, can provide advanced positions to national business also plays the most important role. The ability of a particular country to provide the most favorable environment for such specialists will be a determining factor in the economic growth of the future. Accordingly, providing such an environment is the most important task of any modern developed state, claiming a worthy position in the world economy. Meanwhile, this task, as practice shows even in recent years, is not very simple even for the most developed states. So, for several years now, international experts have been trying to find an explanation of the reasons why, as it was several decades ago (when this process was first marked as a global trend), there is a “brain drain”. Moreover, today it is not just about executing specialists (highly qualified programmers, calculators, analysts, etc.), but more and more about research scientists, inventors. Movement of people of mature age - specialists "with a name", and talented young people, as they say, from the student days is taking place. At the same time, a relatively new phenomenon is observed: young people are leaving even from such rich and most developed countries as, say, Great Britain, as well as Germany and other leading EU countries such as Austria and France. The United States is the main “center of gravity” for youth from developed countries, taking into account that, as we see, the conditions created to support scientific youth are qualitatively differ for the better not only from the “third world” countries, as it was in previous decades, but also from the most developed states which are at such level of general economic development that is comparable to the United States. From the point of view of Azerbaijan as one of the post-Soviet countries, it is important to bear in mind that for a number of years (with the exception of the last month due to an outbreak of coronavirus), there has been a tendency for specialists from the CIS countries to first leave for Europe, and then the most “advanced ” part of them moves to the USA. What caused such a special attractiveness particularly of the United States for research youth? According to European experts, in North America, young people are still attracted by two factors: firstly, and this has not gone anywhere, - the remuneration is better even in comparison with rich Europe, and secondly, it is again preserving and even expanding much wider opportunities for self-development and self-realization as specialists. Indeed, the self-realization of specialists is one of the main driving forces of scientific and technological progress in general and, in particular, the achievement of results that can lead to qualitative improvement or even a change in the priority areas of all economic growth. And, we repeat once again, to provide such self-realization, not only the level of payment is important (although it is also very important, and we will talk about this a little further), but also the effectiveness of the organization of all scientific work. So, in the USA, it is precisely the small science-intensive business, that receives great attention, not only financial, but also legal and organizational support at various levels - from federal to corporate. For example, the National Science Foundation conducts regular competitions to support small scientific businesses, according to the results of which funding is allocated for various periods depending on the application. On the one hand, this is a form of support for small and medium-sized businesses that is familiar to all developed countries, and on the other hand, particularly of such a business that is engaged in the development and testing of advanced technologies. Further, mentioning the terms is important because in the case of, for example, the development of long-term science-intensive projects, it becomes possible to link them with large-scale national (let’s say, in the field of healthcare or the education) projects; which immediately increases the value of "small" projects in terms of the prospects for their large-scale application. Now back to the problem of remuneration of young professionals engaged in high-tech business and the scientific field of developed countries. So, the United States demonstrates here not only quantitative indicators of payment, but also its stability, which in recent years - due to the ongoing crisis - is sometimes absent in the most developed European countries, where various kinds of "savings" are being made, including in

scientific research. For modern Azerbaijan, this even negative experience seems important because it once again shows the importance of having a unified national system of training highly qualified personnel for science and science-intensive production and the subsequent provision of such personnel with a promising field of activity - with the government playing an active role, including in the field of financing.

#### **4. CONCLUSION**

In recent years, the world economy and international economic relations have undergone profound changes caused by radical changes in the entire technological basis of modern production, which, in turn, are made possible thanks to breakthrough achievements in the field of new technologies and their large-scale use in practice. Under these conditions, the previous resources of economic growth, associated with attempts to increase efficiency within the existing system without changing the technological basis, turn out to be exhausted. Providing sustainable economic growth of the future becomes possible thanks to qualitatively different resources based on technological acceleration. The most important role in providing technological acceleration belongs to the sectors of particularly non-raw-material sphere, since the main scientific potential is concentrated in them and associated with them scientific organizations; the most part of scientific and technological discoveries that are directly of practical importance and have a major impact on the sustainability of economic growth take place also there. The formation of the scientific potential corresponding to new tasks depends, firstly, on the training of highly qualified scientific and technical personnel, and secondly, on an effective system of both remuneration of these personnel and the organization of their activities.

#### **LITERATURE:**

1. Galbraith, J. K. Economic Theories and Goals of Society / Ed. by Acad. N.N. Inozemtsev and corresponding member of the USSR Academy of Sciences A.G. Mileykovsky. M.: Progress, 1976. - P. 98
2. International Energy Outlook .2019. - Sept. 24. - 2019
3. World Energy Outlook. 2010 \ IEA. - Paris. 2010. P.37

## ECONOMIC GROWTH AND SOCIAL PROGRESS AS FUNDAMENTAL INDICATORS OF A DEVELOPING SOCIETY

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### **ABSTRACT**

*The article proves that economic growth and social progress are essential features of any dynamically developing society. Economy in terms of growth of production has a greater ability to meet the needs of society, better adapted to the socio-economic problems. Economic growth is a prerequisite for the achievement of goals. In terms of qualitatively and quantitatively increasing globalization of economic growth in the national economy becomes an important factor in ensuring the country's competitiveness in the world economy. Therefore, the implementation of any model of economic growth is impossible without the active position of the state. In a real process of economic and social development of the events line up in such a way that the resources of the state and its economic policies have become leading factors of economic growth. The status of the state in modern conditions should represent and Express the public interest, the interests of the country as a whole. Only in such circumstances in the economy is the balance of public and private interests in which the freedom of satisfaction of private interest limited to just one – the interests of society as a whole. Economic growth of national economy will promote the economic security of the country. Economic growth creates the conditions for solving the problem of limited resources allows to predict the prospects of development of society, contributes to social progress, in connection with which the investigated subject is of special relevance.*

**Keywords:** *economic growth, economic development, national economy, economic security*

### **1. INTRODUCTION**

From the point of view of the system approach, economic growth expresses the realization of the goals of the economic system, which synthesizes all its qualitative and quantitative changes, reflects the evolution of its socio-economic nature, i.e. the very way of economic development. Most often, economic growth is interpreted as an increase in GDP for the entire national economy per capita. Economic growth is the basis of economic development and, with a long development trend, is reflected in the high standard of living of the country's population. Economic growth is a dynamic process in the economy that involves increasing the volume of national production and increasing the well-being of human society. By linking social production, accumulation, and individual consumption into a single whole, economic growth indicates the costs of social labor and its productivity. Economic growth means an increase in productive resources, increasing production, growth of production and its flows are like on the current non-productive consumption and replenishment production and nonproduction resources. Modern economic growth is a system-forming and uneven process, the origins of which should be sought not only in the labyrinths of the world market, but also in the core of the national economy's self-development. This core is a special integrative and innovative education, a single and contradictory Association of the most active components of technological, economic and social structures of society (Chepurin M. N., 2010, p. 703). It should be noted that economic growth is an extremely complex phenomenon, since its study must take into account natural resources, political institutions, legislation, as well as many psychological and social factors. In this regard, the development of an all-encompassing theory of growth seems almost impossible task.

## **2. FACTORS OF ECONOMIC GROWTH**

The problem of economic growth is becoming more complex in modern reality and this requires research into the nature of economic development over time. The study of economic growth factors, the main of which are the rates of investment and consumption, is put forward to the fore. Developing countries cannot achieve the same results from net investment as in highly developed countries. In highly developed countries, the capital-to-income ratio means more opportunities for the production of modern technology, hence more goods. The root of difficulties in developing countries is a lack of skilled labour and knowledge, which means that producing the same amount of goods requires more investment. In this regard, the analysis of economic growth raises another important question: how fast can go the accumulation of capital. In the twenty-first century, investment has acquired a special role and is considered not only as a form of capital investment in fixed assets, but also as an investment in human development. Despite some theoretical advances in the study of growth problems, changing economic realities require an increasingly complex and detailed explanation of the sources of growth. Complex developments in the field of economic growth in transitive economies, especially in resource-exporting countries, reveal the problem of maintaining the impact of investment rates. The economy of any country is a process of producing public goods in their continuous flow and renewal, so it cannot be unregulated. In our opinion, the most complete approach is to consider economic growth not as an alternative to reproduction, but as its most important link. If reproduction reveals significant relationships and interdependencies in the structure of social product and production in a continuous flow of their renewal, then economic growth reveals the factors of productivity of the reproduction process in dynamics, its performance-dynamic component. The main manifestation of economic growth is an increase in the productivity of living labor, but this situation in the context of increasing knowledge-intensive products does not always confirm the fact of economic growth. This provision has been interpreted as a justification for the possibility of non-investment growth, due to the loading of significant unused capacity. Analysis of the underlying causes of the economic crisis also led to the conclusion that demand forces play a special role in economic development. From a supply perspective, economic growth is driven by the aggregate productivity of factors of production. From the point of view of demand, the main factor of economic growth is the growth of consumption of the country's citizens. Economic theory considers demand as a factor of economic growth, since it is the main stimulus for the growth of aggregate output in a short period of time. Stimulating aggregate demand is a priority task of economic policy, since it is the main engine of economic growth. Demand acts as a need for households and the state, as a need for investment, taking into account clearly defined priorities of industrial policy that guarantee the sale of products (Abalkin L. I., 2002, p. 47-48).

## **3. THE ROLE OF NONECONOMIC FACTORS IN ANALYSIS OF ECONOMIC GROWTH**

Within the framework of economic theory, it is difficult to imagine a functioning model of the economy without introducing many different prerequisites. In fact, any economic model is implemented under the influence of both economic and non-economic factors. Moreover, as the complexity of a country's economic growth increases, the role of non – economic factors increases, because the economic model is not an end in itself, but a means of improving the well-being of the population and strengthening democratic principles in society as a whole, and in all levels of human activity. Economic growth is an integral component of economic development, which is characterized by the formation and implementation of prerequisites for the development of each member of society. (Zaykova I. A., 2016, p. 51). The complexity of the structure of social reproduction requires the development of new models of economic growth, taking into account the influence of noneconomic factors such as information,

institutional framework, quality of life, the country's history, mentality, level of culture, education, skills, knowledge and intelligence, health as components of human capital, in fact, proven to be "motivators" long-term and stable economic development. The establishment of causal relationships between economic growth and non — economic factors that cause it is a problem that has been hotly debated over the past decades. At the heart of new models of economic growth, priority should be given to the human person, since the very essence of development is determined by focusing on the person, on the human potential as the main wealth of any society, and the basic goal of economic growth of the country is to increase the production of goods and services and ensure a higher standard of living on this basis (Gorshkov M. K., 2013, p.34). The historical experience of countries and their modern development suggests that there is no single standard model of economy that would meet the conditions of each and every country. Non-economic factors in each country differ in significant specifics, different effects on purely market, economic processes. Even citizens of advanced countries (for example, the United States, Japan, and Germany) are well aware that their countries differ from each other not only in their official language, but also in their market structure, as well as in a large number of other characteristics. It is no accident that the World Bank experts, analyzing modern development in the light of globalization, note that the United States is the largest and by some measures the most successful economy on Earth, but it is not the only model for success (Globalization Growth and Poverty, 2009, p.15). According to the authors of this study, States such as Austria, Belgium, Denmark, Norway and Japan have approximately the same standard of living as in the United States, which is due to the provision of a favorable climate for private economic activity for many years. However, these five highly developed countries do not use any common model, since successful globalization does not require adaptation to a single, standard institutional model (Globalization Growth and Poverty, 2009, p.123). In this regard, ignoring the specifics of the Azerbaijani path of development and imposing a certain "Western" or "Eastern" option on the country looks like operating with abstract structures that are not perceived by society. The World Bank report focuses on non-economic factors that have a significant impact on the implementation of various national models. The methodological approaches of the world Bank specialists should be used to analyze the Azerbaijani model of economic development and the conditions that determine its evolution.

#### **4. MODERN SOCIO-ECONOMIC DEVELOPMENT OF AZERBAIJAN**

At a time when many scientists are aware of the obvious limitations of existing theoretical developments in the field of economic growth, it is difficult for Azerbaijan to find ready-made recommendations to solve this complex problem, so as not to aggravate the lag behind other countries. The main external factor that contributed to the growth of the national economy was the improvement of the global market conditions for Azerbaijan's main export products. The domestic factor that had a positive impact on the economic growth rate was the stable political situation in the country, macroeconomic stability, increased domestic demand as a result of improving the living standards of the population and a favorable investment climate. At the initial stage of transformation, Azerbaijan's development model was based on high rates of oil and gas development and production. This period was laid the basis for further economic growth, including conducting restrictive monetary policy, strict conditions for the expenditure of the state budget, the completion of price liberalization, the adoption of a number of strategic legislative acts, the conclusion of agreements with international financial organizations on loan for the implementation of the stabilization and structural and institutional reforms. The further socio-economic development of Azerbaijan and its economic growth opportunities are largely linked to the implemented macro-regulation strategy. Oil resources play a key role in the development of the national economy and are an indicator by which the country's economic



potential is judged. Economic growth in Azerbaijan is largely driven by sectors related to the extraction of natural resources. It is believed that economic growth has combined the development of several major industries, but does not simultaneously cover the entire economic system as a whole. Therefore, the disappearance of the growth stimulus in the main industries leads to a drop in growth. Excessive development of the extractive sector of the national economy, as a rule, causes an increasing risk of "Dutch disease": the increase in revenues from natural resource exports limits the competitiveness of other sectors of the economy. If the development of the Azerbaijani economy continues along a resource-dependent trajectory and the extractive sector maintains or increases its share in exports, the risk of "Dutch disease" will increase. It should be noted that in Azerbaijan, the main hindering factor of economic growth is the structural deformation in the economy, which gives a "false signal" to producers and consumers, which counteracts sustainable growth. Low monetary incomes and correspondingly low effective demand determine the lack of incentives for modernization and growth of production in the domestic market. Effective demand consists of the salaries of various groups of the population, which have their own internal structures for using income growth. Ignoring the basics of demand management related to the specifics of motivation for reproduction creates problems in solving urgent issues. Therefore, the main task of economic and social policy is to increase wages and other real incomes of the population. A high level of consumption creates conditions for improving the well-being of the population and, consequently, for long-term growth. Qualitative renewal of the economy implies improving the main production assets of manufacturing industries, increasing the efficiency of the use of production capital, improving working conditions and increasing wages (Sukharev O. S., 2015, p. 35). It is obvious that the Azerbaijani economy can become truly effective if it relies on the progress of manufacturing industries that are able to meet the needs of all other sectors of the economy, and thus improve the standard of living in the country. For the Azerbaijani economy today, the main fundamental reason for the poor quality of economic growth, accompanied by the negative effects noted above, is the factors of the institutional order. Like any other country, Azerbaijan is not only able, but also obliged to use market instruments for economic growth and development of a democratic society, only with a well-balanced and mathematically modeled account of all its specific features. Crisis phenomena in the Azerbaijani economy require taking measures to ensure economic growth with the prospect of economic development. These measures are large-scale, require large expenditures and adequate state regulation, which will create the basis for sustainable economic development of Azerbaijan.

## **5. STATE REGULATION OF ECONOMIC GROWTH**

Economic growth is an integral component of the country's economic development, and since it contributes to solving the most important socio-economic problems, it requires an active state policy. According to its status, the state in modern conditions should represent and express public interests, the interests of the country as a whole. Only under such circumstances, the economy creates a balance of public and private interests, in which the freedom to satisfy private interests is limited only by one - the need to take into account the interests of society as a whole. In the real process of economic and social development, events are arranged in such a way that the state's resources and its economic policy have become leading factors of economic growth (Porokhovskiy A. A., 2003, p. 176). State regulation in the framework of economic policy helps to unfold the creative forces of society, thereby contributing to:

1. dynamics of development, since such regulation accelerates the growth of per capita income of the population, which is accompanied by diversification and improvement of effective demand;
2. mitigating the pressure of external competition and providing financial assistance, which facilitates the formation of new types of production;

3. creating conditions for a more even distribution of economic benefits, which leads to the production of high-quality goods and services, reduce social tension, and reduce government spending on social security.

To achieve high and sustainable economic growth, the state can use the following tools:

- improving the investment climate (various agreements between countries, the absence of double taxation, stimulating entrepreneurship in various regions of the country);
- increasing the availability of credit resources (lowering the refinancing rate, government programs of the banking sector to support unprofitable enterprises);
- assistance in solving infrastructure problems that impede the effective development of business relations of economic entities;
- increasing labor productivity (rational distribution of enterprises in the country, promoting national employment);
- increase in income of economic entities.

State policy aimed at stimulating economic growth should include:

- facilitating retraining of labor resources to ensure the necessary number of workers with the required qualifications;
- measures to reduce state control in the industrial sector to reduce the degree of monopolization and increase the competitive environment;
- providing labor mobility through regional migration;
- improving the social security system, creating incentives for the growth of labor productivity;
- stimulating the capital market by ensuring competition in the financial sector;
- increased investment in high technology industries, as well as in the development of new equipment and technologies, and the promotion of innovations in the production process.

At the present stage it is possible to allocate some directions of the state stimulation of economic growth, which include:

1. Thorough state control over speculative capital, which implies measures to regulate and supervise the stock exchange and banking sectors. The increase in investment securities compared with investment in the real sector of the economy due to their high profitability. It is assumed that the increase in the tax rate on the receipt of dividend payments is able to reduce investment in the financial sector and prevent a recession.
2. Changes in the structure of GDP, reducing the export of energy supplies. Prices for oil and other key resources exported by our country decreased significantly, so the trade became less profitable. To ensure the economic development necessary to search for other sources of growth.
3. Stimulation of innovative development. Direct public investment in innovation is inefficient, requires the use of tax policy instruments.

Economic growth is one of the main goals of economic policy in any modern country. The level of public welfare directly depends on how effective the government's policy to stimulate economic growth will be. For the revival of the national economy, it is necessary, along with stimulating economic growth, to implement a social policy of the state aimed at meeting the material and spiritual needs of citizens, which will ensure the retention of the achieved trajectory and allow us to move to a new level of economic development.

## **6. STRATEGY FOR TRANSITION TO A NEW LEVEL OF ECONOMIC GROWTH**

Economic changes in the modern world are deep and rapid, which makes it necessary to identify new approaches when analyzing the economic growth of the national economy. This means that the disclosure of the foundations of the national economy and the definition of a development strategy becomes an integral part of economic policy. The transition of countries to the path of sustainable economic development requires appropriate market institutions, a certain sequence and speed of reforms, as well as a reasonable, reality-based economic policy (Elyanov A. Ya., 2012, p. 8). An increase in the share of public investment in the total amount of national capital does not have a significant positive impact on the acceleration of economic growth, even on the trajectory of sustainable growth. If the task is to move to a "higher" trajectory, then the negative effects of excessive expansion of state ownership can become a significant hindrance. The "high" trajectory (and the corresponding overall development of the country's economy) determines the level of national capital accumulation, income and consumption per capita, the growth rate of capital equipment and productivity of workers, as well as investment in new technologies. These factors are necessary conditions for growth in any situation of the country. Their sequence, the dominant value of any factor, the predominant distribution in time space, the speed of change-it is a matter of a specific period and a specific position of the country in relation to the trajectory. These variables must grow in order for the country to stay on the trajectory that is the path of the economy. The significance of these factors is determined by the fact that they are components of a strategy designed to ensure sustainable economic growth (Rudakova I. E., 2013, p. 32). If the necessary growth conditions are met to ensure that the trajectory is maintained, the strategy for moving to a new level of economic growth must contain other targets and outline specific actions. One of the most important goals in forming a strategy for moving to a "higher" trajectory is to improve institutions, whose role in determining the nature, direction, and pace of economic growth at the stage of transition to a "higher" trajectory of development becomes key (Auzan A. A., 2010, p.135). The role of institutions is ambiguous, just as the institutions themselves are ambiguous. They can produce positive and negative effects. The negative effects of institutions and their inhibiting influence on economic growth are associated with excessive state regulation of business activities, which undermines their initiative for further development, an insufficiently developed legislative system, and a judicial system that does not implement justice. Positive effects of institutions are manifested in clear legislation and law enforcement, protection of property rights, which ensure the interest of people in the results of their activities, responsibility in the formation of individual goals, and efficiency in the distribution and use of their resources. The combination of positive and negative effects creates a serious stupor not only for economic growth, but also for social progress in General. An unsatisfactory institutional framework explains the slow pace of real change. The creation of a new institutional environment that overcomes the conditions of inhibiting future changes, making it difficult to return outdated rules to ineffective institutional arrangements, is the main component of the strategy of economic growth in the transition to the trajectory of developed countries. When moving to a "higher" trajectory, the innovation process is of particular importance as a necessary condition for economic growth. The innovation process affects the areas of production, exchange, Finance, and management. It also covers the organization of people's activities, ways to motivate them to creativity and effective work. An innovator who is not sure that society and the state are interested in the results of their work will not be motivated. The maximum return on people's participation in the innovation process is achieved through the formation of public policy, which implies certain benefits for them. The quality of human capital is of particular importance for the transition to a "higher" trajectory. The effectiveness of interaction between knowledge carriers ensures the diffusion of knowledge and thereby increases the average level of human capital, and therefore the quality of social capital as a whole.

Conditions that ensure the quality of human capital – a high level of education, qualifications that meet the requirements of the latest technologies, a high – quality level of health care and living conditions-are of key importance as components of a new quality economic growth strategy. To create them, the spheres that form these qualitative features of human capital must expand in the sectoral structure of the economy. Thus, the transition strategy should include long-term guidelines and measures to achieve them, aimed at forming new social structures, common values, and new features of social relations. All this requires time and considerable effort from the entire society.

## **7. CONCLUSION**

In the conditions of qualitatively and quantitatively growing globalization, the economic growth of the national economy becomes the most important factor in ensuring competitiveness and maintaining the country's economic security in the world economy. Therefore, the practical implementation of any model of economic growth is impossible without an active position of the state. There are no generally accepted standards for state behavior in this area, because the conditions of each country have their own specifics and there are no such templates and forms that would suit everyone. The practice of economic development shows that no one can do without knowledge of the theory and world experience, but specific recommendations for a particular country should take into account the conditions of this country and its specific tasks. Economic growth and social progress are essential features of any dynamically developing society. The economy in the conditions of production growth has a greater ability to meet the needs of society, is better adapted to solving socio-economic problems. Improving the material well-being of the population and its quality of life, as the main components of economic growth and its main social goal, are realized in the growth of per capita income, increasing free time as the basis for harmonious personal development, increasing the level of development of social infrastructure sectors, increasing investment in human capital, ensuring the safety of working conditions and life of people, increasing consumer satisfaction. It is particularly important to optimize the distribution of national income among various segments of the population and reduce the property stratification coefficient, ensuring the principles of social protection of the unemployed and disabled. In order to ensure the economic growth of the country, it is necessary to modernize the economy through the implementation of targeted development programs and multiple increases in funding for research activities. Without this, the technological gap between Azerbaijan and economically developed countries will only increase every year, which will lead to a decrease in GDP growth rates and a deterioration of the socio-economic situation in the country. The transition to economic growth based on the implementation of scientific achievements is particularly relevant for Azerbaijan in conditions when the country's economy must free itself from excessive dependence on natural resource prices and adapt to the requirements of import substitution. Modern economic growth is characterized by a global character, a significant dependence on the competitiveness of specific national economies. It is determined not so much by comparative advantages as by a complex system of interrelated factors, the main of which are the existence of a national innovation system, the quality of human capital, the conditions of domestic aggregate demand, the state of related and supporting industries, and the level of internal competition; norms of behavior of economic entities (mental characteristics, management level), effectiveness of regulatory actions of the state. Consequently, achieving high-quality economic growth and social progress requires the creation of new and implementation of existing national factors of competitiveness in the context of global economic development. To achieve high economic growth, it is necessary to apply a new social policy of the state, whose main task is not to issue funds, but to create conditions for the free activity of individuals who are able to create these benefits and take care of themselves.

Creating conditions for everyone to have the opportunity to get an education, a profession, a job, as well as stimulating savings and the desire to acquire property — these are the most important directions of the social state's policy. The new social policy of the state will lead to social cohesion, people's confidence in the justice and viability of the social system, trust in the leaders of the state, that is, we are talking about building up social capital, which, like building up human capital, is increasingly recognized as the key to the success of any economic endeavors. The immediate development of Azerbaijan should proceed from two interrelated directions — a new model of economic growth and a new social policy. In the modern world, social policy is a powerful tool for improving the quality of a country's human capital and ensuring its competitiveness in the international arena. Investment in human capital, mainly in quality education and medical care, is a priority. A systematic breakthrough in economic development can be expected only when the practical implementation of the course proclaimed by the state will bring tangible results to the population and strengthen the confidence in the success of the reforms in the mass consciousness.

#### **LITERATURE:**

1. Abalkin L. I. The logic of economic growth. M.: IE RAS, 2002. 228 p.
2. Auzan A. A., Zolotov A. V., Stavinskaya A. A., Tambovtsev V. L. M.: The political economy of Russia: the dynamics of the social contract in the 2000 s. / Selected Proceedings of the Institute of the National Project "Social Contract". 2010. Section 1.3.
3. Gorshkov M. K. Non-economic factors of economic growth: unused reserves // Humanities. Bulletin of the University of Finance. 2013. №2 (10), p. 33-43
4. Zaikova I. A. Economic growth as a basis for economic development // National interests: priorities and security. 2016. №9 (342). p. 51-60
5. Porokhovskiy A. A. Economic theory in modern Russia: global trends and national traditions. M.: TEIS. 2003. p. 173-236
6. Rudakova I. E. National Strategy for Economic Growth: Dependence on the Trail and Targets // Bulletin of the Institute of Economics, RAS. 2013. №4. p. 26-38
7. Sukharev O. S. Institutional factors and a macro model of economic growth // Investments in Russia. 2015. № 11. p. 28–35.
8. Chepurin M. N., Kiseleva E. A. The course of economic theory. Kirov: ASA. 2010. 800 p.
9. Elyanov A. Y. Globalization and development. Journal "World economy and international relations." № 11, 2012, p. 3-15
10. Globalization Growth and Poverty: Building an Inclusive World Economy, 2009

# IMPROVING ENVIRONMENTAL PROTECTION MANAGEMENT IN OIL AND GAS PRODUCTION

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## **ABSTRACT**

*The article investigates environmental and economic issues in the oil and gas industry, as well as environmental protection management. The article examines the system of the economic evaluation of nature use and shows that it plays a major role in solving environmental problems, provides elements of environmental costs for the use of nature by economic entities, explains the nature of environmental control over nature protection activities. In addition, the article substantiates the main objectives of environmental protection in oil and gas production, the reduction of emissions of harmful substances by enterprises in this field, as a result of economic activity of SOCAR's environmental protection and environmentally friendly. Priorities in the field of use were identified and ways to improve environmental management in the oil and gas industry were shown. As well as the main elements of the environmental standardization system were given in groups, a system of measures aimed at reducing the harmful effects on the environment was developed, a mathematical formula for assessing the effectiveness of environmental policy was given. The article also substantiates the need to create a low, medium and high-level environmental information system for industries, reflecting the existing environmental conditions in SOCAR, the man-made impact on the environment and the results of measures based on ISO 14000.*

**Keywords:** *environmental protection, ecological problem, ecological information, oil production*

## **1. INTRODUCTION**

In the new millennium, the preservation of ecological balance, efficient use of natural resources, protection of water, soil and air from pollution has become a universal problem. In the world the environmental problems are new challenges for humanity. Maintaining the necessary balance between the economy, society and the environment in the context of the global environmental crisis can be achieved through the formation of an environmentally safe and economically optimal model of development - sustainable development [12]. At present, the protection of environmental components and the application of advanced methods to solve existing environmental problems are being implemented in the international arena. One of these tasks is the efficient use of natural resources, i.e. minimizing the role of crude natural resources in the gross domestic product. If natural resources are not preserved for future generations, it is impossible providing of sustainable economic development in the future [2]. All over the world, the oil, and gas industry, as well as refining, petrochemical, and other related industries are essential polluters and have negative impacts on the environment.

## **2. ECONOMIC EXPENDITURE ELEMENTS IN OIL AND GAS PRODUCTION PROCESS**

Each economic entity has the following elements of nature management: development of natural resources, negative impact on the environment, nature protection activities (Figure 1). The company incurs costs for each of these elements, which can be combined under the concept

of "ecological expenses". The first element of environmental expenditures includes obtaining a license for the right to use mineral resources, the cost of developing natural resources, the tax on mining, etc. can be attributed. The second element includes the payment for the negative impact on the environment. The third element includes capital investment and current expenditures for conservation activities. The main objectives of environmental protection in oil and gas production are to reduce emissions of harmful substances into the environment by economic entities, to prevent the generation of industrial wastes, as well as to expand the recycling of such wastes, and the recultivation of contaminated lands.

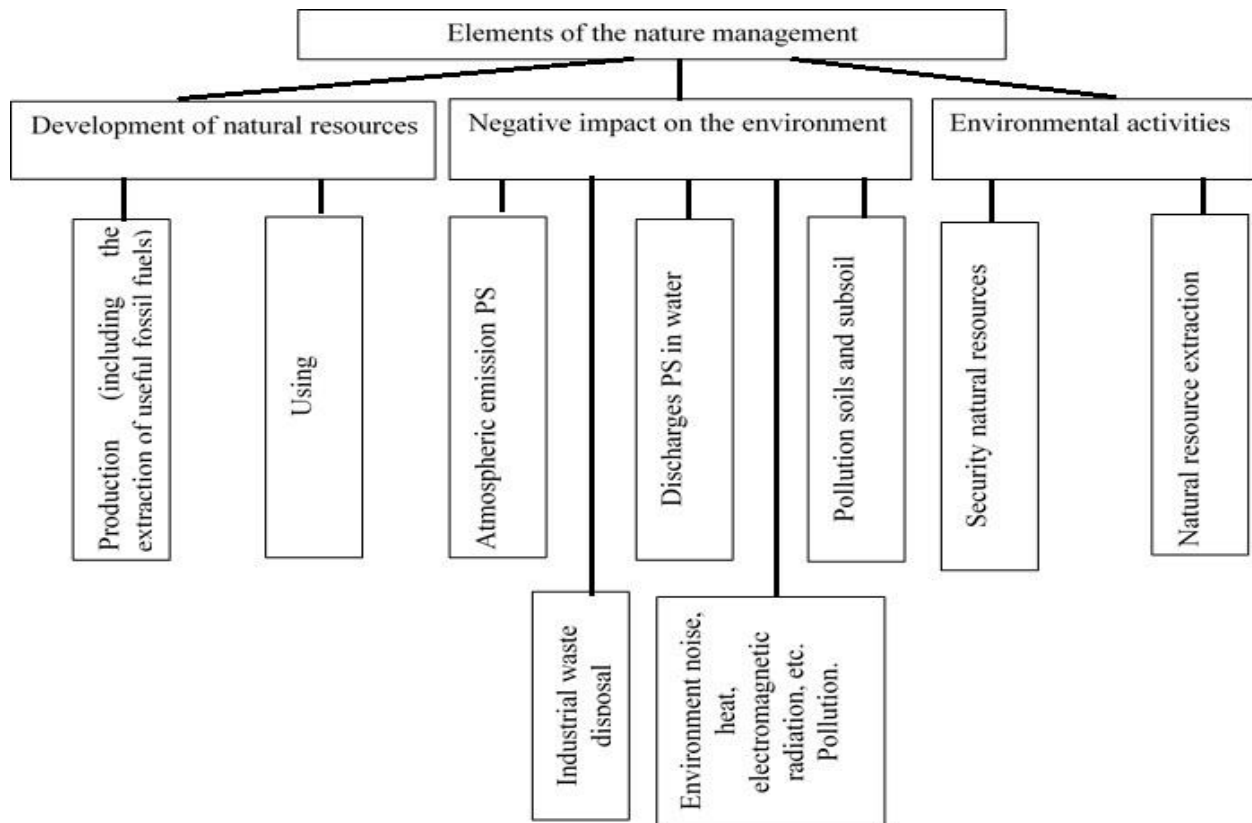


Figure 1: Elements of nature management by business entities

A convenient way to develop oil and gas industry enterprises and reduce their negative impact on the environment is to develop and apply resource-saving and environmentally friendly technologies. At present, it is impossible to completely eliminate production. However, progress in this area in the future will depend on the organization of production to the maximum extent possible to "environmentally friendly processes". This will allow Azerbaijan to fulfill its international obligations under the Kyoto Protocol to reduce emissions of harmful substances, as well as greenhouse gases. The goal of environmental policy in oil and gas production is to ensure that anthropogenic loads do not have a negative impact on the environment and are safe for the population. Research shows that the biggest threats to the environment posed by the production activities of the oil and gas industry can be considered as follows:

- Violation of natural ecosystems as a result of drilling wells, laying mining and main oil and gas pipelines;
- methane losses at all stages of the production process;
- Emission of harmful substances during the production and processing of hydrogen sulfide gases in oil and gas fields;
- Possible disturbances of the geo-ecological and geo-dynamic balance of subsoil resources as a result of the development of large oil and gas fields [6].

### **3. SOCAR PRIORITIES FOR ENVIRONMENTAL PROTECTION**

In accordance with the industrial environmental program, SOCAR has identified the following priorities in the field of environmental protection and efficient using of natural resources [2]:

- preservation of the natural environment in the area of location of oil and gas industry facilities, efficient use of natural resources;
- ensuring industrial and environmental safety of construction and operation of oil and gas production, as well as refining, transportation and storage facilities.

It is important to increase the efficiency of existing oil and gas transport systems to solve environmental problems, reduce their emissions and prevent accidents during reconstruction and technical equipment, as well as the timely detection and elimination of defects. It is important to conduct regular in-pipeline diagnostics of oil and gas pipelines. One of the SOCAR priorities is the application of environmentally friendly equipment and materials in the program for the protection of the geological environment and surface ecosystems during the exploration and development of oil and gas fields, as well as the geography of all major onshore and offshore fields. It is planned to conduct wet monitoring, which will reduce the risk of accidents due to the fact that the pipelines fall into geodynamical active zones. The creation of conditions for environmentally safe operation of projects in SOCAR is ensured by the implementation of the following measures:

- development and application of safe technologies and technical means for exploration, production, transportation, storage, use and processing of hydrocarbon raw materials and their processed products;
- taking into account regional natural and climatic features at all stages of decision-making on the construction of new projects and their design, application of modern scientific methods of assessing the expected impact on the environment;
- reduction of technogenic burden on the environment from re-launched projects before design and during the preparation of the project documents and by conducting its internal ecological expertise.

### **4. MEASURES TO MINIMIZE ENVIRONMENTAL DAMAGES**

In order to minimize the damages to the environment caused by economic activity, SOCAR must ensure the following [3]:

- to use efficient technologies and technical means that are environmentally friendly in all projects;
- comprehensive restoration of natural systems in the areas where decommissioned production facilities are located;
- timely implementation of technical diagnostics, maintenance and repair work;
- Development, application, operation, and maintenance of environmental monitoring systems of SOCAR's economic entities in the production and ecological monitoring systems of the environment in the regions where these projects are located.

The main elements of environmental monitoring in production are the verification of compliance with the requirements of nature protection legislation and the systematic measurement of the parameters that characterize the environmental impact of production facilities, which can lead to violations of established standards. This element includes timely their detection and elimination, as well as control of the efficient operation of oil and gas and wastewater treatment plants [4].



## 5. KEY ELEMENTS OF ECOLOGICAL NORMALIZATION SYSTEM

One of the important components of national economy adaptation to the ecological requirements in the market relations conditions is the creation of a normalization system of nature use, i.e. environmental normalization, or rather, the definition of human impact on the environment [5]. The main elements of the standardization system consist four normative groups (Figure 2):

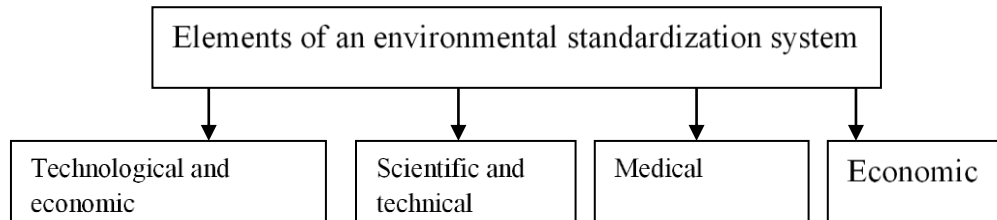


Figure 2: The main elements of the standardization system consist four normative groups

1. Technological and economic elements are defined in relation to the operational characteristics of means and objects of labor, which determine the ability of man to ensure the implementation of certain limits of impact on the environment.
2. Scientific and technical elements - contain standards that determine the ability of technical means to control compliance with the limits of environmental impact on all parameters.
3. Medical elements - are the elements that determine the highest level of danger to the environment and human health from the harmful effects of economic entities (sanitary-hygienic standards - quality indicators of the environment in terms of human health; maximum allowable concentrations, levels of radiation exposure; scale of sanitary protection zones);
4. To the allocation of funds from various sources to economic elements belong- renewal of fixed assets to the EPA; implementation of targeted economic projects; environmental cost management; application of other advanced methods of environmental management, etc.

## 6. REDUCTION OF HARMFUL EFFECTS ON THE ENVIRONMENT

Each business entity should develop a system of technical, technological, anthropogenic and financial-economic measures aimed at reducing the negative impact on the environment as part of the formation of its own long-term development strategy (Figure 3).

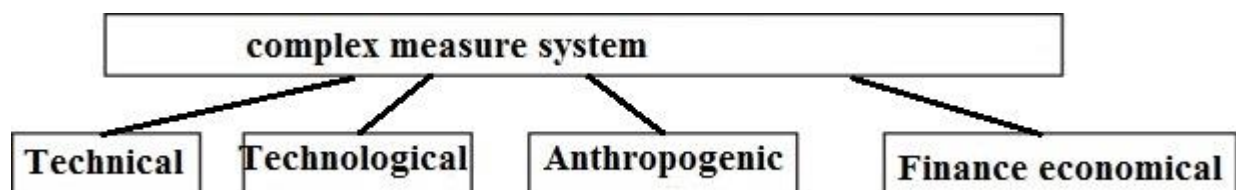


Figure 3: System of measures to reduce harmful effects on the environment

Technical measures - removal of equipment that does not meet environmental safety requirements from production activities; Rehabilitation of equipment to improve both its production and environmental characteristics (waste reduction, especially high toxicity and radioactive waste). Technological measures - processing of environmentally hazardous raw materials and minimization of the number of stages of such processing; application of low-waste and non-waste technologies, measures aimed at gradually reducing the share of high-quality materials in the technological stage without compromising the level of product competitiveness.

Anthropogenic measures - this is to increase the level of qualification and knowledge in the field of nature protection of the personnel working in environmentally harmful industries and areas where technological accidents are likely to occur; creation of highly effective and appropriate internal job descriptions that ensure effective and timely action of staff when working with environmentally hazardous raw materials and supplies; financial incentives for staff to work safely and to implement measures to prevent waste reduction [7]. Financial and economic measures - collection of personal funds and involvement of the funds of the created ecological funds in the implementation of nature protection projects; proper accounting of environmental costs; calculation of current and strategic efficiency of the enterprise's expenditures on environmental protection measures, participation in the environmental insurance system. In general, the evaluation of the effectiveness of the implementation of environmental policy for the enterprise through the accounting of direct and indirect environmental costs can be determined using the following mathematical formula:

$$EEFF = \frac{K_1 + K_2 + K_3 + K_4}{(BX_1 + BX_0) + (DX_1 - DX_0) \times G_1}$$

Here:

- EFF - efficiency coefficient of environmental policy implementation (in shares);
- $K_1, K_2, K_3, K_4$  - amounts of profit (income) obtained from implementation of nature protection measures in the reporting period (as a result of implementation in the reporting period), (manat);
- $BX_1$  and  $BX_0$  - the total amount of direct environmental costs of the enterprise during the reporting period and the previous period, respectively, (manat);  $DX_1$  and  $DX_0$  - the total amount of indirect costs of nature protection in the reporting period and the previous period, (manat);
- $G_1 - DX$  is the average percentage (income) of the total environmental impact from the costs incurred.

It can be concluded that in a similar way, the economic efficiency of environmental costs incurred on separate productions, workshops, investment projects can be calculated, as well as on separate types and groups of costs. In this case, all the formulas that make it up must be aligned with the total ratios  $K_1 - K_2, BX_1$  and  $BX_0$  for the specific gravity of the cost of each production (cost group). The  $G_1$  ratio should be determined either specifically for each cost type or on average for separate productions, workshops or cost groups.

## 7. ECOLOGICAL INFORMATION SYSTEM

The information system currently being created and improved should enable the solution of the following different levels of issues [5].

### 1. Low level (object):

- Reconciliation of the real impact on the components of the natural environment with the allowable impact and background indicators (general indicators);
- Carrying out current calculations (waste dispersal, water mixing, etc.), preparation of statistical reporting forms.

### 2. Intermediate level (enterprise):

- Analysis of data on the permissible level of pollution of the components of the environment, assessment of the degradation of the components of the environment in the impact zones of all facilities of the enterprises;

- assessment of the level of payment for pollution of natural components and use of nature (allowable, to be reduced, etc. level of payment);
  - Determining the need and direction of work to reduce the level of impact to improve environmental conditions (reduction of payment rates);
  - planning of maximum permissible levels of waste, environmental protection and nature management measures;
  - reporting documents, payment calculations.
3. High level (science, new equipment and technology, environmental management, environmental and analytical center of the oil and gas industry):
- collection, processing and storage of information;
  - identification of development dynamics and trends of the ecological situation, study of the interrelationships and possible causes of this or that change in the situation;
  - Providing SOCAR management with operational and accurate environmental information required for decision-making;
  - preparation of proposals for making scientifically sound decisions on efficient use of nature, development and implementation of nature protection measures, operational management of the environmental situation (financing of works, granting of loans, technical support).

## 8. CONCLUSION

Thus, the evidence provides that a system of environmentally friendly organizational, technical and financial measures has been developed and implemented in the oil and gas industry, which will reduce emissions and wastewater into the atmosphere. These measures are based on information obtained as a result of environmental monitoring of production and are implemented due to the positive dynamics of capital investments in SOCAR's nature protection activities. The application of these methods, as well as the proper implementation of environmental and economic policy, is impossible without environmental monitoring and the creation of a database of environmental elements. For this reason, it is important to create a low, medium and high-level environmental information system for industries in the SOCAR to reflect the results of measures based on ISO 14000. The main task to ensure environmental protection is to improve the existing financial and credit mechanism for the EPA. First of all, a system of innovative environmental funds should be developed in our country, preferential loans should be used, and concessional funds of World and European banks should be widely used for EPA. We believe that the recommendations to improve the environmental security mechanism in our country is very important in its essence and practical significance. Therefore, the use of these proposals in the process of financing and implementing relevant investment projects under the EPC, as well as relevant state and sectoral programs, can provide high economic and social benefits.

## LITERATURE:

1. Azərbaycan Respublikasının “Ətraf mühitin mühafizəsi haqqında” Qanunu. Bakı 1999-cu il.
2. Azərbaycan Respublikası Dövlət Neft Şirkəti “Ekoloji siyasət”. Bakı 2008 ci il.
3. Davamlı inkişaf üzrə illik hesabat, SOCAR, 2018-ci il
4. T.H.Əliyev. “Ekoloji münücmənt”, Bakı, 2006, 454 s.
5. M.Əliyev, A.G.Hüseynov və b., “Neft-qaz sənayesinin iqtisadiyyatı və idarə edilməsi”, Bakı, 2016, 553 s.
6. A.G.Hüseynov Azərbaycanca ekoloji təhlükəsizliyin təşkilati-iqtisadi mexanizmlərinin təkmilləşdirilməsi yolları, Bakı 2010-cu il

7. İsmayılov F.A. Neftin ilkin emalı prosesində mühitin təhlükəsizliyinin təmin olunması üsulları və vasitələri//Bakı, ADNA, Azərbaycan Ali Texniki məktəblərin Xəbərləri,2007, № 3 (49) s. 72-76
8. Бабаев А.М. и др. Малоотходная технология комбинированной обработки воды. //Известия Высших Технических Учебных Заведений Азербайджана, 2003, № 4(26), с.63-67.
9. Мухтаров Н.Н. və b. Tükənməz neft yataqlarının açıq üsulla işlənməsinin prespektivliyi və ekoloji aspektləri //AATMX, 2004, № 6(34), s. 88-92.
10. Алиев Т.Н. Влияние нефтегазовой промышленности Азербайджана на экологическую обстановку и пути ее оздоровления. Инновационные процессы в сообществе МЦНТИ. Экологические проблемы и пути их решения. - М.:МЦНТИ, 2009, с.5-16.
11. Лукьянчиков Н.Н, Черников А.Н. “Экономическая оценка экологического ущерба– основа экономического механизма охраны окружающей среды”, Москва: НИА, Природа, 2004, 204 с
12. [www.eco.gov.az](http://www.eco.gov.az)

## CURRENT SITUATION AND OPPORTUNITIES FOR INCREASING GRAPES AND WINE EXPORTS IN AZERBAIJAN

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### **ABSTRACT**

*Azerbaijan's rich natural resources create opportunities for economic diversification. Revenues from oil and gas are used to develop the non-oil sector. One of the promising directions of the export of non-oil products is export of grapes and wine. Although Azerbaijan has great potential for increasing exports of grapes and especially wine, there were certain problems with its implementation in the early years of independence. As a result, grapes production declined by 15.6 times in 2000 compared to 1990. The purpose of this study is to analyze the current state of the export of grapes and wine, identify opportunities for increasing their exports. The analysis shows that over the past 5 years, activities aimed at increasing the production of grapes and wine exports have been deepened, a state program has been adopted, and the goal of the 5-fold increase in wine exports by 2025 has been set. The realization of this goal conditions the export of grape wine to exceed USD 30 mln in value, and the country's wine production to increase by three times. The study has revealed that there is a potential to increase exports of grapes and wine in the coming years. It is proposed to develop and adopt a unified State Program for Development of Viticulture and Winemaking. Adoption of a unified State Program in this area will lead to more flexible and more targeted implementation of activities aimed at the development of the sector and timely achievement of the goals set.*

**Keywords:** *agriculture, competitiveness, export, grapes, import, wine*

### **1. INTRODUCTION**

Historically, grape products and wine production has provided a major contribution to the development of the agrarian sector in Azerbaijan and it has been one of the leading fields. The favorable soil and climatic conditions of our country, existing workforce, the ability to meet the needs of the processing industrial enterprises for raw material at the expense of local production, and the availability of export markets indicate the great export potential of this sector. In the 80s of the last century, there were over 151,000 workers and specialists in the system of 210 wine factories and wineries in the country, and 56 brands of wines, 10 brands of cognac, 4 brands of champagne and other products (13). However, under anti-alcohol campaign led by the former Soviet Union, starting in the mid-80s, vineyards established in Azerbaijan at the expense of great labor were destroyed and the economy was severely damaged, thus, people were deprived of income source (14). And also, in the early years of independence, decline in this sector continued because of the economic problems in the country and vine-growing and winemaking in Azerbaijan could not restore its former glory. One of the main challenges is the transition of vine-growing and winemaking to a new stage of development in the country. According to the State Program (13), it is targeted to increase wine exports by 5 times by 2025 in the country, using the production potential of wineries at the maximum level. This article just analyzes the current state of grape and wine production and its export, and evaluates the political impact pursued in this field. And also, relevant suggestions will also be provided to increase the export of grape wine and diversify its markets.

## 2. CURRENT SITUATION IN VINE-GROWING AND WINEMAKING IN AZERBAIJAN

Vine - growing is one of the traditional manufacturing areas in Azerbaijan. However, the rapid development of this area occurred in the 1970s under the leadership of great leader Heydar Aliyev. So, while in 1970, the vineyards were 121.6 thousand hectares, the grape production was 351.7 thousand tons, and the productivity was 46.8 quintals, but in 1984, vineyards increased 2,3 times, grape harvesting 6 times and productivity more than 2 times and reached the highest level of 99.2 quintals as a result of attention and care for the sector (14). However, under anti-alcohol campaign led by the former Soviet Union, starting in the mid-1980s, vineyards in Azerbaijan were destroyed and the economy was severely damaged. Then, as a result of Armenian aggression against our lands since 1988, 43 thousand hectares of vineyards have been occupied. During the first years of independence, the decline in this sector continued, and in 2003 grape planting area in Azerbaijan decreased to 7,7 thousand hectares. Since 2005, the decline observed in vine - growing has been prevented, and gradually new vineyards have been established and intensive cultivation techniques have been applied in the development of vine – growing.

Years	Cultivated area	of which at grape-bearing age	Gross harvest	Yield from 1 ha
	thsd.ha		thsd.tons	100 kg
<b>1950</b>	22,5	18,9	81,1	42,9
<b>1960</b>	56,1	26,1	91,4	34,7
<b>1970</b>	121,6	70,4	351,7	46,8
<b>1980</b>	263,0	150,9	1481,3	95,3
<b>1990</b>	181,4	156,1	1196,4	76,5
<b>2000</b>	14,2	13,9	76,9	35,8
<b>2010</b>	15,4	11,2	129,5	74,7
<b>2015</b>	16,1	13,5	157,1	86,6
<b>2016</b>	16,0	13,9	136,5	74,4
<b>2017</b>	16,1	14,1	152,8	84,1
<b>2018</b>	16,1	14,4	167,6	92,8

*Table 1: Grape: planting areas, total harvest and productivity for all economic categories (Source: Agriculture of Azerbaijan. Statistical Bulletin, 2019, p.90)*

As can be seen from the table, in 2016, 136,5 thousand tons were supplied, and in 2017 this figure was 152.8 thousand tons. In 2018, grape planting area in Azerbaijan was 16.1 thousand hectares and the production output was 167.6 thousand tons. In comparison with 2017, grape production increased by 10%. In the coming years, measures should be intensified to improve the economic efficiency of grape production. In this case, it is important to select the most productive grape varieties suitable for soil-climatic conditions. At present, these issues are almost not considered in the current vineyards. For example, in Tovuz, grape varieties are placed in a mixed form in areas. It would be advisable to take into account climate change and the needs of the population and processing enterprises in the selection of technical and table grapes (3). Some of the grapes produced in our country are directed towards food production. As can be seen from Table 2, the volume of grape directed to food production has increased by 28 percent over the past 10 years.

*Table following on the next page*

	2009	2010	2013	2014	2015	2016	2017	2018
<b>Resources</b>								
Balance at the beginning of the year	1 016	1 110	1 556	1 522	1 458	1 644	1 525	1 610
Production	129 159	129 536	148 535	147 701	157 076	136 499	152 843	167 591
Import	13 478	14 764	9 385	3 643	13 642	20 623	13 259	16 900
Total reserves	143 653	145 410	159 476	152 866	172 176	158 766	167 627	186 101
<b>Using</b>								
For food production	60 000	60 734	63 890	62 900	70 846	65 328	68 974	76 575
Used as a food product (without processing)	80 177	76 871	89 543	84 864	94 079	84 465	91 028	100 547
Export	220	984	1 216	476	2 038	4 138	2 520	3 311
Losses	2 146	5 193	3 305	3 168	3 569	3 310	3 495	3 880
Balance at the end of the year	1 110	1 628	1 522	1 458	1 644	1 525	1 610	1 788
Total usage	143 653	145 410	159 476	152 866	172 176	158 766	167 627	186 101

*Table 2: Grape resources and its uses, ton*

*(Source: State Statistical Committee of the Republic of Azerbaijan, 2019)*

As can be seen from the analysis of table data, in 2018, the volume of grape used as food product in the country increased by 25 percent compared to 2009. It is also clear from the analysis that while in 2018, 16,9 thousand ton of grapes were imported, but only 3,3 thousand ton of grapes were exported. That's, grape import was 5 times more than grape export, and mainly dried grapes were imported. In order to improve the supply of country population and the processing industry with local grape, it is important to stimulate this sector. In this regard, according to the decision of the Council of Agricultural Subsidies, it is a positive step to adopt decision on granting subsidies in the amount of 600manat per hectare within the first 4 years since the year when the vineyard was planted and 240 manat for next years after 4 years since 2020. Vineyard producers are also supported at the expense of the state budget. It should be noted that great attention is paid to the increase of grape and wine production at the government level. On April 17, 2017, at the national meeting of non-oil exporters in Yevlakh, the President of the Republic of Azerbaijan gave relevant instructions saying: "We have favorable natural conditions for vine - growing. Now we have to restore and we restore vine - growing. New vineyards should be built and our wineries should work with their fullest potential. According to the information given to me, the production capacity of wineries is 100 million bottles in a year. However, we use about 20-30% of it. Therefore, the production of grape, including the production of technical grapes should be increased, our wineries should work at full capacity, and exports should increase dramatically" (1). As a result of reforms pursued in the agrarian sector starting from the second half of the 90s of the last century, all wine and primary wine processing, champagne and cognac factories were announced to be open for privatization and 53 joint stock companies were established within their base and the remaining 82 processing enterprises were privatized as small enterprises (14). However, not all of these businesses have been successfully operating after privatization.

For this, the President of the Republic of Azerbaijan touching upon this issue saying “Many factories have been built, but one of them works at 20 percent, some 50 percent and the other 30 percent. This is unbearable. Therefore, entrepreneurs have to take responsibility to work at full capacity. Or now they have built factories, but don’t use them”, increased the attention on the solution of the issue (6). This is just the result of the fact that in 2017, the production of grape wine amounted to 1,020,1 thousand decalitres and increased by 2.4% compared to 2016. In 2018, the production of grape wine increased by 49 percent and reached 1,500,3 thousand decalitres (18). However, there will be necessity to increase wine production up to 3 times until 2025. According to the state program (13), wine export is targeted to be reached from 375,000 decalitres in 2017 to 1875,000 decalitres by 2025. On the other hand, the rapid development of tourism in the country may also increase the demand for local wine, which in turn conditions an increase in domestic production.

### 3. ANALYSIS OF THE EXISTING CONDITIONS OF GRAPE AND WINE EXPORT

The natural and climatic conditions of Azerbaijan allow for the further development of vine - growing, and meeting the need of the population for high quality table grapes of different types and the needs of wineries and other processing enterprises for raw material through local production (14). The State also provides appropriate support for export growth. Grape products (table grape, raisins, bakmaz, juice and other foods consumed in natural or processed form) are exported from our country. According to 2018 statistics, fresh grape exports from Azerbaijan amounted to \$ 2.3 million.

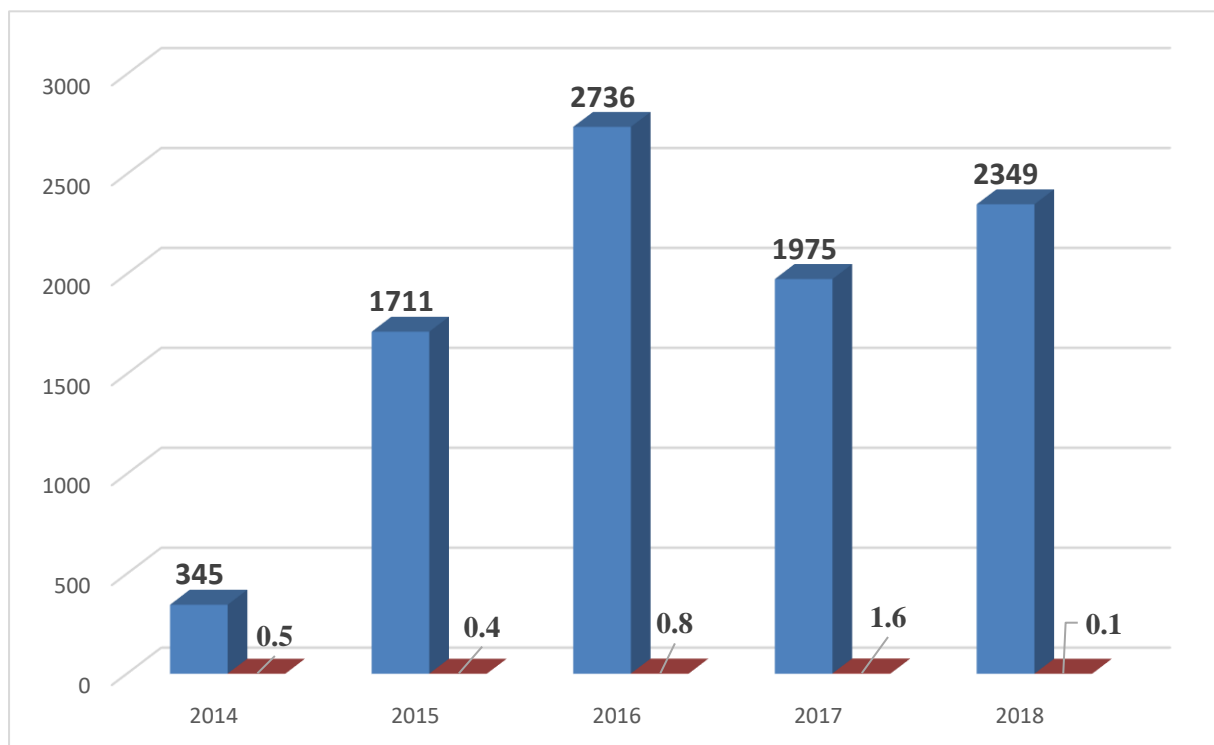


Figure 1: Fresh and dried grapes export in Azerbaijan, in thousand USD  
(Source: State Customs Committee of the Republic of Azerbaijan)

Fresh grapes were exported mainly to Russia, the United Arab Emirates and Kazakhstan. As can be seen from Figure 1, the export of dry grapes from our country is very low. It should be also noted that besides grapes, grape juice is also exported from Azerbaijan. However, its export value in 2018 was only \$ 179,000. The main value in export refers to natural grape wines (HS code 2204).



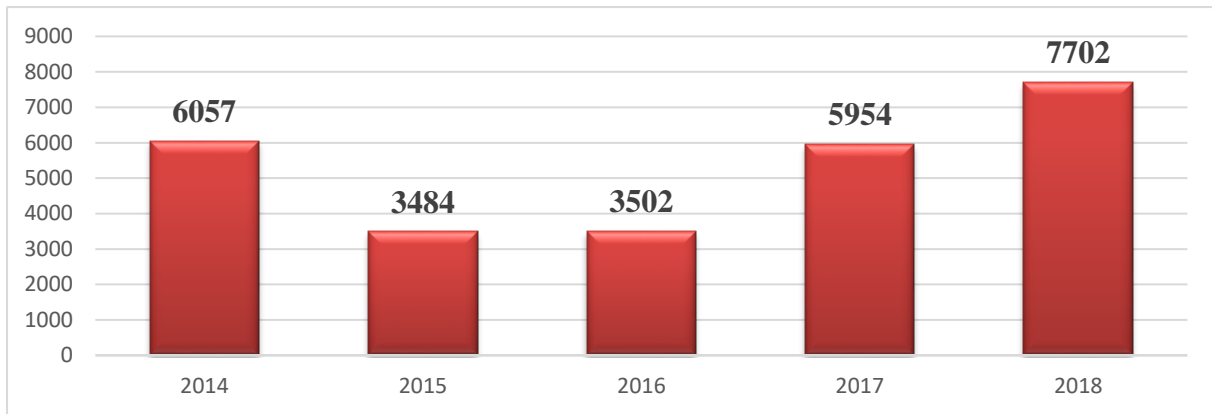


Figure 2: Export of natural grape juices from Azerbaijan, in thousand USD  
(Source: State Customs Committee of the Republic of Azerbaijan, 2019)

As can be seen from Figure 2, the export of natural grape juices increased 27 percent during the last 5 years. Main export country of Azerbaijan is the Russian Federation. In 2018, 83 percent of natural grape wines of Azerbaijan accounted for Russia. In addition, exports to China, Belarus, Kyrgyzstan, Ukraine, Georgia and other countries have also been implemented.

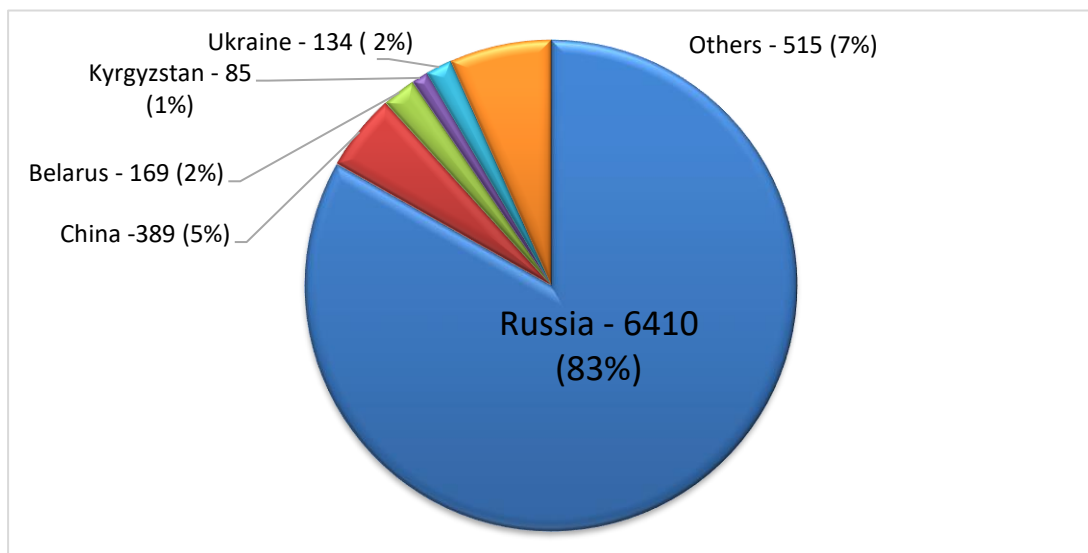


Figure 3: Main export countries of natural grape wines from Azerbaijan, in thousand USD  
(Source: International Trade Centre)

It should be mentioned that Azerbaijan targets to increase wine exports of the country by 5 times by 2025 using the production potential of wineries at the maximum level. However, it is also important to be ready for intense competition to increase exports. Currently, exports of wine and wine products around the world are approximately 1 billion decalitres. Spain, Italy, France, Chile, Australia, CAR, USA, Germany, Portugal, Argentina, New Zealand and Moldova are considered to be the most exporting countries. Azerbaijan can compete with these countries by exporting competitive wines.

#### 4. ROLE OF STATE SUPPORT IN INCREASING PRODUCTION AND EXPORT OF VINE - GROWING AND WINEMAKING PRODUCTS

Significant works have been done in the development of vine - growing in our country in recent years, the state has granted more than 40 million concessional loans to the development of grape production and processing, and significant progress has achieved in the assortment and quality

of products. At the same time, wine makers could also benefit from the promotional activities of the brand “Made in Azerbaijan”. Azerbaijan Wine Manufacturers and Exporters Association was established to coordinate activities between manufacturers and exporters of wine and wine products. The winemakers have taken part in the most prestigious exhibitions on winemaking in the world with state support. The exporter of natural grape wine and grape juice is paid an export incentive of up to 6% of the customs value. In 2018, entrepreneurs that export grape wines and other alcoholic beverages were paid an export incentive of 826,000 manat (9; 2). On the other hand, the requirement for special permit (license) for the production, import and sale of wine and wine products has been abolished in order to create a favorable market in the field of winemaking and stimulate entrepreneurship in this area in the country. The analysis shows that the volume of production is much less than the actual potential of wineries operating in the country. The current situation is firstly affected by the high cost of the grape, which is the main raw material of wine. In recent years, problems related to the quality of wine products of Azerbaijan also play a role in limiting its export. It should be mentioned that one of the directions of state policy in the field of vine - growing and winemaking in Azerbaijan is the introduction of new techniques and modern technology to improve the quality of competitive grapes and wine products which were presented to consumer market or exported, increasing production and export, and protecting the domestic market from unfair competition. There is no restriction on the export of wine products by the state (20). The Republic of Azerbaijan joined the International Grape and Wine Organization (19) and thus, provided additional opportunities for entrepreneurs operating in this sector. It is expected that in the coming years the policy of encouraging the export of grape and wine products will continue. Especially, it may focus on appropriate stimulus measures for the supply, acceptance, storage, processing, sale and export of grape products manufactured. Also, relevant domestic and foreign events will continue to be held to promote Azerbaijani wines. An example of this is the Azerbaijan Grape and Wine Festival held in August 2019 in Meysari village, Shamakhi (8). In addition, it has already been achieved to establish 3 “Azerbaijan Wine Houses” for the promotion of the brand “Made in Azerbaijan”, and also further promotion and sale of wine and other alcoholic beverages of Azerbaijan in the world market by Export and Investment Promotion Foundation in Azerbaijan (2). Thanks to these measures, it was possible for the export of natural grape wines from Azerbaijan to reach \$ 30 million by 2025. Finally, we should also note that when analyzing the data from the internet portal Azexport.az, a common database of goods produced in Azerbaijan, it becomes clear that one of the most popular products for orders is Azerbaijani wines (5). This fact again shows that a significant increase in this sector can be achieved if potential and appropriate measures are taken to increase the export of vine-growing and wine products from our country.

## 5. CONCLUSION

As a result of our research, it became clear that in the coming years, there is a potential to increase the export of grape and wine. As, comprehensive (15; 11; 12; 13; 14) activities have been launched and continue within the state programs and strategic roadmap to increase grape and wine production in the republic. At present, the development of vine - growing is carried out in Ganja-Gazakh economic region, mainly in Salyan, Aran economic region, in irrigated lands in Jalilabad, Lankaran economic district, in dry farming lands in Shamakhi, Agsu and Ismayilli regions, Mountainous Shirvan and new vineyards are established (17). This indicates that in the coming years, there will be an increase in grape and wine production and significant export potential will be formed in the country. We can say that according to the State Program, the export of wine is expected to reach 1,875,000 decalitres by 2025. On the other hand, the rapid development of tourism in the country may also increase the demand for local wine, which in turn conditions an increase in the domestic production.

One of the main problems facing us regarding this issue is the dependence of our grape and wine products on Russian markets. Therefore, it is necessary to accelerate efforts to diversify export, and take measures for it to gain more active role in the Chinese market. On the other hand, it is necessary to address the problems of grape and wine production, support the capacity of the Wine Manufacturers and Exporters Association, and organize the production of competitive wine products. If the above mentioned are realized, the export of natural grape wines can reach \$ 30 million by 2025. And this, in its turn, will contribute to the realization of the goal of increasing exports in the non-oil sector on the strategic road map (15). Also, our study shows that the execution term of the State Program for the development of vine-growing in the Republic of Azerbaijan ends in 2020. However, the implementation of the State Program for the Development of Winemaking in the Republic of Azerbaijan will continue until 2025. In our opinion, separate state programs on the development of vine-growing and winemaking lead fragmentation in the field and affects coordination. As the conclusion of our research, we propose to develop and adopt single State Program for the development of vine - growing and winemaking. Adoption of single State Program will lead measures aimed to the development of this sector to be implemented in a more flexible and more targeted manner and achieve targets set forth on time.

#### LITERATURE:

1. *A meeting of non-oil exporters was held in Yevlakh under the chairmanship of Ilham Aliyev.* (2017). Retrieved 05.03.2020 from <https://president.az/articles/23369>
2. *Azpromo Annual Report.* (2018). Retrieved 15.02.2020 from <http://www.azpromo.az/uploads/files/pages/c187f911441794930c9e582b14f9c9b3.pdf>
3. Bayramov, V.M. (2018). *Priorities of protection of the vineyard and wine products market from foreign competition.* Abstract of thesis presented for the degree of Doctor of Philosophy in Economics. Baku, 22 p.
4. *Center for Agrarian Studies.* Retrieved 18.02.2020 from <http://agrodata.az>
5. *Center of Analysis and Communication of Economic Reforms.* Retrieved 18.02.2020 from [www.azexport.az](http://www.azexport.az)
6. *Closing speech by Ilham Aliyev at the conference dedicated to the results of the fourth year of implementation of the State Program on Socio-Economic Development of Regions for 2014-2018.* (2018). Retrieved 20.02.2020 from <https://president.az/articles/26866>
7. *International Trade Centre.* Retrieved 17.02.2020 from [www.trademap.org](http://www.trademap.org)
8. *Ministry of Agriculture of the Republic of Azerbaijan.* Retrieved 28.02.2020 from <http://www.agro.gov.az/az/>
9. *Ministry of Economy of the Republic of Azerbaijan.* Retrieved 28.02.2020 from <http://economy.gov.az>
10. *State Customs Committee of the Republic of Azerbaijan.* Retrieved 23.02.2020 from <http://customs.gov.az/en/>
11. *State program of socio-economic development of regions of the Republic of Azerbaijan for 2014-2018.* (2014). Retrieved 27.02.2020 from <http://www.e-qanun.az/framework/27284>
12. *State program of socio-economic development of the regions of the Republic of Azerbaijan in 2019-2023* (2019). Retrieved 29.02.2020 from <http://www.e-qanun.az/framework/41320>
13. *State Program on Development of Wine in the Republic of Azerbaijan for 2018-2025.* (2018). Retrieved 22.02.2020 from <http://www.e-qanun.az/framework/38684>
14. *State Program on Vine Development in the Republic of Azerbaijan for 2012-2020.* (2011). Retrieved 22.02.2020 from <http://e-qanun.az/framework/22694>
15. *Strategic Road Map for the Production and Processing of Agricultural Products in the Republic of Azerbaijan* (2016). Retrieved 25.02.2020 from <http://www.president.az/articles/22110>

16. State Statistical Committee of the Republic of Azerbaijan. (2019). *Agriculture of Azerbaijan*. Statistical Bulletin. Baku, 644 p.
17. State Statistical Committee of the Republic of Azerbaijan. (2019). *Social and Economic Development of Regions (2014-2018)*. Statistical summary. Baku, 676 p.
18. *State Statistical Committee of the Republic of Azerbaijan*. Retrieved 18.02.2020 from <https://www.stat.gov.az>
19. The Law of the Republic of Azerbaijan. (2014). *On Accession to the Agreement on Establishment of the International Grape and Wine Organization*. Retrieved 02.03.2020 from <http://www.e-qanun.az/framework/27477>
20. The Law of the Republic of Azerbaijan. (2001). *On viticulture and winemaking*. Retrieved 25.02.2020 from <http://e-qanun.az/framework/1021>

## CRIMES AGAINST LIFE AND HEALTH IN CRIMINAL LEGISLATION OF THE REPUBLIC OF AZERBAIJAN

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### ABSTRACT

*The article states that crimes against life and health are included in Chapter 5 of the Penal Code of the Azerbaijan Public Council dated on December 9, 1922, Chapter 6 of the Criminal Code of Azerbaijani SSR of December 3, 1927, Chapter 3 of the Criminal Code Azerbaijani SSR of December 8, 1960. For the first time a separate chapter dedicated on crimes against life and health envisaged by the Criminal Code that is in force. According to the Criminal Code the following crimes are considered crimes against life and health: deliberate murder; deliberate murder by mother of a newborn child; deliberate murder committed in a condition of suddenly arisen strong emotional excitement; deliberate murder, committed at excess of limits necessary for defense or at excess of measures, necessary for detention of a person who have committed a crime; murder on imprudence; bringing a person to suicide; deliberate causing of serious harm to health; deliberate causing of minor serious harm to health; deliberate causing of less serious harm to health; deliberate causing of serious or minor serious harm to health in a condition of suddenly arisen strong emotional excitement; causing of serious harm to health at excess of limits necessary for defense or causing of serious or minor serious harm to health at excess of measures necessary for detention of person, which committed a crime; causing of minor serious or serious harm to health on imprudence; torture; threat to murder or causing of serious harm to health; Euthanasia; illegal artificial fertilization and implantation of embryos, medical sterilization; sale - purchase and compulsion to withdrawal for transplantation of body organs or tissues of a person; illegal implementation of biomedical researches or application of the forbidden ways of diagnostics and treatment, and also medical products; infection with Venereal Disease; infection with HIV of a person; illegal of abortion ; not rendering medical aid to the patient; leaving in danger; to force the use of doping substances and or doping methods.*

**Keywords:** *crime, article, law, legislation, health*

### 1. INTRODUCTION

It is well known that events occurs on the ground of such principles as history, development and succession. Samandarov F.Y. states that the improvement of the existing criminal legislation should not only be based on the current state of the struggle against crime, its future perspectives, but also the historical development of criminal law and its succession should be taken into consideration. Unfortunately, sometimes we forget the principle of succession, relation between the law in force and its historical past. Lack of knowledge of the past not only undermines the perception of the present reality, but also undermines the credibility of the actions that will be taken. The present level of human culture takes its source from material, cultural, moral and legal values of the past times that gone away from the historical scene. It should not be forgotten. The legal literature supporting the opinion of Samandarov F.Y. shows that people who forget their past have no future, whetehr his past subject of proudness or vice versa. People and nations need to know their past so that they can build their present and future by learning from their past. It is impossible to erase the past, we must enjoy the things that are acceptable and follow them, correct their defects, reject the useless and harmful ones. It is not difficult to comprehend the relevance of this issue, especially when the past reflects on the

entire historical-socio-political period, the provisions of the criminal (penal) code, which is the main normative document of criminal and criminal policies of that period [2, p. 4]. Consider the views of the French philosopher Auguste Comte, author of Positive Philosophy, about the importance of learning the history of the development of any concept: "Each concept can only be properly understood if its history is known" [7, p. 10].

## 2. RESEARCH

Following the aforementioned ideas, let's take a look at the history of the development of criminal legislation regarding life and health in Azerbaijan. Investigating the history of Azerbaijan's criminal legislation in relation to this crime is important both in terms of studying the origin and formulation of statutory acts to combat this crime, as well as to reveal stable trends in the improvement and evolution of legislation. After the establishment of the Soviet power in Azerbaijan, according to Article 6 of the Penal Code of the Azerbaijan Public Council Republic, adopted by the 2nd session of the Central Executive Committee of Azerbaijan on December 9, 1922 and entered into force on February 1, 1923, "Any socially dangerous act or inaction threatening the foundations of the Soviet system and the rule of law set by the peasant government for the transition to communism was a crime" [5, p. 509]. Article 148 of this Code is dedicated to the crime driving to suicide. The article stated: "Encouraging or assisting an underaged person or a person who is unable to understand the nature and nature of his or her actions or directing his actions to commit suicide, and at the result of these actions, if that person commits suicide or attempted suicide – shall be subject to punishment by imprisonment up to three years" (This article is stated in Chapter 5 of the Code, "Life, Health, and Crimes Against Personal Identity"). It should be noted that the Criminal Code of the Azerbaijan SSR of December 3, 1927 was considered as the next stage in the development of Soviet criminal legislation and was in force until January 1, 1961. The new Criminal Code of the Azerbaijan SSR came into force on that date. The Law of the Supreme Soviet of the USSR of February 11, 1957 "On Transferring Empowerment of the Adoption of Legislation On the Establishment of Courts, the Adoption of Civil, Criminal and Procedural Codes to the Allied Republic", and the The Fundamental Principles of Judicial Structure of the USSR, Allied Republics and Autonomous Republics of December 25, 1958, played a great role in the process of adoption of new Criminal Code. In accordance with the Act of February 11, 1957, determining of the basics of criminal legislation was transferred to the jurisdiction of the legislature of the USSR, and the adoption of criminal codes was transferred to the competence of the Union republics legislature [6]. Approved by the Law of the Azerbaijani SSR dated December 8, 1960, which came into force on March 1, 1961, the Criminal Code of the Azerbaijan SSR consisted of 264 articles does not reflect crimes against life and health in separate chapter [8]. The mentioned crimes are reflected in the third chapter of the Code, "Crime against Personality" (Articles 94-130). The crimes against the individual included the following crimes: Deliberate murder in aggravated circumstances (Article 94); Deliberate murder (Article 95); Deliberate murder by a mother of a newborn child (Article 96); The deliberate murder committed in a condition of strong emotional excitement (Article 97); Deliberate murder, committed at excess of limits necessary for defense (Article 98); Murder on imprudence (Article 99); Driving a man to suicide (Article 100); Threat to murder (Article 101); Deliberate causing of serious harm to body (Article 102); Deliberate causing of serious harm to health or minor serious harm to body in a condition of strong emotional excitement (Article 103); Deliberate causing of serious harm to health or minor serious harm to body at excess of limits necessary for defense (Article 104); Deliberate causing of minor serious harm to body on impudence (Article 105); Deliberate causing of minor serious harm to body (Article 106 ); Deliberate causing of harm to body on impudence (Article 107); Battery and torture (Article 108); Rape (Article 109); Coercion of a woman to the sexual relations or to committing of other actions of sexual nature (Article 110);

Sexual relations with the person who has not reached of age 16 (Article 111); Depraving actions (Article 112); Buggery (Article 113); Infection of other person with venereal disease (Article 114); Illegal abortion (Article 115); Forcing a woman to do abortion (Article 116); Leaving in danger (Article 117); .Not rendering medical aid to the patient (Article 118); Not rendering by captain of a vessel the help to suffering from disaster on the sea (Article 119); Illegal imprisonment (Article 120); Slander (Article 121); Insult (Article 122); Deliberately refusing to pay alimony and taking care of children (Article 123); Deliberately refusing to support parents (Article 124); Abuse of trusteeship rights (Article 125); Kidnapping and Substitution of another's child (Article 126); Entering into marriage with minors (Article 127); To force woman into marriage or preventing her from getting married (Article 128); Bride kidnapping (Article 129); Bigamy or polygamy (Article 130). Let's consider deliberate murder in aggravated circumstances: Deliberate murder out of greed means; Deliberate murder committed from hooligan prompting; Deliberate murder of victims in connection with implementation of a given person of service activity or performance of public debt; Deliberate murder of two or more persons; Deliberate murder of women, which was obviously for guilty pregnant; Deliberate murder with special cruelty or in publicly dangers way. Except murder envisaged in the Articles of 96, 97, 98 of the Criminal Code murder with the purpose to hide other crime or to facilitate its commitment, as well as connected with rape; murder by particularly dangerous recedivist or murder by the person who earlier has committed deliberate murder, were crimes against life and health and were considered deliberate murder in aggravated circumstances. The person who committed one or one of these crimes was punished by imprisonment from eight up to fifteen years or by death penalty. The new Criminal Code of the Republic of Azerbaijan, effective from September 1, 2000, contains a separate chapter (Chapter 18) to crimes against life and health [4]. According to the Article 14 titled "Concept of the Crime and classification of Crime Crime" of the Criminal Code of the Republic of Azerbaijan crime shall be admitted as a socially dangerous action (action or inaction), forbidden by the present Code, under threat of punishment on guilty. Actions (action or inactivity), though it is formally containing attributes of any action (action or inaction), provided by the criminal law, but by virtue of insignificance not representing public danger, and shall not cause harm to a person, to a society or the state, shall not be considered as a crime. In accordance with the legislation, the laws establishing criminal liability and providing punishment for the perpetrator can be applied only after being included into the Criminal Code. According to the Criminal Code dated on September 1, 2000 the following crimes are considered crimes against life and health: Deliberate murder (Article 120); Deliberate murder by mother of a newborn child (Article 121); Deliberate murder committed in a condition of suddenly arisen strong emotional excitement (Article 122); Deliberate murder, committed at excess of limits necessary for defense or at excess of measures, necessary for detention of a person who have committed a crime (Article 123); Murder on imprudence (Article 124); Bringing a person to suicide (Article 125); Deliberate causing of serious harm to health (Article 126); Deliberate causing of minor serious harm to health (Article 127); Deliberate causing of less serious harm to health (Article 128); Deliberate causing of serious or minor serious harm to health in a condition of suddenly arisen strong emotional excitement (Article 129); Causing of serious harm to health at excess of limits necessary for defense or causing of serious or minor serious harm to health at excess of measures necessary for detention of person, which committed a crime (Article 130); Causing of minor serious or serious harm to health on imprudence (Article 131); Torture (Article 133); Threat to murder or causing of serious harm to health (Article 134); Euthanasia (Article 135); Illegal artificial fertilization and implantation of embryos, medical sterilization (Article 136); Sale - purchase and compulsion to withdrawal for transplantation of body organs or tissues of a person (Article 137); Illegal implementation of biomedical researches or application of the forbidden ways of diagnostics and treatment, and also medical products (Article 138); Infection with Venereal

Disease (Article 139); Infection with HIV of a person (Article 140); Illegal abortion (Article 141); Not rendering medical aid to the patient (Article 142); Leaving in danger (Article 143); To force the use of doping substances and or doping methods (Article 143.1). As can be seen, article 24 (twenty-four) of the new Criminal Code of the Republic of Azerbaijan deals with crimes against life and health. Let's take a look at the crime of deliberately causing serious harm to health, which is one of the crimes against life and health. Article 126 of the Criminal Code of the Republic of Azerbaijan states:

- "126.1. Deliberate causing of serious harm to health, is harm dangerous to human life, or brought to loss of seeing, hearing, speech either organs or loss by body of its functions, mental frustration or other frustration of health, long disability which is not less than on one third or obviously for guilty caused full loss of professional work capacity, either interruption of pregnancy, or harm which consequence brought to disease of a person to narcotics or glue sniffing or expressed in ugliness of persons shall be punished by imprisonment for the term from three up to eight years.
- 126.2. The same act committed: concerning two or more persons, and also repeatedly or by group of persons, on preliminary arrangement by group of persons, by organized group or criminal community (organization); concerning a victim or his close relatives in connection with implementation of service activity by him or performance of the public debt; with special cruelty, tortures to a victim or by order, as well as concerning a person, which is obviously for guilty, taking place in a helpless condition; publicly dangers a way, from hooligan prompting; with a view of use of body parts or skin of a victim shall be punished by imprisonment for the term from six up to eleven years.
- 126.3. The acts, which is provided by articles 126.1 and 126.2 of the present Code, on imprudence entailed to death of a victim shall be punished by imprisonment for the term from seven up to twelve years".

Deliberate causing of serious harm to health is the most dangerous crime against health. As opposed to the previous criminal law in the definition of health crimes, the new Criminal Code of the Republic of Azerbaijan uses the new term, "health damage". The new term "Harm to health" is more appropriate than the term "harm to body" that used in the old Criminal Code. Because disfunction of anatomical integrity of organs and tissues or their physiological functions as a result of the influence of environmental factors understood under the concept of "body harm" does not fully cover the potential harm to health. Though disfunction of physiological functions of anatomical integrity of organs and tissues is type of harm to health, some type of serious harm to health is not related with disfunction of anatomical integrity and physiological functions. For example, mental disorders as a result of mental illness, some infectious diseases that are transmitted from one person to another, morbidity with drug addiction or toxicomania and so on. However, the notion of "harm to health" includes any detrimental effect that may be on human health. The public danger of crime of deliberate causing of serious harm to health is that at the result of the committed acts envisaged in the Article 126 of the Criminal Code, human health is being harmed. The object of the crime provided for in Article 126 of the Criminal Code of the Republic of Azerbaijan is public relations that ensure the health of the people. Health refers to the natural state of the human body that excludes any disease. Criminal law protects a person's health from birth to the end of his life. The objective feature of crime of deliberate causing of serious harm to health is to cause serious damage to the health of another person. Objective actions can be expressed by the perpetrator's influence on the outside world using mechanical, physical, chemical, biological factors or psychological impact. Human health can also be severely damaged through inactivity. This will be the case when the perpetrator does not take action to act on the victim and may result in serious harm to his health [3, p. 334-335].



It should be noted that the objective nature of the crime is one of the important elements of the criminal structure. The objective aspect of the crime is the realization of the plan, that the person is thinking of achieving his or her goals, by actively intervening in the course of events in the world. Or on the contrary, it is understood that it refuses to intervene even if it owes legal action. The objective nature of the criminal activity reflects the consequences of this activity as well as the causal link between these results. Thus, the objective nature of the crime is the element that specifying the manifestation of socially dangerous act, that occurs in certain circumstances, in place, at certain times and harms the object (socially significant values, interests and wealth) which is protected by criminal law [1, p. 58]. The objective nature of the crime is both compulsory and optional. Since socially dangerous acts or inactivity are included in all criminal law, such signs are considered necessary signs of the objective nature of the crime. The objective nature of the crime is described in the criminal law disposition. Accordingly, certain crimes are differentiated in the law for their more objective nature. The objective nature of the crime determines the following characteristics of the crime:

- the nature of the damage caused by the crime, that is, the public danger of the act committed;
- by what act the intention was committed;
- the consequences of the criminal act;
- the nature of the relationship between the action and results;
- what are the circumstances of the crime and the circumstances in which it was committed (conditions, places, time, method of crime, tools and means of committing crime, etc.).

### 3. CONCLUSION

All this constitutes the content of the objective nature of the crime. When investigating any criminal case, first of all, the essence of the crime is the objective nature of the crime, and only on its basis, the subjective nature of the crime and its signs - motives, goals, intentions, etc., are determined. Therefore, there is no such crime in the criminal law whose objective is not disclosed or at least not mentioned in the description. The objective signs are reflected in the General and Special sections of the Criminal Code. It is purposeful to look through the crime of bringing to suicide that is considered as a crime against life and health. Article 125 of the Criminal Code of the Republic of Azerbaijan envisages: "Bringing a person, who is taking place in material, service or other dependence from guilty, to suicide or to attempt at suicide by threats, cruel treatment or regular humiliation of his dignity shall be punished by restriction of freedom for the term up to three years or imprisonment for the term from three up to seven years". The object of crime of bringing to suicide is the life of another person. The objective aspect of this crime is expressed in the actions bringing a person, who is taking place in material, service or other dependence from guilty, to suicide or attempt to suicide (sometimes inactivity, for example, refusal to eat). This crime is material and is considered ended when a victim commits suicide or attempts to kill himself. Preparation of suicide by the victim or saying by the victim that he/she is going to commit suicide is not liable under Article 125 of the Criminal Code of the Republic of Azerbaijan. The actions of the perpetrator must be unlawful for describing an act under article 125 of the Criminal Code of the Republic of Azerbaijan. However, it is not all his or her wrongful actions, but the ruthless treatment of the victim, the continual humiliation of his or her dignity or the act of intimidation is also can be considered.

### LITERATURE:

1. Agayev I. B. Composition of a crime: concept, elements, meaning. M.: "Yurist", 2008, 335 p. [In Russian].
2. Anthology. Criminal Law Collection (1920-2000). Baku: Law Publishing House, 2014, 1184 p. [In Azerbaijani].

3. Comments of the Criminal Code of the Republic of Azerbaijan / Edited by F.Y. Samandarov. Baku: Digesta, 2012, 1104 p. [In Azerbaijani].
4. Criminal Code of the Republic of Azerbaijan. <http://e-qanun.az/code/11> [In Azerbaijani].
5. Ismailov Kh.S. History of state and law of Azerbaijan. Baku: Nurlan, 2006, 720 p. [In Azerbaijani].
6. Law of the USSR on the approval of the Fundamentals of legislation on the judicial system of the Union of Soviet Socialist Republics, Union and Autonomous Republics of December 25, 1958. [http://www.libussr.ru/doc\\_ussr/usr\\_5351.htm](http://www.libussr.ru/doc_ussr/usr_5351.htm) [In Russian].
7. Ragimov I.M. Immortal death penalty. St. Petersburg: Publishing House Legal Center, 2017, 192 p. [In Russian].
8. The Azerbaijani SSR Law of 8 December 1960 on the Approval of the Criminal Code of the Azerbaijani SSR. Bulletin of the Supreme Soviet of the Soviet Socialist Republic of Azerbaijan, 1960, No 29, Article 143 [In Azerbaijani].

## FRANCHISING DEVELOPMENT MODELS BY AN EXAMPLE FROM THE WORLDS LEADING COUNTRIES

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### **ABSTRACT**

*The article touches on a subject of the development of franchising and its development in the leading countries of the world, as well as in Azerbaijan. Franchising in our country is just starting its progress. In 2018, Azerbaijan hosted the 1st International Azerbaijan Franchise Forum, organized by Caspian Event Organizers. The main goal of the forum was to bring together owners of franchise companies and potential franchisors. A platform for franchisees, franchisors, and investors was created at the Forum. The reason for use of the franchising is the introduction of a new business method for entrepreneurs. Recently, there existed a lot of enterprises that operate under the brand of well-known domestic and foreign companies. It is obvious that the appearance of subsidiaries or representative offices could require a much longer period of time and higher costs, which in recent years had clear downward trend that in our view in this case there is a new way of organizing business that allows Russian enterprises to use well-known brands. This method is called franchising. The goal of the article is to study the domestic experience of implementation of franchising operations. The subject matter of the article is to study the economic relations developed between franchising entities in the process of organizing joint business activities. Any director of a small enterprise is eligible for creation his own brand and register it. But in order for the business to go successfully on down the line in future, so that it was well known in the market, you need to invest a lot of money. You need to create a good brand advertising campaign and participate in various exhibitions. It is too expensive for many small enterprises now. Therefore, it is easier for a small enterprise to buy rights to use a famous brand within the framework of franchising. In a spots like that, a large Franchisor Company provides all the opportunities for a small enterprise, namely: equipment and technology, training of personnel. In its turn, a small enterprise is obliged to use the trademark only of this company, regardless of where it is located in Azerbaijan or in any other country.*

**Keywords:** *franchising, franchise companies, franchising operations, global brands, small enterprise*

### **1. INTRODUCTION**

Franchising is a largely unique phenomenon. The peculiarity of this type of entrepreneurship is that enterprises operating under a Franchise agreement, despite a legal independence, are essentially a part of a unified system. Thus, franchising, on the one hand, helps to avoid a sufficient number of difficulties associated with the functioning of an independent small business, and on the other hand, creates problems inherent to any corporate structure. An undeniable advantage for a burgeoning entrepreneur is that belonging to a unique franchise system and using a recognized brand significantly reduces risks. Continuous support and control by the franchisor allows entrepreneurs of the franchisee to learn the ways of the effective business management and improve their professionalism and competence. The franchisee deals with a proven business, their services are commercially viable, and their products are reliable. Both are standardized, and the franchisor is solely responsible for further quality improvement. Accordingly, the franchisee's initiative to update and expand the range of products and specifications is limited by these standards.

## 2. THE PROCESS OF FORMATION OF THE FRANCHISING IN EUROPE

The modern process of formation and development of small businesses takes place in conditions of severe restrictions on the financial resources of the state and local budgets, the absence of an effective financing system, lending and insurance of business activities. It is important in this situation to establish close interaction between small and large businesses to solve common problems of their functioning. This form of financial support on the part of large enterprises is the franchise system. And it is this that makes it possible to combine the advantages of small and large businesses, as well as significantly increase the entrepreneurial initiative. Experience shows that franchising is applicable in a wide variety of service activities (the International Franchise Association identifies 75 branches of economy that use franchising methods), as well as particularly as part of the small business in the service sector. Recent publications also highlight business-style franchising or business-format franchising (Business format franchising). At the same time, in the cited literature, you can find a narrow and expansive interpretation of this phenomenon. In the first case, it is only noted that the franchisor grants the franchisee not only its trademark and products that they produce, as is usually the case, but also their production plans, including market strategy, business manuals, quality control services, as well as other types of assistance necessary for the conduct of business. Franchising is extended in Europe in different ways, depending on the country, customs, culture, and especially on everything related to the socio-economic history of trade, level of development, and economic systems. Thus, some countries have preferred franchising in the field of service (UK, Germany), others in the field of distribution (especially France). At the same time, franchising does not actually exist in certain areas of activity: for example, in Germany there is no such kind business in the hotel sector. At the institutional level, the franchise system is represented and promoted by the European Franchise Federation (EFF), which is a Non-profit Making International Association founded in 1972. Its mission and principal targets (see Table 1):

- development of franchising in Europe;
- representation of interests of franchising in international organizations (European Commission, European Parliament, etc.);
- development and representation of the European franchising and its members in the international arena;
- exchange of information and documentation between national franchising associations in Europe and other continents.

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*Table 1: European Franchise Federation's mission*

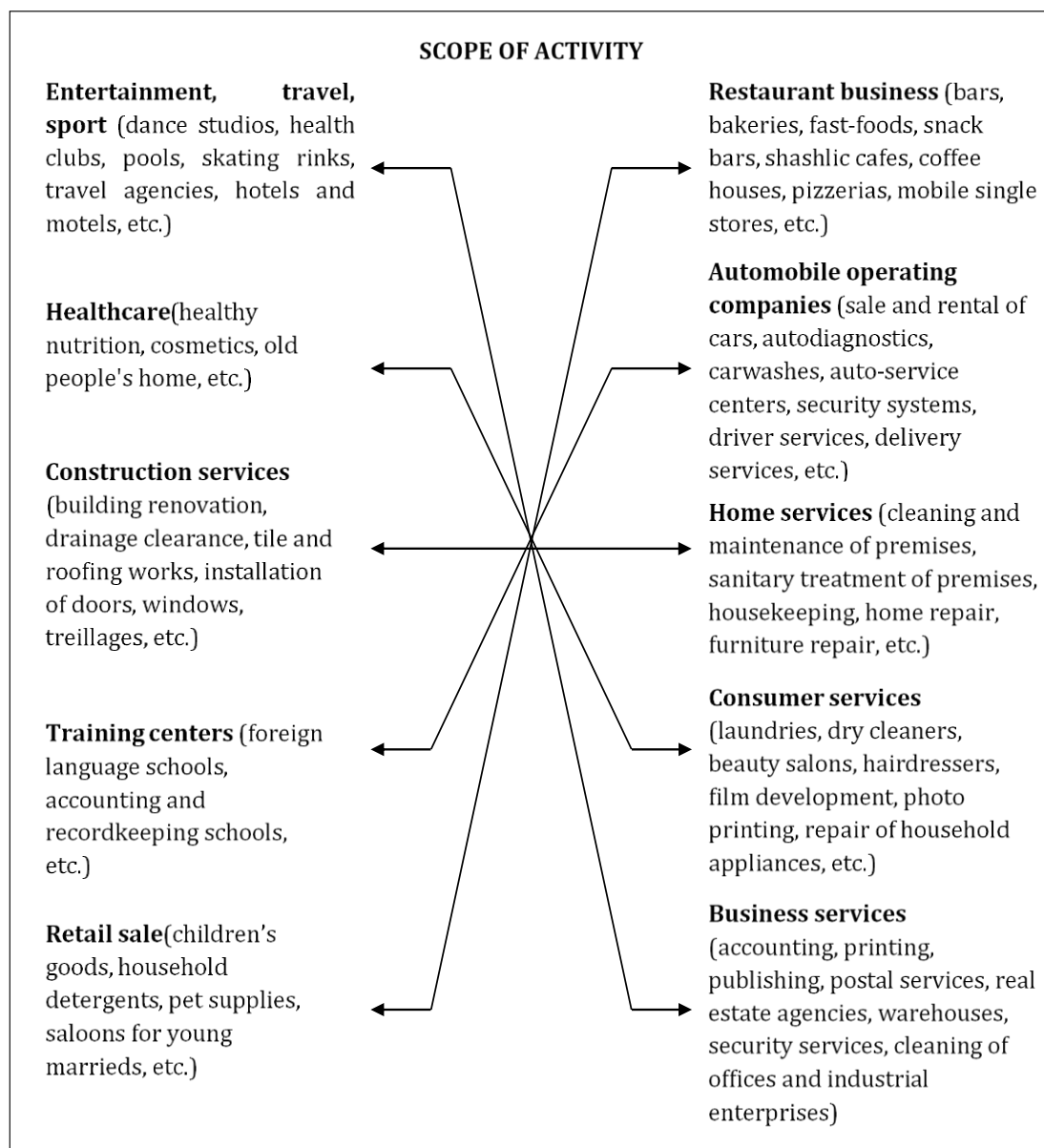
In 1977 was established the British Franchise Association (BFA)<sup>1</sup>, which for the first time in history provided clear definitions of the concept of a franchise as a control license issued by one person (Franchisor) to another person (Franchisee). Currently, there are 4,500 franchising systems operating in Europe, each of them cooperates with about 37 partners, and their total

<sup>1</sup> British Franchise Association <http://www.thebfa.org>

turnover equals \$ 150 billion. However, the degree of development of the franchise business in Europe is much lower than in the United States, where the volume of such transactions exceeded \$ 800 billion. The forefront in the field of franchising development among European countries in terms of the number of franchisors and franchisees is occupied by the United Kingdom. The formation of franchising as an integral part of the national economic environment began in the 50s and 60s. The following factors facilitated its development:

- 1) Shift of emphasis in the economy from production to the provision of services.
- 2) General urbanization processes, income gross.

These factors made it possible to create a service sector where the level of comfort and speed of service delivery has begun play no less a role than traditional price and quality. (see Figure 1).



*Figure 1: The sphere of activity of small enterprises that most effectively use franchise networks of business organizations<sup>2</sup>*

<sup>2</sup>Maslennikov V.V. Entrepreneurial networks in business. – M.: Center for Economics and Marketing, 2007, p.125

And relationship in franchising in a business format is clearly seen in Figure 2.

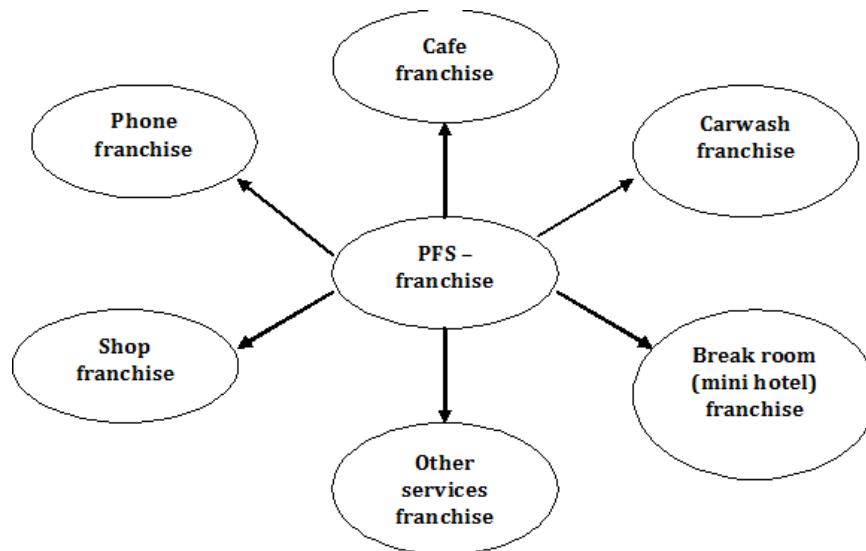


Figure 2: Relationship scheme for business format franchising by the example of the PFS<sup>3</sup>

In the world, franchising is widespread and recognized as attractive way of development<sup>4</sup>. This is confirmed by encouraging trends in the development on all continents. Europeans have recognized franchising as a promising development system, and activity in the formation and promotion of networks is observed almost throughout the European space. At the same time, it is impossible to say that development is progressing equal in all European countries.

### 3. THE STRUCTURE OF THE FRANCHISE MARKET IN EUROPE

The structure of the franchise market in Europe is heterogeneous. The largest holders of franchises for the researched period were the United Kingdom, Germany and France. And the same States were the largest European exporters of franchises are about 70%. (see Figure 3).

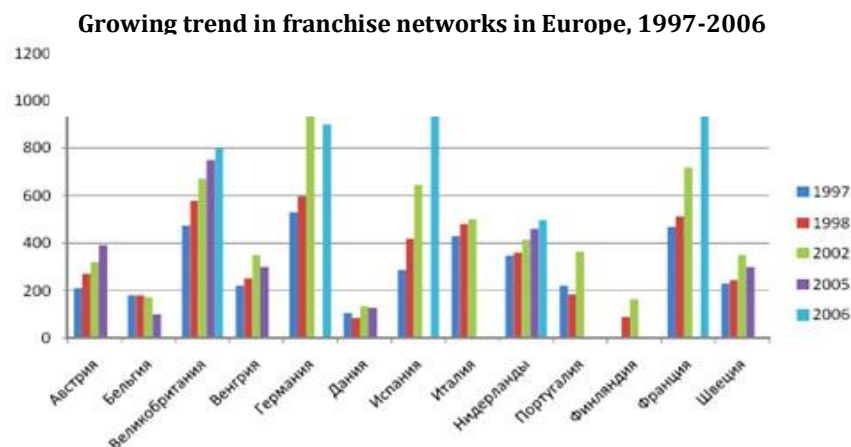


Figure 3: Growing trend in franchise networks in Europe, 1997-2006

According to the European Franchise Federation in 2010, approximately 80% of European franchises were present in their countries of origin; 10-20% of franchises came from other countries of Europe, the United States, Canada and Australia.

<sup>3</sup> Rykova I.V. Franchising: new technologies, methodology, contracts. - M: Modern Economics and Law, 2010, p. 21

<sup>4</sup> On the investigation of the International Franchise Association and the International Franchise Council.

The most active buyer of franchises in the United States, Canada and Australia is the United Kingdom. The largest number of European franchises is exported to continental Europe, while exports to more distant countries, such as the Middle East and China, are determined by the specific strategic goals and capabilities of the rights holders and are not massive. Laws governing franchising, according to analysis, are not adopted in all European countries. Special laws are applicable, for example, in Spain, Italy, France and Belgium. In addition, franchising involves a sufficiently diverse form of relationship between the parties, which can hardly be subject to regulatory regulation, limited to the framework of a single law. Management of franchising refers to various branches of law, and in those States where franchising has an independent statutory regulation, the use of the rules of other laws and instructions are excluded. The main branches of law that are essential in managing this type of relationship include Contract law, Representation laws, and laws governing distribution contracts (such as distribution and Agency agreements), rules governing lease and leasing relationships, laws governing intellectual property, rules governing technology transfer, competition law, and many others. In addition, the rules of international conventions, such as the Paris Convention, the Berne Convention, etc. are also applicable. In the European Union, along with national standards, general regulatory rules that apply to the Member States are in force.<sup>5</sup> In the EU, franchising is not directly regulated by special laws and regulation refers to the rules governing competition. Two articles of the Treaty of Rome that establish the European Economic Community regulate the basic rules of competition. In Asia, some forms of franchising have been used for a long time, but business-format franchising has been used mainly with the entry of foreign brands into the Asian market. International companies are very successful in the Asian market. The leadership in this direction belongs to US companies, but recently there has been a trend of development and growth of Asian franchisors, which are expanding with great activity not only in national markets and also beyond them.

#### **4. ANALYSIS OF DEVELOPMENT OF FRANCHISING IN THE USA**

The research of the most developed franchise market in the United States allowed us to draw a number of conclusions about its dynamics. First, after an increase in the number of franchising companies in the United States by more than 40% since 2001 to 2008, their number declined by 3.5% in 2009, which continued until 2011. Second, in 2012, the economy of the country began to recover slowly, and the activity of small and medium-sized businesses increased. The number of franchising companies in the United States has grown by 1.5% in comparison with 2011. In 2013, the growth is projected to be about 1.4%, however, the number of companies has not yet reached the pre-crisis indicators of 2007. Third, in 2013, according to existing predictions the number of franchising companies in the United States, their sales volume and employment will increase in all areas of franchising development in comparison with 2012. The segment of fast-food restaurants and sphere of retail trade reaches the highest indicators. Total sales values in franchising sphere have started to increase since 2010 and in 2013 its steady growth was at 4.3 % or up to \$ 802 billion in comparison with 2012.(see Table 2).

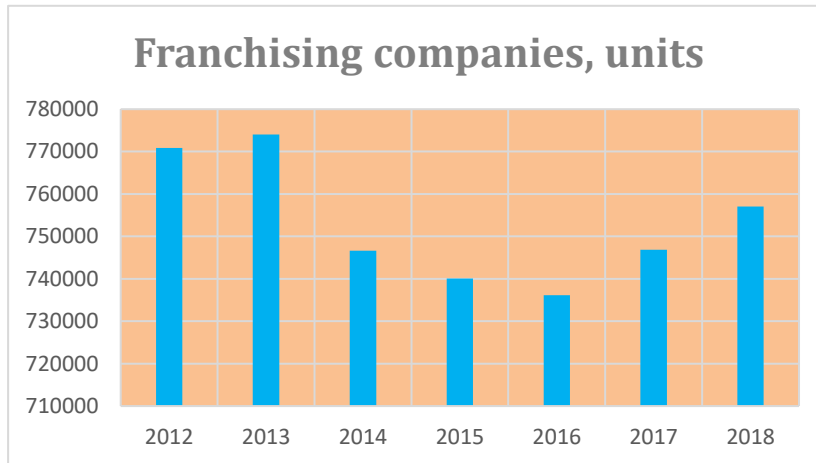
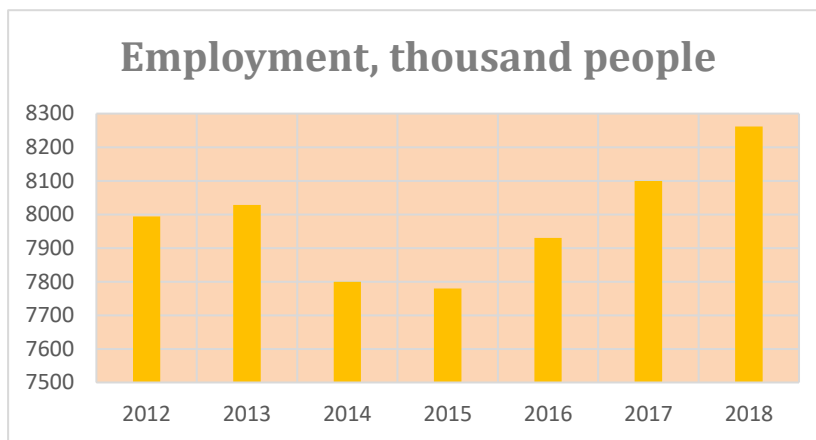
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<sup>5</sup> Top 100 franchising Economic article by I.V. Rykova. <http://www.franchisetop.ru/franchajzing-v-mire>

*Table 2: Trends in the indicators of franchise business in the United States in 2007-2013*

	2012	2013	2014	2015	2016	2017	2018
Franchising companies, items.	770 835	774 016	746 646	740 098	736 114	746 828	757 055
Change, %		0,4 %	- 3,5 %	- 0,9	- 0,5	1,5 %	1,4 %
Employment, thousand man	7 994	8 028	7 800	7 780	7 930	8 100	8262
Change, %		0,4 %	- 2,8 %	-0,3 %	1,9 %	2,1 %	2,0 %
Production (goods and services) output, billion US dollars	675	696	674	699	733	769	802
Change, %	3,2 %	-	3,2 %	3,7 %	5,0 %	4,9 %	4,3 %

*Figure 4: Franchising companies, units**Figure 5: Employment, thousand people*

*Figure following on the next page*



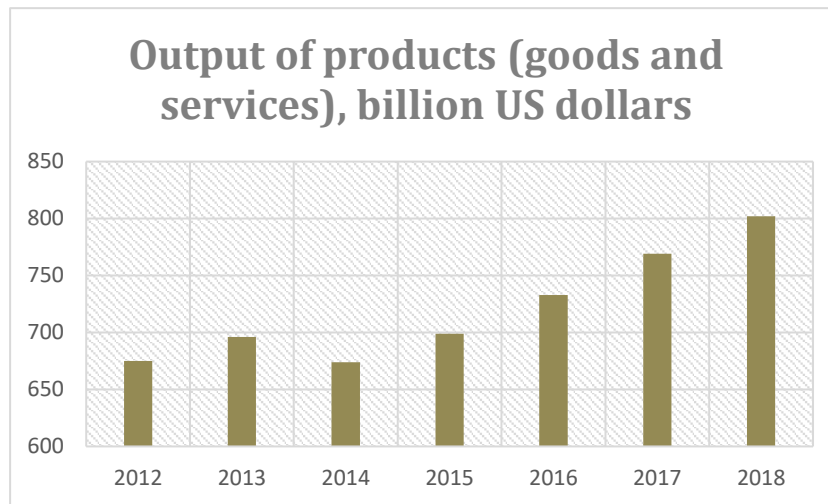


Figure 6: Output of products (goods and services), billion US dollars

Special Laws on franchise apply in the United States. In such countries as France, Germany and Canada franchising is managed by the rules set forth in codified acts, laws relating to business activities, and various subordinate legislations. In the European Union, the European code of ethics for franchising promotes the uniform use of the concept of "franchising".

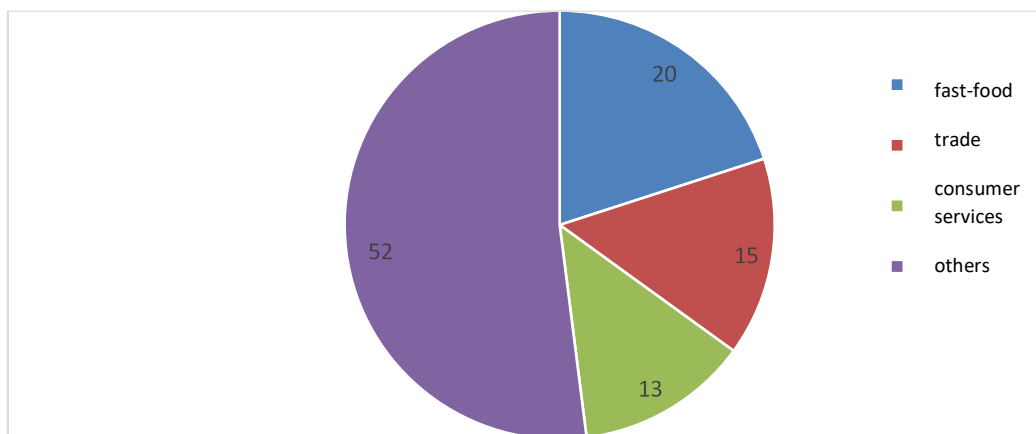
## 5. FRANCHISING IN ASIAN COUNTRIES

Up until recently, the governments of most Asian countries did not show sufficient interest in franchising and did not see any threat to national entrepreneurs. Management of franchising coincided with the Asian financial crisis of 1997-98 (China-1997, Indonesia-1997, Korea-1997, Malaysia-1998). In China, according to national statistics in 2006, there were 2,600 franchise networks with 200,000 franchisees, and annual growth estimated at 40%. Most networks are national. 1,100 networks are acting in Japan. Mostly, franchising is represented by national systems and this is mainly due to national traditions and commitment to Japanese brands. Currently, Japan is one of the leaders in franchising in the world. Franchising is regulated by the law on trade related to medium and small retail businesses and antitrust legislation. In Korea, according to the International Franchise Association, by the end of 2002, there were 1,300 franchisors with 100,000 franchisees, a total turnover of 0.8 billion dollars and the number of employees of 500 thousand people. In 2002, the Act on Fair Transactions in Franchising was adopted, the purpose of which is to establish the fairness of transactions in franchising, balanced promotion and development of franchisors and franchisees. According to reports, the average franchisor had about eight corporate outlets and seven franchises, about 30% of franchisors had ten or more franchises. In Singapore in 2002, there were about 350 networks with 2300 participants, and in 2005 there were 380 franchisors with 3 thousand franchisees. In Singapore, they see great prospects for the development of franchising. International exhibitions held in Singapore provide information about the constant increase in the number of exhibitors, which characterizes the growth of entrepreneurs' activity in this sector. In Singapore, there is no special legislation regulating franchising. Relations between participants are governed by the rules of Contract law. In India in 2005, there were 850 franchise networks with 48 thousand franchisees. The service sector is well developed, especially in education. The food and cloth production sector is growing.

## 6. THE DEVELOPMENT OF FRANCHISING IN AUSTRALIA AND NEW ZEALAND

In Australia and New Zealand, franchising is widely developed. According to the International Franchising Association in 2002 in Australia there were about 700 franchise networks, in New Zealand-300, with 52 and 14 thousand franchisees, respectively.

The turnover of networks in Australia was at that time 50 billion dollars, in New Zealand-10 million, the number of employed was 698 thousand in Australia and 70 thousand in New Zealand. In Australia, more than 5,000 new businesses and about 100,000 new jobs are created annually in the franchise format (this comprise about 50% of all new jobs created annually). The annual growth of the franchise turnover is 17%, and more than 60% of the gross national product is created by franchise networks. From 2006 to 2008, the number of franchise networks grew by 14.6%, which is higher than the growth for the same period from 2004 to 2006, which was 12.9%. The greatest number of systems in Australia comes from the national systems (91%). Franchising relationships are governed by the mandatory Franchising Code of Conduct, adopted in 1998, which is binding on the Code of Conduct, and relations related to the retail sale of motor gasoline are regulated simultaneously by the Code by the Petroleum Marketing Franchise Act of 1980. Despite the external similarity of franchising in the two countries, the issues related to its regulation are solved differently. Unlike Australia, New Zealand does not have special legislation governing franchising. At the same time, a very active position is taken by the Franchise Association, which provides serious support to its members. The Association has a strict Code of conduct, which contains rules on compliance with the procedure for alternative (out-of-court) dispute resolution. Unlike Australia, the Code of conduct is voluntary. Global franchising is applied in 75 business areas; 20% of all franchises (the highest rate) are sold in fast-food, 15% in retail sale and 13% in consumer services. Other franchises are less popular and are spread across a wide variety of areas, including legal services and real estate transactions (see Figure 7)



*Figure 7: The structure of the Global Franchise Market*

General study conducted by the International Franchise Association IFA<sup>6</sup> (USA) showed that the number of bankruptcies among its members is less than 1%. But if you carefully analyse the franchise relationships, it can be noted that cooperation not only has a useful effect, but also can create certain difficulties and restrictions arising from this system, because each partner must subordinate himself to a common goal, common rules, general agreements, and coordinate their interests with the interests of the opposite party (see Figure 8).

*Figure following on the next page*

<sup>6</sup> On the investigation of the International Franchise Association and the International Franchise Council. Link: <http://www.franchise.org>

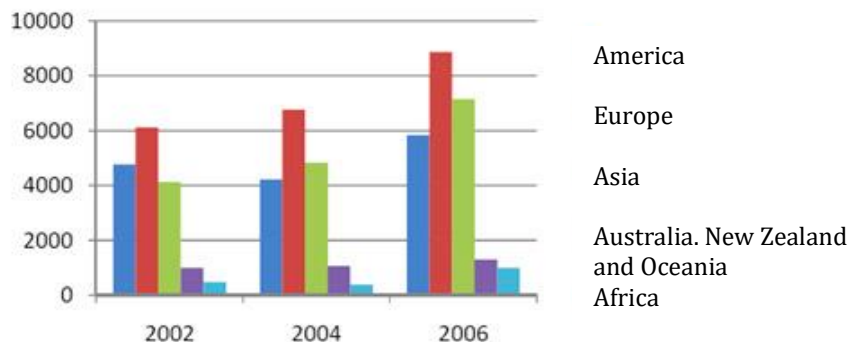


Figure 8: Number of franchisors

## 7. CONCLUSION

Thus, from the abovementioned we can conclude that the franchise system of doing business is in great demand on the world market. Among European countries, France, Italy, Spain and the United Kingdom are on a leading position. As for the United States, it is the most developed franchise marketplace in the world, but according to trends in the indicators it can be seen that from 2001 to 2011 there was a huge decline in franchising companies. In 2012, the country's economy began to recover slowly and the number of companies increased by 1.5%. Franchising is a very specific phenomenon. The peculiarity of this form of entrepreneurship is that enterprises operating under a Franchise agreement, despite their legal independence, are in fact a part of a uniform system. Thus, franchising, on the one hand, helps to avoid a sufficient number of difficulties associated with the functioning of an independent small business, and on the other hand, creates problems inherent in any corporate structure. Therefore, if you have a choice whether to turn to franchising or not, you should know that due to this duality, any of the advantages of franchising can turn into a minus, if you consider it from a slightly different angle. An undeniable advantage for a starting entrepreneur is that belonging to a unique franchise system and using a recognized brand significantly reduces risks. Constant support and control by the franchisor allows entrepreneurs-franchisees to learn effective business management methods, improve their professionalism and competence.

## LITERATURE:

1. According to E. M. T. G. and the world franchise Council (WFC):  
[www.worldfranchisecouncil.org](http://www.worldfranchisecouncil.org)
2. British Franchise Association <http://www.thebfa.org>
3. Investment in a company under a franchise scheme.
4. Maslennikov V.V.(2007) *Entrepreneurial networks in business*. – M.: Centre for Economics and Marketing, p. 125
5. On the investigation of the International Franchise Association and the International Franchise Council.
6. On the investigation of the International Franchise Association and the International Franchise Council. Link: <http://www.franchise.org>
7. Russian Franchise Association. Digest of publications in the media and the Internet (November-December 2010).
8. Rykova I.V. (2010) *Franchising: new technologies, methodology, contracts*. - M.: Modern Economics and Law, p.21
9. Top 100 franchising Economic article by I.V. Rykova.  
<http://www.franchisetop.ru/franchajzing-v-mire>

## FEATURES OF MARGINAL ANALYSIS IN ADMINISTRATION OF MANAGEMENT DECISIONS

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### **ABSTRACT**

*In the conditions of dynamic development of the economy, the task of making effective managerial decisions is becoming increasingly important for domestic enterprises. A special role in substantiating management decisions is assigned to marginal analysis. To form a qualitatively new level of management, it is necessary to justify management decisions as fully as possible and clearly evaluate their effectiveness at all levels of management. Margin analysis establishes a correlation between the most important indicators characterizing the activity of any enterprise - costs, volume and profit. Using this tool, enterprise management can predict the amount of profit, its change compared to the existing level and, based on this information, make the right managerial decisions on choosing an enterprise strategy. With the help of margin analysis, other management decisions are also substantiated: a choice is made of a change in production capacity, the product range is determined, the price of a new product is made, a decision is made on the purchase or purchase of component parts, the effectiveness of accepting an additional order is evaluated, and others. The methodology of marginal analysis is based on the study of the relationship between the most important indicators: costs, volume of production (sales) of products, profit, as well as forecasting the magnitude of each of these indicators for a given value of others. This analysis is also called breakeven analysis, since this analysis allows you to find the equilibrium point, i.e. critical sales volume, or break-even point - the point at which the total revenue is equal to the total cost. They represent the sum of fixed and variable costs. Break-even point is a situation in which the company does not incur losses, but also has no profit. Sales below the breakeven point mean losses for the enterprise, above the equilibrium point - profit. The key elements of marginal analysis are operational, financial leverage, the stock of financial strength of the enterprise, the threshold of profitability. This article explores marginal analysis as a tool for making effective management decisions. The importance of using margin analysis to select an enterprise development strategy is noted. The basis of the marginal analysis is the division of production and marketing costs depending on changes in the volume of production into variables and fixed. The article discusses the content, advantages and disadvantages of various methods of dividing costs into constant and variable components. The author also considered the stages of margin analysis, provides examples of the calculation of the main indicators used in the analysis, substantiates their role in enterprise management.*

**Keywords:** *fixed costs, margin analysis, management, profit, variable costs*

### **1. INTRODUCTION**

Marginal analysis plays an important role in substantiating management decisions. This analysis has the tools that allow you to explore the direction of development of the enterprise, to fully and orderly study the factors affecting the change in the results of its activities, to give an overall assessment of the results of activities and to develop an economic strategy for the development of the organization. Margin analysis is a link between various management functions, it is a tool that allows you to make effective management decisions in conditions of increased competition. The origins of marginal analysis relate to marginalism, which was formed into an independent economic doctrine at the end of the 19th century.

The founders and main followers of this direction are K. Menger, W. Jevons, L. Walras, A. Marshall, J. B. Clark, V. Pareto. The marginal analysis itself, as a tool for assessing the financial condition of an enterprise, was developed in 1930 by an American engineer Ulter Rautenshtrakh (Kovalev, 2002). It should be noted that, despite the wide coverage of this issue in the scientific field, marginal analysis is still a very controversial area of scientific research. This analysis contains a significant number of questions regarding the division of costs into a variable and a fixed part for use in margin analysis, features of the use of margin analysis tools in industrial and commercial organizations, and determination of initial data in an unstable market environment. Any decision made regarding the price, costs, volume and structure of products sold affects the financial results of the enterprise. Margin analysis is a simple and accurate way to determine the interdependence between these categories.

## **2. SOME ASPECTS OF THE METHOD OF MARGINAL ANALYSIS**

The marginal analysis methodology is based on the separation of production and marketing costs depending on changes in the volume of production into variable and constant components, as well as the use of the category of marginal income (income covering variable costs). It must be borne in mind that marginal analysis is based on a number of assumptions (conventions):

1. All costs of the enterprise are divided into fixed and variable;
2. Marriage and spoilage of products are not considered, because they lead either to lower prices for products, which will lead to a deviation of profit from the expected result, or to direct losses of the enterprise;
3. Margin analysis does not take into account the economies of scale, which ideally should lead to a decrease in average costs per unit of output with an increase in sales;
4. The volume of production is the only factor affecting the value of variable costs.

### **2.1. Margin analysis indicators**

The main tools for margin analysis are operational, financial leverage, the stock of financial strength of the enterprise, the threshold of profitability. The effect of the operational (production, economic) leverage is manifested in the fact that any change in sales revenue always generates a stronger change in profit. This effect is due to the varying degree of influence of the dynamics of fixed and variable costs on the formation of the financial results of the enterprise when the volume of production changes. The higher the level of fixed costs, the greater the impact of the operating leverage. Indicating the rate of decline in profit with each percentage reduction in revenue, the strength of the operating leverage indicates the level of entrepreneurial risk of the enterprise (Nikiforova, 2017). With favorable market conditions, the high value of operating leverage allows the company to increase its profit. However, in conditions of economic instability, with a decrease in the solvent demand of consumers of products, the high value of operating leverage significantly worsens the financial results of the enterprise. This is due to the fact that each percentage reduction in revenue leads to an even greater drop in profits and the entry of the enterprise into the loss zone. The effect of financial leverage is that the company that uses borrowed funds, changes the net profitability of own funds and its dividend opportunities. The level of financial leverage effect indicates the financial risk associated with the enterprise. Since interest on loans relates to fixed costs, the increase in financial costs of borrowed funds is accompanied by an increase in the strength of operational leverage and an increase in entrepreneurial risk (Efimova, 2014). It is very important for the company to calculate the profitability threshold. The calculation of the profitability threshold begins with the separation of costs into variable and constant components. Next, calculate the gross margin and by comparing it with the amount of revenue determine the coefficient of gross margin (the share of gross margin in revenue from sales).

The profitability threshold is determined by the ratio of fixed costs to the gross margin ratio. Exceeding the actual sales proceeds over the profitability threshold determines the margin of financial strength of the enterprise.

### 2.1.1. Testing the margin analysis technique

Consider the methodology of margin analysis according to the output of the enterprise Sama LLC, the results of which are presented in table 1. The results showed that the company will reach a breakeven point and will cover all its costs in the production of products in the amount of 16333 manat. For the enterprise under study, the marginal margin of safety, which characterizes the excess of actual revenue from product sales over the threshold, is 31.4%. This means that if the company's revenue decreases due to changes in the prevailing market situation by less than 31.4%, the company will make a profit, if it decreases more than the specified level, it will be at a loss. Thus, the company will be able to predict the receipt of the desired amount of profit even due to a decrease in revenue, but not more than 31.4%. The effect of production leverage was 3.16. This means that if the company's revenue decreases by 1%, the profit will decrease by 3.16%, and if the revenue decreases by 31.4%, the profit will become zero. In this case, the profitability threshold will be reached.

Line number	Indicators	Value
1	The amount of revenue, manat	23800
2	Variable costs, manat	6600
3	Marginal income, manat (3-1)	17200
4	Fixed costs, manat	11760
5	Profit, manat	5440
6	Sales volume, pieces	700
7	Price per unit, manat	34
8	Marginal income rate (3/1)	0,72
9	Break even, manat (4/8)	16333,33
10	Margin margin of safety %, $((1-9)/1*100\%)$	31,4
11	Leverage effect (3/5)	3,16

Table 1: Margin analysis ratios

The value of production leverage is greatly influenced by the change in the price of products. Let us see how the effect of production leverage will change if the price of products increases by 10%. An increase in the selling price by 10% will lead to an increase in revenue to 26180 manat, profit up to 7820 manat, marginal income up to 19580 manat. Marginal revenue per product will increase to 24.57 manat. It follows that lower costs will be required to cover fixed costs. The margin margin of safety will increase and amount to 40.1%, the enterprise will receive additional profit in the amount of 2,380 manat (7820-5440). The effect of production leverage will decline from 3.16 to 2.50. A 10% reduction in variable costs will lead to an increase in marginal income to the level of 17860 and profit to 6100 manat. As a result, the profitability threshold will drop to the level of 15680 manat. As a result of this, the marginal margin of safety of the enterprise will increase and amount to 34.1%. Under these conditions, the effect of production leverage at the enterprise will decrease and amount to 2.93. Thus, the calculation of marginal income, dividing the costs by fixed and variable components, allows you to determine the impact of production and sales on the amount of profit from the sale of products, works, services and the level of sales starting from which the company makes a profit (Horngren, 2007). All this can be determined based on the analysis of the breakeven model. At the breakeven point, the company's profit is zero.

With this volume, revenue corresponds to total costs. Below the critical volume point, production becomes unprofitable. Data on the value of marginal income and other derivatives are widely used to predict the selling price of products, costs, assess the effectiveness and feasibility of increasing production volume and in making other optimal managerial decisions. It should be noted that the breakeven model is used only for those decisions that are made within an acceptable range of prices, costs and volumes of production and sales, where the indicators are unchanged. Outside this range, the selling price of a unit of production and the variable costs per unit of production are no longer unchanged, and any results obtained without taking these restrictions into account lead to unreliable conclusions.

## 2.2. Opportunities and difficulties of margin analysis

It seems that marginal analysis provides more opportunities for making effective management decisions. Table 2 summarizes the main opportunities that a marginal analysis gives the management of the enterprise, as well as the difficulties in its implementation.

Margin analysis capabilities	Difficulties in conducting margin analysis
Determination of critical sales volume, variable costs per unit of production, fixed costs, price at a given value of the relevant factors;	The difficulty of accurately separating costs into fixed and variable;
Calculation of the necessary sales volume to obtain a certain amount of profit;	The use of data for decision making within an acceptable range of prices, costs and sales in which they are unchanged.
Carrying out an accurate calculation of the influence of factors on changes in the cost of production, the amount of profit, profitability and, on this basis, more efficient management of the process of formation and forecasting of cost and financial results;	
Establishment of the enterprise security zone and assessment of its sensitivity to changes in internal and external factors;	
Justification of the most optimal variant of management decisions in order to minimize costs and increase profits.	

*Table 2: Opportunities and challenges for margin analysis*

The conditional nature of the separation of costs into fixed and variable components is the main disadvantage of marginal analysis. Often this entails the inaccuracy of the results obtained. And with multinomenclature production, the problem of sharing variable costs of a general nature between individual types of products arises. Mixed costs are also allocated, which include features of both variable and fixed costs (Drury, 2007).

### 2.2.1. Methods of dividing costs into fixed and variable

To solve the problem of dividing costs into constant and variable components, analytical and statistical methods are used. It should be noted that these methods have various disadvantages. So, with the analytical method, all costs of an enterprise are primarily divided into line items, constant, fully variable (proportional) and partially variable (half-variable) (Nikolaev, 2008). This division is based on past experience. Then, based on an analysis of the ratio of expenses and the results of previous periods for each article of partially variable expenses, the proportion

of the variable part (cost variator) is determined. As a result of this, the variator 0 is assigned to constant costs, proportional to 1, and partially to the variables - variator values in the range from 0 to 1. The analytical method, depending on changes in the volume of production, allows us to establish a general trend in the behavior of costs, however, due to some conventions for calculating the variators, it allows certain errors. Statistical methods are considered more accurate. The main statistical methods for dividing the total cost into fixed and variable costs are: graphical (statistical) method, the minimum and maximum point method (mini-maxi method) and the least squares method. The content of these methods, as well as their advantages and disadvantages are shown in table 3.

Method name	Method contents	Benefits	Main disadvantages
Graphic (statistical) method	This method consists in constructing a graph that reflects data on total costs at different levels of output.	Using the entire set of cost data for the period.	The method is quite subjective, which may affect the quality of management decisions.
Minimum and maximum point method (mini-maxi method)	In this method, from the presented set of data, the period with the smallest and the period with the highest production volume are selected. Next, the average variable costs in the unit cost of production are calculated. The total amount of fixed costs is defined as the difference between the total amount of costs and the multiplication of their variable part by the volume of production.	Ease of use.	To determine the costs, only two points are used, which may not be typical for this population and not sufficient to determine the dependence and calculate the amount of costs.
Least square method	In this method, the cost line is constructed so that the sum of the squared deviations of the distances from all points to the theoretical regression line is minimal.	Sufficient accuracy in determining the constant and variable components in the structure of total costs.	When using this method, statistical information may not be enough to ensure the accuracy of the calculations. Calculations are very laborious.

*Table 3: Statistical methods of dividing costs into constants and variables*

Thus, enterprises are recommended to use the least-squares method as a whole for the most accurate distribution of costs for constant and variable components, which allows to determine these parts in the cost structure with high accuracy.

### **3. THE ROLE OF MARGINAL ANALYSIS IN DECISION-MAKING ON THE DEVELOPMENT OF THE COMPANY'S ASSORTMENT POLICY**

As noted earlier, margin analysis can be used to solve a number of managerial tasks, namely, tasks related to making decisions on the development of the assortment policy of an enterprise. Consider how the criterion of marginal income can be used to formulate the product range of LLC "Ulduz" based on the data in table 4. According to table 4 shows that the production of products "C" is unprofitable.



Let us analyze how the refusal to release this type of product will affect the amount of profit. Refusal from the “C” products will lead to a reduction in variable costs of the enterprise to 29880 manat. In this case, fixed costs will remain unchanged and amount to 47,860 manat. Revenues from sales will decrease to the level of 74190 manats. The total cost without product “C” will be 64,660 manat. The profit of the enterprise will have a negative value equal to (-3550) manat. Thus, the company will go into the zone of losses.

Type of products	Amount units	Variable costs	Total costs	Revenue	Profit	Marginal income
A	80	9070	30150	34660	4510	25590
B	210	20810	34510	39530	5020	18720
C	190	18760	31840	31660	- 180	12900
Total		48640	96500	105850	9350	57210

*Table 4: Data for the analysis of the assortment policy of the enterprise (in manats)*

Thus, the use of marginal income in the formation of the assortment of the enterprise allows you to avoid making an erroneous decision on the refusal to produce unprofitable products. Calculations showed that the average marginal income for all types of products is positive. Failure to manufacture 190 units of “C” products will result in losses equal to 12,900 manat. Therefore, the production of this type of product must be maintained.

#### **4. CONCLUSION**

Using margin analysis allows you to correctly plan and predict the activities of the enterprise. Managers, accountants, managers, analysts, financiers, using the tools of margin analysis, get the opportunity to more deeply evaluate financial results and accurate justification of recommendations to improve the work of the enterprise. Thus, the role of marginal analysis in the enterprise management system is steadily increasing. The effective functioning of the enterprise and maximum profit directly depend on the optimal and timely monitoring and analysis of the results of its financial and economic activities.

#### **LITERATURE:**

1. Basovsky, L, Basovsky, E. (2009). Comprehensive economic analysis of economic activity. Moscow: Infra.
2. Drury, K. (2007). Management and production accounting. Moscow: UNITY-DANA.
3. Efimova, O. (2014). Financial analysis: modern tools for making economic decisions. Moscow: Omega-L.
4. Horngren, Ch, Foster, J., Datar, Sh. (2007). Management Accounting. St. Petersburg: Peter.
5. Kovalev, V. (2002). Financial analysis: methods and procedures. Moscow: Finance and statistics.
6. Nikolaev, O, Alekseeva, O. (2008). Strategic management accounting. St. Petersburg: LCI.
7. Nikiforova, N. (2017). Operational analysis technique. Moscow: Rusyns.

## PROBLEMS OF THE REGIONAL ECONOMIC DEVELOPMENT

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### ABSTRACT

*Within the framework of the regional policy, development of both production infrastructure and social infrastructure is being implemented. The latter is important not only for the provision of the same level of service in all regions, but also for the economic development of the territories. The construction of social infrastructure facilities contributes to the growth of employment, and the development of higher education through the development of high-tech industries, enhancing the responsibility of investors and territories for high-skilled labor. Regional policy focuses on the development of social infrastructure, the creation of production infrastructure, the selection of areas suitable for industrial and commercial buildings, the improvement of transport links, and the creation of water supply systems. The choice of forms of regional policy is important for this purpose. In our opinion, these forms may include: investor awareness of regional priorities, direct donations to regional studies, low-interest loans to troubled areas, long-term low-interest loans for businesses, infrastructure development support, regional export promotion, and regional export promotion. development of programs and further strengthening of state support for small business development in the regions and identification of such regions. Combining regional policy-specific measures will help identify complex tools, such as regional development programs, regional features, and measures to accommodate government agencies, the creation of free economic zones, support of border regions, infrastructure development and incentive measures, and the development of preferential visa and customs regimes.*

**Keywords:** *regional economy, development, capital, tax*

### 1. INTRODUCTION

Experience shows that the level of development of different regions is not the same, what is quite normal and common. Thus, the accumulation of human capital and investment capital is quite different. Given that the process of diffusion of innovations, certain relative equations are also possible. Of course, there have always been economically weaker and more prosperous regions. One of the important reasons for the disproportionate allocation of economic entities across regions is the economic policy pursued by the regional local authorities. In this situation, there is a need for state regulation of the economic development of the regions. The main factor determining the difference between the regions in terms of the level of economic development is the amount of per capita expenditures of regional budgets, taking into account regional differences between the cost of living. The calculations rather use the cost indicator, not the usual income indicator. Thus, the amount of actual expenditures reflects the amount of funds that could be used to finance one or another purpose in the region. Budget loans occupy a special place among the sources of payment of the deficit.

If we refer to them as a financial assistance from the state budget, the differences between revenues and expenditures will be relatively small, with some exceptions.

## **2. THE CONCEPT OF REGIONAL ECONOMIC POLICY**

Regional economic policy can usually be divided into macro and micro policy, the latter in turn being divided into labor impact policy and capital impact policy. In our opinion, this classification is not very convenient. Thus, first of all, it is not always possible to unambiguously attribute this or that measure to this or that type. For example, tax incentives, soft (concessional) loans are both part of capital impact policy and are, at the same time, a macroeconomic tool. Second, grouping of instruments is not always considered correct. For example, all administrative measures, both restrictive and stimulating, form a single group. Tax concessions and subsidies are equally important, although, from a government's point of view, the latter means allocating budgetary resources to regional policy, while tax deductions do not require additional expenditure. Before considering the proposals on the concept of regional economic policy, it should be noted that in our opinion, this concept should be developed taking into account the existing conditions, restrictions and directions of economic policy in the country. First, private capital plays a crucial role in the development of territories in the conditions of the market economy. The state can only influence the investment attractiveness of the regions, but it cannot decide where to locate enterprises or where and how to sell its products instead of individual entrepreneurs. Two alternative approaches are usually used in regional fiscal policy: - the efficient distribution of public funds between regions and the use of various tax instruments by regions to increase their investment attractiveness. Experience shows that countries that generally refuse to pursue regional policy, on the contrary, have been forced to implement it sooner or later after facing large territorial disparities and underutilization of the development potential of individual regions. All laws on investment management in the regions can be divided into two groups: laws that explain in detail the tax benefits provided to investors, and laws that inform investors only about the possibility of receiving concession. The latter, as a rule, require additional normative acts, which, in itself, more complicates the legislation, often making it less stable; in addition, the normative acts required to clarify the law are not always adopted). There is a discrepancy between the regions, regarding tax exemptions to investors. However, it is very likely that they are not of a principled nature. As a rule, it implies extremely significant tax benefits, from tax exemptions to the full provision of invested funds. In other words, in terms of the impact on the economic development of the regions, whether the decisions made are implemented in real life means whether in practice investors receive tax incentives; this, however, cannot be assessed solely on the basis of an analysis of the legislation. All regional policy measures can be classified as restrictive and encouraging. The restrictive measures are mainly aimed at limiting the growth of the largest urban agglomerations. Such measures include, in the best case, various bans on buildings, and in the worst case, the imposition of additional fees, fines and taxes on entrepreneurs during construction.

## **3. PROBLEMS OF COORDINATION OF THE MAIN INSTRUMENTS OF REGIONAL ECONOMIC POLICY**

The integration and coordination of various instruments of regional policy is largely explained by the fact that each of these tools has its own disadvantages and advantages. In the early stages of regional policy, the outflow of the population from troubled regions was constantly observed. More active and skilled workers are coming out of troubled regions, which in turn aggravates the situation of the rest of the population of the degraded areas, and, consequently, their needs are met with less efficiency. As a result of such population movement, additional economic and psychological problems arise.

It is expedient to raise the issue of strengthening fiscal sustainability as one of the strategic goals in order to ensure fiscal sustainability and to achieve the balanced development of large, medium and small businesses in problem regions with the participation of government agencies. Tax breaks are usually provided when paying regional and local taxes. These benefits are expressed in the reduction of tax rates or the complete abolition of taxes for a certain period from the date of commencement of operations in the problem areas. In international practice, discounts encourage reinvestment in place of income and can be automatic or selective, such as subsidies. For example, in many countries, subsidies are provided automatically when the norms set out in this law are followed, and in some cases, this issue is resolved by the regional and local authorities for each specific enterprise. A special type of tax deduction is depreciation. This is more effective. The nature of the dependence of budget loans on income per capita, regardless of whether they are included in the regional budgets, does not differ from the nature of their per capita expenditures. The questions that should be answered within the framework of future improvement of state regulation of economic development of the regions can be summarized as follows:

- Differences in the level of economic development of the territories without interference from central authorities;
- The need to stimulate troubled or promising regions;
- What financial instruments should be used in state regulation of economic development?

The validity of this view is confirmed by foreign experience in the implementation of economic policy. Countries that are trying to implement an intensive policy of reducing regional disproportions have been denied this policy, primarily because of financial constraints. Another reason for the lack of investment may be the inconsistency of tax policy and other actions of regional authorities. Let us assume that in other regions, under favorable tax legislation, other bureaucratic conditions are not so good (for example, in the area of registration and licensing). When there is a need to negotiate concessions with regional leaders, it is very difficult to actually get these or other benefits. It is more convenient to study the impact of tax policy on the economic development of the regions by quantitative indicators of the tax regime. For this purpose, information on the expenditures and revenues of the combined regional budgets, i.e. not only the regional budgets, but also the local budgets, can be used to characterize the economic policy of the regional authorities. The need for this is explained by the need for existing statistics. Thus, the existing reporting forms do not reflect the information required for research on budget system levels. Practice shows that the convenience of legislation does not always compensate for other negative aspects of investment attractiveness. In these cases, it is necessary to analyze the differences between the regions, not only on the nature of economic policy, but also on its outcomes. Thus, if the actions of regional authorities have led to more favorable dynamics of social and economic indicators in the region, then such actions can be considered rational. If a region has allocated more funds for these or other expenditures than the national average, and as a result has not led to any positive processes, then these expenditures can be considered irrational. Budget policies should generally be interpreted as indicators of the role of the public sector in the region, the amount of funds allocated to individual sectors, and cost rationality. Based on this, two groups of indicators are considered:

- Different expenditure items per capita or unit of product produced in the relevant area;
- Indicators of budget deficit.

The level of subsidies of the economy can be used to assess the degree of liberalization of the economic policy of regional governments. However, in our opinion, this approach is doubtful. Based on the available data, two approximate conclusions can be drawn. Either subsidies in different years and in different regions can mean completely different costs, or formally non-

subsidized expenditures may, in some cases, be considered such expenditures. The analysis of the combined regional budgets is completely justified, as in the current system of inter-budgetary inter-regional relations almost all regional authorities are responsible not only for their own policies but also for the policies of other local governments within the region. As it is known, in almost all regions individual norms of deductions from regulatory taxes are used to regulate the redistribution of revenues between local and regional budgets. Regional budgets, such as financial aid to local budgets, are often revised annually. Also, decisions made by regional authorities are not regulated by legislation. When determining the revenues of local budgets in accordance with this rule, their expenditures are determined directly or indirectly by regional authorities. All incentive measures, that is, measures to stimulate economic development in the regions that are left behind by the level of economic development, can be grouped as follows:

- Placement of state enterprises and organizations in the regions;
- Implementation of regional policy measures aimed at increasing the investment attractiveness of the territories, but not providing the support of specific enterprises.
- Providing financial assistance to individual businesses.

#### 4. CONCLUSION

Based on the foregoing, it is advisable to use the following important instruments of regional policy to enhance fiscal stability in our country:

- Strengthening investment assistance;
- Reduction of depreciation rates;
- Development of new tax programs;
- Availability of a soft (concessional) loan program;
- Improvement of regional economic structure;
- Development of projects in the regions that increase the production capacity and improve the quality of products and services;
- To assist in the creation of new jobs and professional development of employees;
- To take the possible measures that will affect the economic development of the regions in the problem areas;
- To develop a mechanism for joint local development of the area based on the perfect program.

In our opinion, the use of the “adaptation” model of state regulation of economic development of the regions is more optimal. Adherence to this model means that its components must be carefully selected in regional economic policy. First, it is possible to reduce the differences between the regions according to the level of economic development, and then to stimulate economic development in the regions with high growth potential. The main problem with selecting a new model of regional policy is the ratio of decentralization and centralization in ensuring regional development. Strengthening the Center's position also touches on the system of property rights over natural resources. The state budget also takes its share of natural resources, primarily from oil and gas production, as well as a large share (much higher than regional). Thus, proposals for the modernization of state policy on the regulation of territorial development are based on the previous paradigm of centralized state support for the territories. The novelty in these proposals is that only centralized objects are affected. An important decision must be made here: a large share of financial resources generated in the regions should be kept in place, taxes should not first be taken to the state budgets so that later to return a small part of them to the regions in the forms of various transfers.

Fiscal centralization can give more freedoms to the regions, stimulate their initiative, intensify the search for solutions to regional problems in accordance with local conditions, and thus give the regions a real chance for economic recovery.

**LITERATURE:**

1. Babkov A.G. 2004, Indicative management of regional economic systems. Nalchik: Polygraphservice and T. 265 c.
2. Bayreyter I.U. 2000. Regional Instrument Financing // ECO. No. 2. 21-26 p.m.
3. Polozkov M.G. 2010, Effective budget alignment in the system of inter-budgetary relations in the region // Finance. No. 4. 39-45 p.

## EFFICIENCY PROBLEMS OF USING HUMAN CAPITAL IN THE CONTEXT OF MODERN CHALLENGES IN AZERBAIJAN

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### **ABSTRACT**

*In the article, the efficiency problems of using human capital in the context of modern challenges, their causes and solutions have been researched. The role of investment in modeling the use of human capital has been explained. The importance of innovative approaches and innovative mechanisms in the productive use of human capital has been emphasized. Modern approaches to the implementation of investment-innovative mechanisms in the effective use of human capital in Azerbaijan have been determined. The importance of taking more effective measures to use human capital on the basis of innovative approaches has been elucidated. The dynamics of researchers working in scientific fields, and research and development organizations in Azerbaijan have been analyzed. Features of approaches to modeling the use of human capital have been identified and assessed. Important aspects of modeling human capital use have been researched and substantiated. A block diagram of the features of approaches to modeling human capital use has been developed. The current state of modeling the use of human capital in Azerbaijan has been analyzed and evaluated. The level of poverty and unemployment in the country, the distribution of the employed population by type of economic activity and the dynamics of gross national income per capita have been analyzed. In the context of economic and structural reforms, the significance of developing and implementing targeted programs for the most efficient use of human capital has been substantiated. In order to diversify the country's economy and reduce its dependence on oil, the importance of active use of human capital potential in taking systematic measures has been indicated. The strategic role of human capital in enhancing the competitiveness of the national economy, creating a national innovation system and accelerating innovative development in the country has been explicate. In accordance with modern challenges, recommendations and suggestions have been developed to increase the efficiency of human capital use in Azerbaijan.*  
**Keywords:** Azerbaijan, diversification, export potential, non-oil industry, non-oil sector

### **1. INTRODUCTION**

It is of strategic importance to model the efficiency of human capital use in accordance with the requirements of modern times and to develop the necessary mechanisms. Adequate evaluation of human resources, efficient use of these resources and creation of necessary environment for realizing intellect and skills are important conditions for the sustainable and balanced development of each country. A lot of work has been done in various countries of the world and these processes are still ongoing. The experience of maintaining the strategic level of human capital use in the USA, which has the strongest economy in the world, is particularly noted. Thus, in the early 2000s, human capital accounted for 77% of the national wealth in the USA and this factor has played an important role in strengthening the United States as a world leader. In the United States, 100 billion dollars are invested in human capital development and financial resources are allocated. The allocation of funds for the development of science at 2.8% of GDP allows for effective organization of scientific research and intensive provision of new discoveries and inventions. The USA allocates 530-540 billion dollars annually for the development of science. Approximately 53% of the country's population has higher education, and and the U.S. accounts for 34% of research and development worldwide. Annual expenditures for strengthening the material and technical base of health services, which are

important for the development of human capital in this country, and increasing the level of development are more than 2.26 trillion dollars (Sokolova I.D. 2018). In terms of the formation and development of the human capital of oil producing countries, Norway's experience is very important for our country. Thus, for many years, Norway has formed a maximum strong and balanced socio-economic development model from oil revenues and created all conditions for the development of human capital. Strong financing of the social system in the country is possible with effective management of oil revenues and maximum diversification of revenues. Furthermore, there are opportunities to allocate funds for processes and measures related to the development of human capital, the implementation of projects (Gilmutdinova ID 2016). In Germany, one of the most developed countries in the world in terms of science and technology, the training of highly qualified and intelligent personnel and the realization of capital acquired by people are kept in focus at the strategic level and in the national conceptual context. For this purpose, necessary measures are implemented systematically and consistently, development funds are created for investment, technology and other fields, and as a result, the effective modeling of the use of human capital is ensured. In Switzerland, where the living standards of the population are very high, state-level measures to model the use of human capital and to use it more effectively have been raised to a fairly appropriate national conceptual level and financing mechanisms have been developed for these measures. In Japan, where the world has achieved significant results in the development of technologies, especially precision instruments, robotics, etc., national economic interests and national conceptual approaches to the efficient use of human capital are given more attention, and the state allocates a large amount of financial resources for the implementation of these measures. In the Republic of South Korea, ensuring effective measures and conceptual approaches to the formation of mechanisms for the efficient use of human capital in the context of global economic challenges is an integral part of the state's economic policy. Moreover, in the field of science and technology, South Korea is already becoming quite strong among the most competitive countries (Osipova GM, Sultasharov BB 2018). In Azerbaijan, taking consistent measures to model the use of human capital in accordance with the requirements of the global era and to provide conceptual approaches are also in focus. Thus, due to the implementation of the Development Concept "Azerbaijan 2020: Look into the Future" approved by the Presidential Decree dated December 29, 2012, significant measures are being taken to develop human capital (Development Concept "Azerbaijan 2020: Look into the Future", 2012). Important work is being done in the country to increase the level of education, strengthen the material and technical base of the health system and develop it on the basis of high technologies.

## **2. LITERATURE REVIEW**

The article contains the views and opinions expressed in the research and scientific works of Azerbaijani and world researchers on the problems and main issues. Approaches to the problems of efficiency in the use of human capital, analyzes and the proposals have been more interesting. The role of institutional measures and mechanisms in modeling the use of human capital have been more emphasized in the scientific works of Y.S. Bogachev, L.V. Vasilieva (Bogachev Y.S., Vasilieva L.V., 2015) and I.D. Gilmutdinova (Gilmutdinova I.D., 2016) and the strategic importance of the human development index being among the key indicators has been indicated. The necessity to make sustainable investments for increasing the efficiency of human capital use, to analyze and assess new challenges and trends in this field, to take necessary measures, and especially to take systematic measures to use existing human resources in all regions of the country have been substantiated in research of E.N. Golovanova (Golovanova E.N., 2008), T.V. Kokuitseva (Kokuitseva T.V., 2014) and E.A. Konopatskaya (Konopatskaya E.A., 2012). Intensification of economic development, the role of human resources in providing high-tech innovative development, the leading importance of



intelligence and the need for the state to take comprehensive measures in this regard have been described in scientific works of M.V.Melanina (Melanina M.V., 2013), G.M.Osipova, B.B. Sultasharov (Osipova G.M., Sultasharov B.B., 2018) and V.V.Perepkin (Perepkin V.V., 2014). The issues on the creation of a favorable environment for the development of human capital and the development of incentive mechanisms for each specialist to reveal their skills and potential have been indicated in the research of E.A.Petrov (Petrov E.A., 2006) and S.N Saharovsky (Saharovsky S.N., 2012). Researches on the problems of efficiency of use of human capital and the solution of important issues in this direction in Azerbaijan have been included in the scientific works of Azerbaijani professors, such as A.Sh.Shakaraliyev and G.A.Shakaraliyev (Shakaraliyev A.Sh., Shakaraliyev G.A., 2016), Sh.T.Aliyev-in (Aliyev Sh.T., 2015; Aliyev Sh.T., 2017 and Aliyev Sh.T., 2018). In the works of T.N.Aliyev (Aliyev T.N., 2016), the preference for innovative approaches in solving the efficiency problems in the use of human capital has been substantiated. Scientific works of the researcher A.H. Tagiyev (Tagiyev A.H., 2018) mainly focused on the problems of use, adoption and application of innovations in Azerbaijan, and formation of intellectual potential in these processes. In the research of another group of researchers, such as J.H.Farajli (Farajli J.H., 2012), V.A.Bayramov (Bayramov V.A., 2018), V.I.Bayramov (Bayramov V.I., 2018), M.N.Zeynalov (Zeynalov M.N., 2017) and N.Abbasov (Abbasov N., 2019), the current issues and problems of human capital use in Azerbaijan in modern times have been researched and the importance of using resources in this field have been underlined. Furthermore, in the context of modern challenges, the new mechanisms and approaches to solving the problems of efficiency in human capital use in Azerbaijan are required, and in-depth research is important in terms of these factors.

### **3. RESEARCH METHOD**

In the context of modern challenges in Azerbaijan, the problems of efficiency in the use of human capital require the solution of many complex issues. New approaches and more productive mechanisms are important for this. Moreover, there is a necessity to take comprehensive and systematic measures for studying the world experience in depth and successfully applying it in Azerbaijan. All this requires the development of maximum productive mechanisms and determination of fairly effective activity styles. More effective methodological approaches are needed on the issues and activity fields under consideration. In order to deal with these tasks, the main methods used in the economy such as analysis, comparative analysis, synthesis, generalization, evaluation and forecasting, as well as the use of the author's observations and approaches have also been emphasized. The advanced world experience and the approaches of countries, which allow to solve the problems of efficiency in the use of human capital have been kept in focus. Methods and approaches that can be useful in solving the problems of efficiency in the use of human capital due to the development of the science and technology market in Azerbaijan, the provision of innovative approaches, the formation of a knowledge economy and the productive use of intellectual resources is also in focus.

### **4. RESULTS AND DISCUSSION**

In the world practice, the processes of human capital development and modeling of related issues have become possible as a result of strategic approaches and consistent measures taken by the state, as well as close cooperation at the international level. In particular, as a result of measures taken by the United Nations, approaches to the use of human capital in countries around the world have become more conceptual, and a system of indicators consisting of many criteria and principles has been formed. Currently, knowledge economy-related issues in about 150 countries around the world are either at an initial level or generally, there are no state policy mechanisms, tools and practical activities in this field.

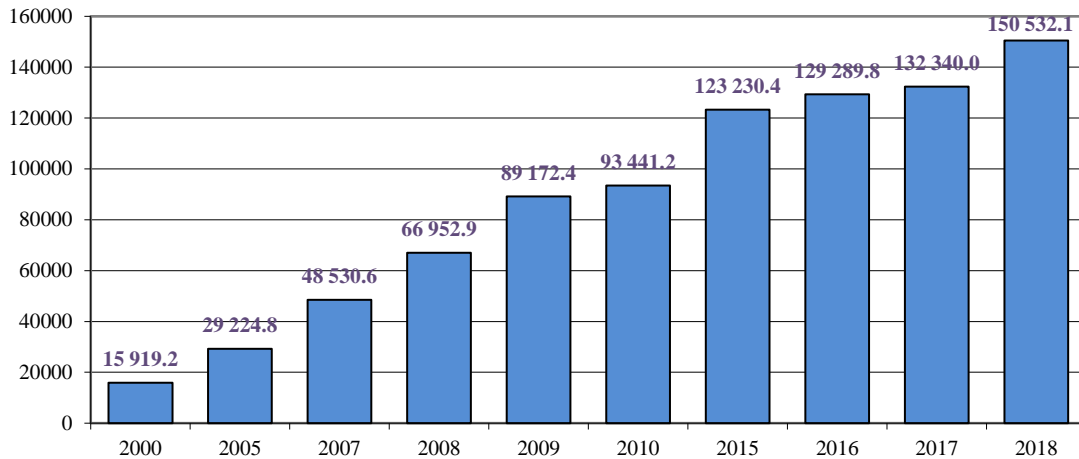
Modern global economic trends and new requirements for innovative development have further increased the role and importance of human capital. In these processes, human capital is the main driving force behind the development of new high-efficiency technologies and their active implementation in the social, scientific, educational and health spheres (Soboleva I., 2009). In addition, it is necessary to have a system of objective indicators in all fields of the use of human capital. Especially, existence of a system of indicators, as well as an evaluation system in higher education institutions is also important (Perepkin V.V., 2014). Investments in the process of organizing knowledge and scientific research in a more fundamental way differ in that they are larger than investments in fixed assets. In the report of the International Bank for Reconstruction and Development, the importance of objective analysis and empirical basis for accelerating the development of human capital in the world, better planning and development of promising projects have been reported (Human Capital Development Project, 2018). The formation and annual publication of an accurate and detailed statistical information system creates favorable conditions for an in-depth analysis of the problems in this field and is important in the formation of the required resources. In order to study the relationship between human capital and other components of productive forces, to develop the necessary mechanisms and to apply them more effectively, it is important to statistically assess the use of human capital and its development, considering the specific characteristics of the country, including the regions (Konopatskaya E.A., 2012). All this could play an important role in the efficient use of human capital and the application of investment-innovative mechanisms. Adequate investment in this field is an important condition for solving the problems of human capital development, and such an approach will ultimately benefit society and the country. The effectiveness of the mechanisms used to attract investment may also be reflected in social production processes (Bogachev Y.S., Vasilieva L.V., 2015). Sustainability of investment attraction should be considered as one of the main conditions for ensuring innovative development.

#### **4.1. Approaches to productivity problems in human capital use in the context of modern challenges and their research**

It is important to research and evaluate the issues related to human capital development (Human capital development: theoretical aspects and valuation methodology 2017). But, first of all, there should be objective statistics for this, and a system of indicators included in the structure of human capital should be formed, accounting should be maintained and an empirical basis should be established by clarifying the structure of human capital in our country in accordance with the challenges of modern times. For instance, measures have been taken to strengthen the material and technical base of healthcare in our country, modern hospital complexes and diagnostic centers have been built and put into use in the central cities and regions. Improvements have been made in health management. However, there are serious changes in this field, including the implementation of compulsory health insurance, changes in the powers of the Ministry of Health of Azerbaijan Republic and institutional reforms in line with the market economy. Therefore, the system of statistical indicators needs to be updated and improved. Similar problems apply to the education system. The improvement of management in education has been significantly accelerated and more modern management models have been preferred. The independence of higher education institutions has been increased, the development priorities of the country's universities have been emphasized and serious work has been done to integrate the education system into the world education sphere. Furthermore, The strategic goals for the development of human capital in the country are defined for the near and long term in the “Strategic Road map for the National Economy Perspective of the Republic of Azerbaijan” approved by the Presidential Decree dated December 06, 2016 and at present, work on the implementation of the tasks of this strategic document is being intensified (Strategic Road map for the National Economy Perspective of the Republic of Azerbaijan, 2016).

In addition, world experience and foreign investment play an important role in intensifying the processes of formation and development of human capital and improving governance by efficiently using the resources, the labor resources and the economic resources in general in the country (Aliyev Sh.T., 2018). In recent years, there has been a decline in investment in Azerbaijan, and this is inconsistent with strategic goals for more affordable and productive modeling of human capital use. Therefore, measures should be taken to improve the existing mechanisms to attract foreign investment to our country. In the period of 2011-2018, the attractiveness of foreign investments has not been so stable, and the oil factor and the oil and gas sector continued to be a priority in this regard. Therefore, most of the investments received during that period has been related to the oil and gas sector. The attractiveness of investments in the non-oil sector, where the human capital is more concentrated, has not been so high. For example, in 2011 this indicator was 900 million US dollars, in 2014 - 1.3 million US dollars, in 2017 - 800 million US dollars, and finally in 2018 - 970 million US dollars. Thus, the share of foreign investment in the non-oil sector in the total volume of foreign investment in the country in 2018 amounted to 11.8%. Overall, 37.8% of investments have been directed to the oil sector. Moreover, the share of foreign investment in the financial sector in foreign investments as a whole in the country is approximately 35.4% (Statistical yearbook of Azerbaijan, 2019). As a result of these analyzes, it is elucidated that the problems of efficiency of the investment environment in our country should be considered as one of the important strategic objective of the state's investment policy, management mechanisms should be fundamentally improved, in particular, more effective management mechanisms for attracting and directing foreign investment should be established. In order to ensure sustainable and balanced economic development in the country, the priorities of actively directing domestic and foreign investment in various sectors of the economy should be reconsidered and the strategy of action should be strengthened. The problems of effective organization of the use of human capital should be considered important. In the current context, problems of modeling conceptual approaches to the formation and development of human capital should be more emphasized. The development of science and technology and the productive use of intellectual resources are important in improving the efficiency of human capital use and the application of investment and innovation mechanisms, and all this requires the expansion of research. At the beginning of 2019, the number of researchers working in the public sphere in our country is 17%, despite the fact that more than half of the country's population lives in rural areas and is engaged in the agricultural sector, the number of researchers in this field is only 4%. Compared to 2000, the number of organizations engaged in research and development has decreased from 95 to 88. We think that new research centers should be established in accordance with modern requirements to model the use of human capital and investment in research should be increased. In Figure 1, the dynamics of total expenditures on research and development in Azerbaijan in 2000-2018 has been indicated. Although these numbers are much higher than in 2000, they are generally much lower than in the world practice.

*Figure following on the next page*



*Figure 1: Dynamics of total expenditures on research and development in Azerbaijan for 2000-2018 years, thousand manats  
(Designed on the basis of ARSSC data – <https://www.stat.gov.az/>)*

In a market economy, the multiplier effect of investment in human capital is quite diverse. Significant measures are already being taken in Azerbaijan to “turn oil capital into human capital” (Investments in human capital, 2018). For more efficient modeling of the use of human capital, it is important to have transparent indicators, the accuracy of financial statements, and the organization of accounting in accordance with modern requirements (Farajli C.H., 2012).

#### **4.2. Important aspects of modelling of human capital use**

Modeling the use of human capital in modern times and developing more accurate approaches are very important issues (Golovanova EN, 2008). Effective development of economic development processes in the country and directing the responsible persons-managers-human capital, who are the executors of the planned measures, to innovation, faster acquisition of creative skills, productive work and increase their motivation are important conditions. The organization of the development of science and technology, the study, development, mastery of innovations and related ideas and their application to production processes are important as important factors in strengthening the country's competitiveness and ensuring the sustainability of economic development processes (Vishnevskaya NG, Yadigarov RF, 2014). If we look at the secular approaches to economic development and the role of man in these processes, we can say that the human factor is of strategic importance in all processes. As a result of large investments in education and health, increase capital investment, systematic and consistent measures to improve people's living conditions, strengthening social infrastructure, creating fertile conditions for increasing people's incomes, ensuring that businesses and business entities operate in a healthy competitive environment in all spheres of society and the economy, eliminating obstacles to business development and additional measures related to the development of entrepreneurship in the country, more favorable conditions are created for more efficient modeling and human capital use. Thus, additional incentives were provided to accelerate the development of these countries, increase their economic power, master new technologies, create innovation infrastructure, organize modern economic mechanisms and areas of activity, including technoparks, technopolises, industrial and innovation parks, scientific and technical parks. In the world economy, balancing resources, the formation and development of new resources remains one of the most difficult challenges (Report of Human Development., 2018). Therefore, in most countries of the world, it is important to increase productivity and ensure economic growth through the development of technology. One of the issues required for the diversification and development of the economy is to provide conceptual

approaches to emerging and identified problems (Petrova E.A., 2006). In this context, the human factor is considered an important component, and therefore the formation of conceptual approaches to issues of global and strategic importance is especially important (Yahnitskaya N.A., 2011). Moreover, one of the more important complex problems is to organize the use of human capital more productively and efficiently, to ensure the concept of formation and development of human capital in accordance with the national economic interests of each country, to model the use of human capital in various sectors of the economy and society (Kokuitseva TV, 2014). In this regard, the state should ensure the implementation of comprehensive and systematic measures, improvement and renewal of existing mechanisms of activity. Furthermore, there should be a policy of formation, development and maximum effective modeling of the use of human capital, and implementation mechanisms should be applied. Human capital includes the skills and resources that a person accumulates within his capacity to act (Melanina M.V., 2013). Objectively evaluating the multifunctional effect of human capital use elements, increasing the education level in the country and improving the health system in line with modern needs, assessing the direct impact of macroeconomic stability and profitability and dynamism of the population on the formation of human capital, increasing transparency in economic development processes, entrepreneurship and business entities, and assessing and considering the problems of concern to the population and society are more diverse.

#### 4.3. Analysis and assessment of the current state of efficiency of human capital use in Azerbaijan

Modelling the human capital use in Azerbaijan and assessing related real situation are important. our country is in the process of deepening economic reforms and accelerating structural reforms within the framework of economic development concepts, strategic roadmaps (Azerbaijan 2020). In this regard, it is important to objectively analyze and assess the current state of human capital use. The efficient use of human capital manifests itself in the formation and growth of national product by considering optimal identification of approaches to modeling the use of human capital and the characteristics of the country's economic development. For a more objective consideration and assessment of this indicator, it is expedient to pay attention to the volume of GDP per capita. In Figure 2, the volume of GDP per capita in Azerbaijan for 2000-2018 years has been indicated.

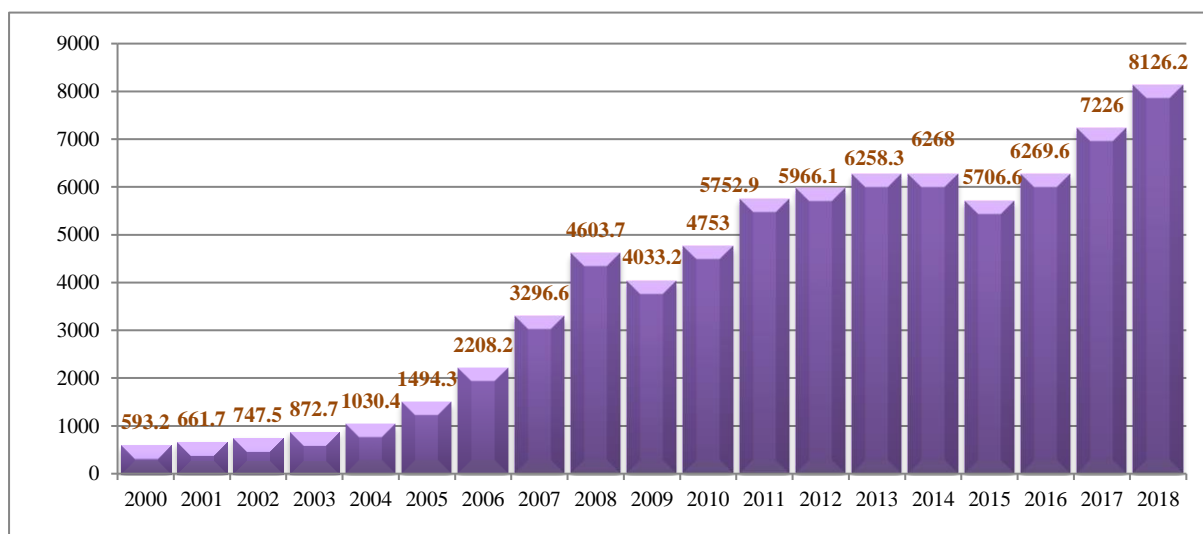


Figure 2: The dynamics of GDP per capita in Azerbaijan for 2000-2018 years, manat  
(Designed on the basis of ARSSC data – <https://www.stat.gov.az/>)

Based on data in the Figure 2, it can be seen that the GDP per capita in our country increased 13.7 times during 200-2018 years and amounted to 8126.2 manats in 2018. However, this indicator has been relatively low in recent years, i.e. after the 2015 year, but increased again in 2016. In dollar terms, the GDP per capita in our country was more than 8 thousand dollars in 2014, and this number was 4.8 thousand dollars in 2018. The double devaluation of the national currency, the manat, has had a negative effect on the country. The poverty rate was 6% in 2005, decreased to 4.9% in 2015, and was 5.1% in 2018. The unemployment rate was 7.3% in 2005, 5% in 2015 and 4.9% in 2018. In terms of these factors, more conceptual consideration of the processes of formation and development of human capital in the context of global impacts, financial and economic crises and in-depth study of problems and effective modeling have a major importance. After the devaluation, important work have been done in our country to eliminate its negative impact, various compensatory measures have been taken, and mechanisms to strengthen the living standards and social protection of the population in the form of a social package have been developed and implemented. The state has managed to develop a mechanism for our citizens and banks to overcome these problems for solving the problem loans, which have accumulated for many years in the national and foreign currencies, part of the population's debts to banks has been compensated, and as a result, positive motivations have increased both in society and in the economy, the solution of people's problems has increased their economic activity and, in general, the development of human capital in the country has been stimulated.

## 5. CONCLUSION

In modern times, as world economic processes enter a new stage of development, existing mechanisms are significantly deformed and therefore the development and application of more advanced mechanisms and tools emerges as an objective necessity. Because of that, modeling the use of human capital, which is the leading and driving force of economic development processes in the context of new challenges and requirements, and it is important to consider this regularity and features:

- One of the important problems in modeling the use of human capital is the in-depth study and objective assessment of the processes happened in this field;
- Activity programs and major projects should be developed and implemented for strengthening the global economic impact, expanding the scale and boundaries of global economic threats to national economies and more efficient use of all national resources to increase the sustainability of the national economy;
- The problems of increasing investment in education for the formation and development of human capital, strengthening the material and technical base of the health system to ensure the physical and mental health of people and improving living standards and housing conditions should be more intensively solved;
- Conditions should be created in the country for more active implementation of innovations in the country and attracting foreign investments in this context, innovation and technology markets should be formed and the processes of commercializing innovation functions and capitalizing profits from the implementation of innovations should be further expanded;
- In order to model and more optimally implement the efficient use of human capital, the development and implementation of long-term strategies such as the "National Strategy for the Development and Efficient Use of Human Capital in Azerbaijan" for 2020-2050 years, should be started and etc.

## LITERATURE:

1. Abbasov N. (2019). The importance of the national innovation system in the economic growth of Azerbaijan // News of ANAS. Economy series. – P. 57-62.

2. Aliyev Sh.T. (2015). Foreign economic policy of Azerbaijan. Sumgait, 2015.-185 p.
3. Aliyev Sh.T. (2017). Ways to increase export potential in the implementation of strategic road maps in Azerbaijan // Audit, № 1, P. 60-66.
4. Aliyev Sh.T. (2018). Economics of Azerbaijan. Sumgait. – 376 p
5. Aliyev T.N. (2016). Innovative industrial development of Azerbaijan: oil refining, chemistry and petrochemicals. Moscow-Berlin, "Palmarium." - 232 p.
6. Azerbaijan 2020: look into the future concept of development (2012). Approved by the Decree of the President of the Republic of Azerbaijan dated December 29, 2012. Baku, 39 p.
7. Bayramov V.A. (2018). The impact of globalization on the national economy // "Scientific works", №4, P.63-68.
8. Bayramov V.İ. (2018). Azerbaijan's economy in 2017: from stability to sustainable development. Center for Economic and Social Development. <http://xalqqazeti.com>
9. Bogachev Y.S., Vasilieva L.V. (2015). To the problem of institutional provision of reproduction of human capital // Statistics issues, (12).–P.27-35.
10. Farajli C.H.(2012). International financial reporting standards are the basis for the development of national accounting standards // "Finance and Accounting".–№ 7.–P.34-38.
11. Gilmutdinova I.D. (2016). Human Development Index of the Kingdom of Norway.//Economic Sciences, № 56-2. <http://novainfo.ru>.
12. Golovanova E.N. (2008). Formation of a model of effective use of investments in human capital of organizations. Diss kand. econ. sciences. Nizhny Novgorod. 131 p. 131 c.
13. Human Capital Development Project (2018). International Bank for Reconstruction and Development / World Bank. –59 p.
14. Human capital development: theoretical aspects and valuation methodology (2017). Ministry of Economy of the Republic of Azerbaijan, Economic Reforms Research Institute. Baku. - 27 p.
15. Investments in human capital (2018) - <http://www.azerbaijan-news.az/view-27100/%C4%B0nsan-kapital%C4%B1na-qoyulan-investisiyalar>.
16. Kokuitseva T.V. (2014). Trends and Prospects of Human Capital Development in Russia//Creative Economy - Vol. 8. - № 10. - P.52-65.
17. Konopatskaya E.A. (2012). Statistical assessment and modelling of human capital development in the regions of the Russian Federation. Diss kand. econ. sciences. Samara, 258 p.
18. Melanina M.V. (2013). The role of human capital in shaping the economy. Knowledge//Almanac of Modern Science and Education, Literacy, No. 7 (71) .- P.123-124.
19. Osipova G.M., Sultasharov B.B. (2018). Approaches to the formation of human capital and the experience of the Republic of Korea. <http://cyberleninka.ru>.
20. Perepkin V.V. (2014). System of evaluation of human capital indicators in innovative university//Scientific result. Economic researches. Tom1, Issue # 2, - <http://rreconomic.ru/journal/article/685/>.
21. Petrov E.A. (2006). Peculiarities of formation and use of human capital in the process of informatization//Fundamental research, № 11, - P. 42-44.
22. Report of Human Development. (2018). UNDP. <http://hdr.undp.org>.
23. Saharovsky S.N. (2012). Institutional Factors of Human Capacity Building // Journal of Institutional Studies. Volume 4, No. 2. - P. 83-92.
24. Shakaraliyev A.Sh., Shakaraliyev G.A. (2016). Azerbaijan's economy: realities and prospects. Baku: "Turkhan" NPB. -536 s.
25. Soboleva I. Paradoxes of measuring human capital (2009). // Economy questions., (9), P. 51-70.
26. Sokolova I.D. (2018). The Role of Human Capital in the US Economy. <http://izron.ru>.

27. Statistical yearbook of Azerbaijan (2019). Baku.– 788 p.
28. Strategic Road Map for the Development of Telecommunication and Information Technologies (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016.
29. Strategic Road map for the National Economy Perspective of the Republic of Azerbaijan (2016). Approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016.
30. Tagiyev A.H. (2018). Innovation (theoretical and applied). Baku, "Taknur", 552 p.
31. Vishnevskaya N.G., Yadigarov R.F. (2014). Human Development Index as an indicator of living standards of the population // Young scientist, № 1, 2014. - P. 351-352.
32. Yahnitskaya, N.A. (2011). Factors of Efficiency of Using Human Capital//Bulletin of the Belarusian State Economic University. - 2011. - N 2. - P. 10-18.
33. Zeynalov M.N. (2017). The main directions of entrepreneurship development according to the strategic road map // “Scientific Works”, №3. – P. 182-188.



## ANALYSIS OF MARKETING ENVIRONMENT OF FOOD INDUSTRY ENTERPRISES

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### ABSTRACT

*Recently, the increase of the number of institutions acting in food industry, also market subjects offering a product to the market of food products of Azerbaijan from foreign countries complicate much more the marketing environment of these institutions. In such complicated condition, the adoption of decisions substantiated on market activity of institutions depends directly on analysis of factors and forces formed that environment. It is impossible to determine the dangers and marketing opportunities opened before institutions in that environment without complex analysis of marketing environment of institutions. By determining the marketing opportunities, the institutions can direct their resources to the needs and demands of people not provided on food products and finally can coordinate to demands of the market. The analysis of marketing environment means the determination of problem to be emerged in market activity of the institution. So, in all cases, the problem arise in marketing activity may concern this or other part (internal and external environment) of marketing environment. From this point of view, the solution of problem reflected itself in marketing environment requests to analyze the marketing environment of institutions and to coordinate to requests of that environment. The analysis of marketing environment of the institutions of food industry may cause these institutions to give opportunity to conformation to requirements of the market, also to regulation of relations needed with institutions including in agrarian-industrial complex. It means the rationalization of marketing activity of institutions and also harmonic development of agrarian-industrial complex. Though marketing is applied at this or other extent as new management conception in institutions acting in Azerbaijan, the institutions can't benefit fully from priorities given by this management conception to them for the present. It regards to non-analysis of marketing environment at necessary level by institutions. Those mentioned indicate the necessity of analysis of marketing environment and also inevitability of formation of efficient relations of institutions with that environment.*

**Keywords:** *food industry, marketing environment, marketing opportunities, dangers, agrarian-industrial complex*

### 1. MODERN DEVELOPMENT STATE OF THE ENTERPRISES OF FOOD AND PROCESSING INDUSTRY

Meeting the demand of the people for food and ensuring the food safety of the country is directly connected with the development of the food industry. Consequently, the food industry is a sector of strategic importance, at the same time important sector of the Azerbaijani economy from social point of view. In 2018, 175 of the enterprises functioning in the food industry of Azerbaijan were medium-sized and big enterprises, and 218 were small-sized enterprises that the most of the mentioned enterprises was private. The number of independent entrepreneurs registered to act in this sector during last five years increased from 3752 to 4754 (26.7%). In total, the value of goods manufactured by the enterprises in this sector increased from 2433.0 million manat to 3050.8 million manat (25.4%) on the current prices of proper years during 2014-2018. Principally, the share of the costs of the goods manufactured in the food industry during this period changed between from 6.4% to 7.3% in the share of the costs of the foods manufactured in the food industry in the country.

The number of people getting involved in the food industry during 2014-2018 years changed between from 18.8 thousand to 21.6 thousand persons. Added value in the sector during the mentioned period comprised 2.0 – 2.5 % of added value in the industry in total. The share of added value in the food industry during the years on the gross domestic product floated between 0.9%-1.0% during last five years. During mentioned period investments to the fixed assets in the food industry increased to a considerable extent and from 92.4 million manat in 2014 came up to 196.6 million manat in 2018. This is the indicator of attractiveness in this sector, in our opinion, this attractiveness will save in future too. Flow of work force to the food industry at the result of modernization of the agriculture of the country from technical and technological standpoint will be observed and consequently the number of enterprises to function in the mentioned sector will increase. The production rate of the following food stuffs changed as follows during last five years analyzed: sausage products increased from 6.6 thousand tones to 16.4 thousand tones (2.5 times), milk with 6-29% fat content increased from 4.6 thousand tones to 7.0 thousand tones (52.2%), cheese and quark production increased from 48.0 thousand tones to 50.1 thousand tones (4.4%), production of fruits and vegetable canning increased from 159.1 thousand tones to 164.7 thousand tones (3.5%), margarine production increased from 24.7 thousand tones to 47.2 thousand tones (91.1%) and cultivation of genuine tea increased from 8.0 thousand tones to 9.3 thousand tones. During the years mentioned, production of noodle products decreased from 9.3 thousand tones to 4.2 thousand tones (54.8%), production of vegetable oils decreased from 106.9 thousand tones to 71.1 thousand tones (33.5%) and sugar production decreased from 410.6 thousand tones to 203.1 thousand tones (50.5%). The country's dependence level from foreign markets on some products of food and processing industry still remains high. After liberalization of foreign economic activity, foreign establishment's stepping up to some segments of food products market enhanced. At present, food industry enterprises face some challenges. One of them is increasing global competition, of course. Foreign specialists write about this: "First challenge has been related with liberalization of foreign economic activity and increasing global competition covering goods, capital and work force. Development of global economic competition is accompanied with reinforcing the geopolitical struggle, including struggle for resources, such as raw material, energy, water and food" (5, p.31). As global competition is getting increased, sustainability the activity of food industry enterprises requires the application of marketing in those enterprises as modern management conception. Because marketing is accepted as a tool allowing the soundness and sustainability of the market activity of the enterprise in the state of competitive struggle.

## **2. MICRO ENVIRONMENT FACTOR ANALYSIS OF FOOD INDUSTRY ENTERPRISES**

As known, marketing environment of food industry enterprises is an overall of active forces and entities having an effect to constitute and keep productive relations between these enterprises and their customers. To control the effect of these forces on the activity of the enterprises is not possible totally. But to conform the requirements of the environment and to have a proper effect on these forces covering the enterprise indirectly (micro environment forces) is possible by surveying them. A problem appeared in the marketing activity of any enterprise is always connected with any part of the marketing environment. It means, the environment should be analyzed to settle the marketing problem and only after this a justified decision on marketing activity should be taken. "“Problem recognition” or “problem generation” means, simply, the effort to identify the specific sides of marketing environment which need additional information” [6, p.72]. Food industry enterprise itself acts as an element or a force of micro marketing environment. The success of the enterprise on the marketing activity is directly dependent from generation of advantageous internal marketing environment

and the marketing support services role in the settlement of this problem is indispensable. Thus, the marketing department of the enterprise acts as a backbone tool of the activity with other departments and ensures the enterprise to conform to the market's requirements coordinating mutual relations among them. The marketing support services are available for the moment in big food industry enterprises in our country and the activity of this service on mutual relations with other departments in some enterprises is not in a proper level. This creates a problem from the standpoint of enterprises' conforming to the market demand and this problem involves the delay in the sale of the products supplied to the market and increase of the ready products in the warehouses of the enterprises. Remarkably, the value of the ready products in the warehouses of the food industry enterprises increased from 17.8 million manat to 38.6 million manat or 2.2 times more during last five years. In our opinion, this problem is related with not surveying the market demand comprehensively, on one hand and lack of proper relations of marketing management structure of the enterprise with other departments, on the other hand. One of the micro environment forces having an effect on the marketing activity of the food industry enterprises is the senders of raw materials and stuffs. These senders of raw materials and stuffs of the enterprise are the enterprises and farms engaged with production of agricultural products. Food manufacturers change the form of the raw materials and stuffs purchased from agricultural producers, add them value and supply the market with differentiated products. These products may be kept for a long term and may be sold easily rather than agricultural products. Average consumption costs in the food industry in Azerbaijan are 77-78% of product output and the important part of these costs is spent for obtaining of raw materials and stuffs. Decreasing these costs allows to improve the competitive preeminence of the enterprises. Thereby, creating long term partnership relations with the senders of raw materials and stuffs is important and this may result with the sustainability of market activity of the food industry enterprises and use of their production force in full. For this purpose, it is very important to improve integration relations basing on contacts among the food and processing industry enterprises and agricultural producers. This means enhancing the rate of development of the agriculture as a base for raw material both for food and processing industry. Note that the role of agricultural producers acting as a sender of raw material to food industry enterprises of the country is very weak in the trade relations with these enterprises. Lack of organization of the producers of agricultural raw materials (agricultural producers do not act in a single position in their trade relations) and low level of their products differentiating reinforces the market position of food industry enterprises in trade relations. Minority of food and processing industry enterprises in the regions and majority of manufacturers sending agricultural raw materials ease the problem to get raw material of these enterprises substantially. The practice to meet the demand of some food industry enterprises of Azerbaijan to agricultural raw material at their own expense is expanded widely during last years. The activity of "Azersun Holding" which ensures proper part of this problem at its own expense and has the greatest market share in the food market is evidently differentiated. Agricultural products are manufactured using advanced technologies by this enterprise and use of human labor is minimum here. This allows it to get the raw material at low cost and results with ensuring its leader position on the costs and increases its competitive level. "Azersun Holding" manufactures, using the agricultural raw material produced by itself, and supplies the market with food stuffs which satisfy consumers. One of important force of micro marketing environment of the enterprises is customers. The customers of manufactured food consist of internal and international customers, distributors and government authorities. The most part of products of the food and processing industry manufactured in Azerbaijan is obtained by the customers of internal market. Proper part of these products is launched to foreign markets. Export of food and processing products decreased substantially in comparison to former years /table 1 /.

*Table 1: Export dynamics of agricultural products used as a food stuff and processed products, in million USD*

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
Export of agricultural products used as a food stuff	250,4	290,4	311,7	372,4	502,1	558,0
Export of food and processed products	575,5	499,4	429,1	123,7	118,1	97,5
Ratio of export value of agricultural products used as a food stuff to value of the exported food and processed products	0,44	0,58	0,73	3,01	4,25	5,72

*Source: The Table was made by author according to the data of State Statistics Committee*

The decrease of export of food and processed products followed by increase of the export of agricultural products used as a food stuff during last years. Thus, studies show that the export of manufactured articles produced using agricultural raw material decreased from USD 499.4 million to USD 97.5 million or 80.5% in 2018 in comparison to 2014. During these years the scope of exported agricultural products from the country increased from USD 290.4 million to USD 558.0 million or 1.9 times more. If the ratio of the value of agricultural products exported from the country to industrial products was equal to 0.58 in 2014, this ratio was equal to 5.72 in 2018. The reason of such sharp change was the decrease of the manufacture of some food and processed products in the country, and at the same time use of not processed agricultural products by foreign consumers. Though the agricultural raw materials of plant origin and fruit are inexpensive in Azerbaijan, the minority of proper processing enterprises does not allow to make use of the raw material in full. It shows that, in fact, great potential opportunities are available for further development of food industry. On the “Strategic road map of production and processing of agricultural products in the Republic of Azerbaijan” regarding the settlement of this problem is written as follows: “Diagnostic analysis will be carried out covering all circles of value chain of every product, establishment of small and medium sized enterprises for processing of fruits and vegetables will be promoted according to the results of the analyses and advantageous business environment will be arranged for their productive activity” [1, p.66]. The level to meet the demand of consumers of the country to some products of animal origin is lower. Such products are meat, meat products, milk and milk products, fish, dairy butter etc. Marketing opportunities before food industry enterprises is mostly connected with these products. But low livestock efficiency index in the country involves low demand to the market of this product. This, consequently, means not meeting the demand to the products of animal origin in full and increase market opportunities of the enterprises. Studies show that real market size of meat and meat products was 26.3% more than its minimum size, carrying capacity was 2.2 and 1.8 times more than its minimum and real capacity consequently. The increase of food market size is mostly related with the increase of market size of products of animal origin. Carrying capacity of fish and fish products is high enough. Market size of this product was equal to the level of its minimum size during past six years. Minimum size of this market changed between 66.4 - 71.1 thousand tones and market size changed between 72.0-76.2 thousand tones during 2013-2018. Market size of some processed products even is not in the level of its minimum size. Dairy butter is in the list of such products. The real market capacity of butter has declined year after year and in 2018 was at 32.7 thousand tonnes. The minimum capacity of the butter market in the same year was 66.3 thousand tons and the ratio of the actual market capacity to the minimum capacity was 49.3%. For this reason, in recent years, the market price of this product has almost doubled. Low number of butter offered to the market almost caused to decide a condition stipulated with raising a special demand against this product.

Such condition caused to suggestion of different type butters those have bad quality and damages to the health of consumers to the market. It shows that, at present, there is more need in Azerbaijan for management of conjuncture and capacity of butter market on the basis of marketing principles and improving of this market. One of the important forces of micro marketing environment of enterprises is competitors. The enterprise, which offers a product to the market of food products, must learn the needs and demands of consumers to get strategic priority and must learn the activity of competitors. For the present, the important part of some segments of this market is seized by foreign country enterprises. It is confirmed with high capacity of indicator for dependence from import on food products which passed from industrial processing /table 2/.

*Table 2: The level of dependence from import in guarantee on some food products which passed from industry processing\* %*

Names of products	2014	2015	2016	2017	2018	Increase/+, decrease/-/in 2018 in comparison with 2014
Purified rice	91,7	90,5	90,0	76,2	80,6	-11,1
Cereals (all kinds)	81,9	82,1	83,2	71,0	73,8	-8,1
Production of dried crust and biscuits, confectionery kept for a long period	82,1	67,8	69,9	62,8	79,7	-2,4
Cocoa, chocolate and sweet confectioneries	98,0	95,4	79,2	82,3	80,2	-17,8
Macaroni foods	53,4	52,1	52,8	55,6	76,0	22,6
Vegetable oils	81,2	73,3	68,9	69,0	72,7	-8,5
Butter	48,2	31,5	24,7	30,3	29,4	-18,8
Sugar	27,2	37,2	15,3	56,3	37,9	10,7
Tea	83,6	87,6	60,6	60,0	62,1	-21,5

\*-  $import / (production + import - export) * 100\%$  calculated

Source: The Table was made by author according to the data of State Statistics Committee

44,5% of enterprises those offer products to food products market of Azerbaijan is large and middle sized enterprises. Large enterprises competing with each other are in low number. The important part of food products market is supervised by “Azersun Holding”. Wine processing enterprises which, offer a product to the segment of alcoholic and soft drinks of this market, act. The activity of “Az-Granata” makes itself more visible as an enterprise offering wide assortment products to the segment of alcoholic and soft drinks of food products market at the last years. So, offer of products differentiated to the market of alcoholic and soft drinks by these enterprises caused to increase of payment level of needs of consumers to those products. The large number of enterprises offering a product to the market of foods products of our country may cause to deepening of competition among them and suggestion of values desired by consumers to them. Therefore, there is a need to improve macro-environment of marketing of enterprises much more.

### **3. ANALYSIS OF MACRO-ENVIRONMENT FACTORS OF FOOD INDUSTRY ENTERPRISES**

#### **3.1. Political and legal environment**

Recently, the political and legal environment of marketing of food industry enterprises is greatly improved. Thus, the number of normative-legal character documents, laws and programs adopted in order to regulate the activities of entrepreneurial structures acting in this area increased much more.

The most important of these documents is “Strategic Road Map of production and processing of agricultural products in Azerbaijan”. As we noted formerly, it is considered in road map to establish small and middle sized processing enterprises in different regions and to deep the competition among them much more. It means increase of capacity and assortment of products those offered to the market of food products and finally increase of payment level of need of population to those products. But, it should be noted that, there is a need for improvement of law base to get more detailed information about processes happened in the market of food products at the present condition. So, food products enterprises include the information about capacity and market shares of products realized by them in the rank of confidential information. It doesn't give an opportunity to get more detailed information on concentration in the market and to adopt adequate decisions on activity of enterprises taking monopolistic position. Therefore, there is a need to expedite the adoption of competition code in our country. At present, the state regulation, state control and coordination in the field of production of food products is realizing by “Food Safety Agency” in Azerbaijan. This organization engages in the activity of normalization in the said field, also activity of normative regulation of food products safety and provides state control over keeping to the legislation about protection of rights of product consumers.

### **3.2. Economic environment**

The number of costs spent for obtaining of food products decreased from 48,2% up to 41,8% in consumption costs of population in 2018 in comparison with 2010. It is the result of increase of profitability level of population sections and increase of profits increase their opportunities for obtaining of food products differentiated by using of agricultural raw material. In its turn, it increased the attractiveness of activity in food products market much more. The fertile economic condition created for entrepreneurial structures offering a product in this market shows the attractiveness of activity in food products market. So, availability of these structures to low-interest loans was provided by means of “Entrepreneurship Development Fund” acting under the Ministry of Economy of the Republic of Azerbaijan. This fund provides the crediting of enterprises realizing the processing of agricultural products - fruit, vegetable, milk and meat. In 2018, 23,1% of credits was issued by funds in order to produce and process different industrial products.

### **3.3. Social environment**

Azerbaijani population grows by almost one percent every year. Increase of the population number and its profitability level will also lead to the increase of capacity of individual segments of the food products market. At the same time, changes in the age structure of the population are reflected and it results in this and other change in the population groups' demand for food products. For example, a slight increase of the portion of elderly population in the composition of total population in Azerbaijan recent years has stipulated the production of products complying with their requirements by the food enterprises. It is more specified in the vegetable and fruit juices enterprises. Thus, these enterprises organize the production of fruit and vegetable juices enriched with nutrients (vitamins) and place them in the eyes of elderly population groups. Based on these changes occurred in the social environment, the assessment of the need for food products and their offer to the market can lead to further improvement of the market position of the enterprises and increase of their competitiveness.

### **3.4. Technological environment**

As equipment used in the production of food products isn't produced in Azerbaijan, enterprises operating in this field obtain the necessary equipment and technologies from developed foreign countries. Large and very small enterprises with high financial resources may achieve to it.

Therefore, costs incurred to technological innovations by the food industry enterprises are high. So, researches show that costs to technological innovations were incurred by these enterprises in 2017 only over the last 5 years and these costs were 1156,7 thousand manat. These costs were directly related to process innovations. In 2018, costs incurred to innovations by the enterprises were equal to totally 81,5 thousand manat and it was related to the product innovations. Due to these costs, the volume of products subject to new and significant changes offered by food companies to the market has continued to increase. So, the food products market was subject to significant changes in the volume of 402,5 thousand manat in 2016, 589,5 thousand manat in 2017 and 831,2 thousand manat in 2018 and a completely new product was offered by clients. It is not so high indicator and shows it that the food industry enterprises of our country do not pay enough attention to scientific-researches and works. In conditions of sufficient production of fruits and vegetables in Azerbaijan (the country's self-sufficiency level for these products was 123.2% and 115% respectively in 2018), the establishment of enterprises that perform the processing of these products may lead to their becoming into larger enterprises. Accelerating the creation of these enterprises and stimulating their access to foreign markets means ensuring their profitable activity at a high level. It is related to the advantages given by the foreign buyers to products offered by the food industry enterprises of Azerbaijan to foreign markets. Such state may lead to rapidly growth of enterprises to be created and increasing their technical and technological armament level.

#### **4. CONCLUSION**

The analysis and evaluation of the marketing environment of food industry enterprises gives as a basis to come to the following important conclusions:

- mutual relations between the marketing management structure and other units of the enterprise should be strengthened to improve the intra-enterprise marketing environment; it means more quickly their compliance with the requirements of the marketing environment of enterprises;
- marketing opportunities that are opened in front of enterprises in the food products market show itself in both animal and plant products; the shortage of the product offering in the animal food products market shows itself more distinctly; It is more advisable that enterprises offering animal food products to market develop their raw material bases (reverse integration) to benefit from these marketing opportunities;
- it is very important to develop contract-based integration relations between food and processing industry enterprises and agricultural product customers; it may also lead to the acceleration of development speed of the agriculture as a raw material base of the food and processing industry;
- the biggest threat or risk faced by the food industry enterprises in the market environment is associated with a stronger exposition of foreign enterprises in some segments of this market; avoidance of these threats by the local enterprises is possible on the basis of improvement of the application of the marketing conception by them;
- the adoption of a competition code should be accelerated to have a clear idea of the market concentration process; it may allow to obtain necessary information on the volume of products realized and offered to the food products market by separate enterprises and on enterprises holding a monopolistic position.

The implementation of aforementioned measures may allow to strengthen the market position of local enterprises and to reduce the dependence level of Azerbaijan's food products segment on international markets.

**LITERATURE:**

1. “Strategic Road Map of production and processing of agricultural products in the Republic of Azerbaijan”. Decree dated 6 December 2016 of the President of the Republic of Azerbaijan.
2. ”State Program for ensuring food safety in Republic of Azerbaijan for 2019-2025”. Order dated 29 April 2019 of the President of the Republic of Azerbaijan.
3. Kheyirkhabarov I.M. Export potential of agrarian and industrial complex and opportunities for its increase//Materials of the Republican Scientific Conference on the theme of “Economic development strategy of Azerbaijan”, Baku, UNEC, 24 December 2019, s. 278-282.
4. Aaker D. A. Business strategy: from studying the market environment to developing win-win solutions. - M.: Eksmo, 2007, page 464
5. The concept of development of food and processing industry of the Russian Federation for the period up to 2020 / K.V. Kolonchin, S.N. Seregin and others; under. ed. IN AND. Nechaeva. - Krasnodar: Enlightenment - South, 2011, page 306
6. Churchill G., Brown T. Marketing Research. 5th ed. / Per. with eng. Ed. G. L. Bagiev. - St. Petersburg: Peter, 2010, page 700



# ONE BELT AND ONE ROAD: PARTICIPATION AND ROLE OF AZERBAIJAN IN THE IMPLEMENTATION OF THE MEGAPROJECT

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## ABSTRACT

*The philosophy of the initiative "one belt, one road" is to search for, shape and promote a new model of international cooperation and development by strengthening existing regional bilateral and multilateral mechanisms and structures of interaction with participation of China. People's Republic of China's cooperation with Azerbaijan under the program "one belt, one road" has been successfully and steadily developing in various directions. The "one belt, one road" initiative has provided tremendous opportunities for bringing China and Azerbaijan closer together. A trade representative office of Azerbaijan has opened in Beijing. The trade mission is associated with the promotion of the made in Azerbaijan brand, attracting Chinese investment in the economy of Azerbaijan and protecting the interests of Azerbaijan companies. Azerbaijan attaches the great importance to cooperation with China and is interested in deepening trade and economic cooperation with this country, as China is one of the main suppliers of products to Azerbaijan, taking the third place in the import of products. In addition, the "one Belt, one Road" is aimed at building a corridor between two continents – Europe and Asia, and Azerbaijan will be the main link and provider of Internet and other digital services to the countries of the so-called new digital Silk Road.*

**Keywords:** *Belt and Road, Silk Road, Trans-Caspian Transport Corridor, Chinese Economy, Azerbaijan Economy, Made in Azerbaijan*

## 1. INTRODUCTION

People's Republic of China's cooperation with Azerbaijan within the framework of the program "one belt, one road" is successfully and steadily developing in various directions. Azerbaijan is becoming one of the important areas for the implementation of the strategy "one belt, one road" put forward in the 2010-years of the People's Republic of China (PRC) of the proposal for the joint projects of the Silk Road Economic belt and the twenty first Century Sea Silk Road. Over 25 years of cooperation between China and Azerbaijan, the trade turnover of the parties has increased 500 times, reaching 770 million dollars. At the end of 2017, it amounted to a record 1.2 billion dollars, that is 43% more than in 2016. China ranks 4th among Azerbaijan's main foreign trade partners, including 3rd in imports and 8th in exports (Mamedov 3, 2020). The "one belt, one road" initiative has provided huge opportunities for bringing China and Azerbaijan closer together. A trade representative office of Azerbaijan has opened in Beijing. The trade mission is associated with the promotion of the Made in Azerbaijan brand, attracting Chinese investment in the economy of Azerbaijan and protecting the interests of Azerbaijani companies. Important infrastructure projects such as the Baku-Tbilisi-Kars railway and the Baku international sea trade route, which provide the shortest rail link between Europe and China, are of great importance for the "one belt, one road" initiative.

## 2. PHILOSOPHY OF THE "BELT AND ROAD" PROJECT»

The philosophy of this initiative is to search for, form and promote a new model of international cooperation and development by strengthening existing regional bilateral and multilateral mechanisms and structures of interaction with China. Based on the continuation and

development of the spirit of the ancient Silk Road, "one belt, one road" calls for the development of new mechanisms for regional economic development of partnerships, promoting economic prosperity of the involved countries, strengthening cultural exchanges and links in all areas between different civilizations, and promoting peace and sustainable development. According to official Chinese data, the "one belt and one road" covers most of Eurasia, connecting developing countries, including "new economies", and developed countries. Experts called the launch of the Chinese megaproject "one belt, one road" "the beginning of the third stage of globalization with Chinese characteristics". The territory of the megaproject contains the rich reserves of resources, 63% of the world's population lives, and the estimated economic scale is 21 trillion US dollars. At the same time, China is making efforts to create an image of a reliable partner that does not have political intentions. Only within the framework of the megaproject, investments worth more than 900 billion dollars have already been announced in 65 countries (Akaev A. A., Sadovnichy V. A. 2014, p 24-25). Although the initiative of the president of the People's Republic of China Xi Jinping to create the "belt and road" is primarily based on concern for accelerating the development of the national economy, it should be noted that due to the objectivity and irreversibility of the laws of interregional economic integration, this project also acquires a cumulative character, stimulating the development of the world economy. Chinese economists say that the implementation of the president initiative of the People's Republic of China will stimulate global GDP growth by 1.75 percentage points. According to S. L. Sazonov, in the future, the implementation of Xi Jinping's initiative may lead to the formation of a new architecture of the world economy, where the center will be China, and the main connecting links will be Russia, the countries of Central and South-East Asia (Sazonov S. L. 2018. p.10).

### **3. AZERBAIJAN AS AN ACTIVE ECONOMIC PLAYER IN THE FRAMEWORK OF THE INITIATIVE "ONE BELT, ONE ROAD"**

Today, the "one belt, one road" initiative is being successfully promoted not only in Europe, Russia, Central Asia, and South-East Asia, but also in the South Caucasus region. Azerbaijan, as one of the important countries of the historical Silk Road, located in the center of Eurasia, at the junction of East and West, based on its historical traditions is still actively involved in the creation of international trade corridors. The "one belt, one road" initiative has provided huge opportunities for bringing China and Azerbaijan closer together. In December 2015, during the visit president of Azerbaijan Ilham Aliyev to China, a Memorandum of understanding was signed to jointly promote the creation of the Silk Road Economic belt, thereby expressing Azerbaijan's support for this initiative [3]. This initiative is well combined with the national development strategy of Azerbaijan, thanks to which bilateral practical cooperation in trade, economic, transport, energy and other spheres is constantly bearing fruits. In April 2015, Azerbaijan became a founding member of the Asian infrastructure investment Bank, and in July it became a dialogue partner of the Shanghai cooperation organization. In December 2015, during the visit of President Ilham Aliyev to China, the parties signed a Memorandum of understanding on the joint construction of the "Silk Road" economic belt. Great things are being done in Azerbaijan in the direction of modernizing the country's transport and transit potential: the Baku cargo terminal, six international airports in Azerbaijan, the Alyat commercial port, the cargo fleet in the Caspian sea, which has the most modern cargo ships, and the Baku-Tbilisi-Kars railway, which was commissioned in 2017 and provides the shortest railway connection between Europe and China. The participation of Azerbaijani President Ilham Aliyev at the second international forum "one belt, one road" on April 26-27, 2019 in Beijing confirmed Baku's increased interest in this international format. Moreover, Aliyev arrived in People's Republic of China two days before the start of this international event and held meetings with both the political leadership of China, led by Xi Jinping, and representatives of the business

elite. The signing of 10 documents worth 821 million dollars between Azerbaijani and Chinese companies within the framework of the forum shows great prospects for trade and economic relations between the countries, particularly cooperation under the initiative "one belt, one road" [<https://az.sputniknews.ru/economy/20190412/420010162/azerbaijan-china-iniciativa-hajjiev.html>]. In addition, the state oil Fund of Azerbaijan invested about 400 million dollars in securities of the Central Bank of the People's Republic of China. For Baku, an important result was the agreement on transit through the territory of Azerbaijan via the TRANS-Caspian transport corridor of 2.5 thousand containers per year. Of course, this is a very modest amount, but regular transportation has been established from the eastern point of the "Silk Road". Another important agreement for Azerbaijan was the contract for the export of Azerbaijani wines to the Chinese market. This can be considered a successful step for Baku, which is making efforts to diversify its exports and reduce its dependence on oil sales. The establishment of the Azerbaijan Trade house in Chengdu, an agreement on which the parties have signed in an official Memorandum, will undoubtedly contribute to the promotion of Azerbaijani exports. The Chinese side turned out to be not in the overlay, its firms received contracts for hundreds of millions dollars. In particular, the contracts were signed for construction on the territory of Sumgait chemical industrial Park plant for the production of automobile tires, the construction of a greenhouse complex with an area of 300 hectares in Kurdamir region of Azerbaijan, the construction of agricultural logistics industrial parks in Guba, Goychay, Khachmaz districts in the North of the country, where fertile conditions for the development of agriculture. The parties also signed agreements to create an Asian-European telecommunications corridor within the framework of the "Azerbaijan Digital HUB" program. Azerbaijan is an active player in the framework of the initiative "one belt, one road". Azerbaijan is the only country that is a member of the East-West and North-South transport corridors. The modernization of our railway systems, the construction of the largest sea port on the Caspian coast with a cargo handling capacity of about 25 million tons, and the construction of the Baku-Tbilisi-Kars railway, which connects us with Turkey and Europe by creating a missing link between Europe and Asia, open up good opportunities for those who want to use our routes. This railway, commissioned on October 30, 2017 and created on the historical Silk Road, is designed to connect the Trans-European and Trans-Asian railway networks. On the one hand, this project is very attractive for the Central Asian region - it facilitates the entry of Turkmenistan, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and also Afghanistan to the European and world markets. On the other hand, the Baku-Tbilisi-Kars railway route is also more important for China, as it provides easier access for Chinese goods to European markets. Since the country's domestic production is growing, today Beijing is interested in increasing the volume of deliveries of its cargo to Europe and searching for alternative routes. Important infrastructure projects such as the Baku-Tbilisi-Kars railway and the Baku international sea trade route, providing the shortest rail link between Europe and China, are of great importance for the initiative "one belt, one road". China, as the world's largest exporter and second largest importer, also shows the great interest in this railway. In addition, this railway will increase the effectiveness of the strategy "one belt, one road". China is getting faster access to Europe through Azerbaijan. The first China Railway Express freight train arrived in Turkey via the Baku-Tbilisi-Kars railway, which left from the Chinese city of Shiyan as part of the "one belt, one road" project. Then the train reached Europe via the transcontinental underwater tunnel "Marmaray" (under the Bosphorus Strait). The China Railway Express train left the Chinese city of Shiyan, the composition of 21 cars with a length of 820 meters, carries 42 containers. In 12 days, he has covered about 11, 5 thousand kilometers, passing through 10 countries, and will soon arrive in Prague. The "middle transport corridor", also called the "iron silk road", runs along the Baku-Tbilisi-Kars railway and through the Marmaray tunnel, connecting Europe with Asia. It is planned that this route will reduce the cost and time for transporting goods from China to Europe.

The Azerbaijani project is not in words, but in practice embedded in the Grand Chinese initiative "one belt, one road", designed to unite the continents through a belt of economic cooperation. The initiative "one belt, one road", while opening up new opportunities in the transport sector, at the same time encourages trade, tourism, contacts between peoples and serves to promote stability, security and peace in the Eurasianspace "[[https://azertag.az/ru/xeber/Odin\\_poyas\\_odin\\_put\\_proekt\\_predstavlyayushchii\\_dlya\\_regiona\\_bolshoe\\_znachenie-1266608](https://azertag.az/ru/xeber/Odin_poyas_odin_put_proekt_predstavlyayushchii_dlya_regiona_bolshoe_znachenie-1266608)]. A free trade zone is being created on the territory of the Baku international commercial sea port, which will be of particular importance in making Azerbaijan an international transport hub. The Chinese side actively looks at the Baku international commercial port in Alat. It is obvious that Azerbaijan is becoming an important transport and logistics center in the region, and the above-mentioned projects can contribute to the development of the initiative "one belt, one road" in the future. Azerbaijan attaches great importance to cooperation with China and is interested in deepening trade and economic cooperation with this country, as China is one of the main suppliers of products to Azerbaijan, taking the third place with 586.38 million dollars in the import of products. The fact that Chinese companies have invested about 800 million US dollars in Azerbaijan in these days shows that the Azerbaijani-Chinese cooperation has successful prospects. The successful cooperation between China and Azerbaijan is also confirmed by figures. For example, in 1992 the bilateral trade turnover was 1.5 million dollars, in 2017 this figure, having increased more than 800 times, reached 1.298 billion dollars. Exports for the year increased by 63.75 percent, to 443.8 million dollars, and imports - by 21.4 percent, to 854.5 million dollars [<http://eurasiaaz.com/ru/main/7-azerbaydzhan-vazhnoe-zveno-novogo-shelkovogo-puti-v-evropu.html>]. Last year the main export goods from Azerbaijan to China were chemical products, fuel, plastics and products made from it. Over the past year, electrical equipment, equipment and spare parts, vehicles and spare parts, clothing and parts, ceramic products and household items were imported from China to Azerbaijan. The positive dynamics in trade, the agreements reached between Azerbaijani and Chinese companies this year on the supply of Azerbaijani products to China and the opening of the Azerbaijani wine house in Urumqi, give grounds to conclude that the trade turnover between the two countries will grow consistently. According to the latest data from the state customs Committee of Azerbaijan, the trade turnover between Azerbaijan and China in January-July 2018 has already exceeded 616 million dollars. Chinese investors have invested more than 800 million dollars in Azerbaijan, on the other hand, the volume of investments invested by Azerbaijan in the Chinese economy is twice that amount and reaches 1.7 billion US currency. Last year according to the official data, Azerbaijan's trade turnover with China amounted to 1.31 billion dollars. At the same time, national exports to China amounted to 114 million dollars., while imports of Chinese goods to Azerbaijan are estimated at \$ 1.196 billion. There are 113 companies with Chinese capital operating in Azerbaijan that work in the fields of construction, agriculture, communications, services, trade and others. I would like to note that despite the geographical distance from each other, Azerbaijani-Chinese relations are doomed to success. Firstly, both countries have a desire to continue cooperation not only at the bilateral, but also at the multilateral level; secondly, Azerbaijan is attractive to China not only within the framework of the initiative "one belt, one road", but also in terms of cooperation in the field of oil and gas [8]. The Azerbaijani oil company SOCAR, has been cooperating for 15 years with the Chinese national oil and gas Corporation (CNPC), from which it purchased equipment for the petrochemical sector worth more than 500 million dollars. During the "Belt and road" forum, the companies signed a Memorandum of understanding within the SOCAR GPC project, as well as an agreement on preliminary detailed design of a gas processing plant and a polyethylene petrochemical complex. As part of the GPC project, it is planned to create a gas processing and petrochemical complex 15 km from Baku, with a capacity of about 10 billion cubic meters of gas per year, as

well as a number of gas processing plants. The cost of the SOCAR GPC project, according to initial estimates, is approximately 4 billion dollars (Mokretsky A., 2019).

#### **4. PARTICIPATION OF "AZERBAIJAN DIGITAL HUB" IN THE INITIATIVE ONE BELT, ONE ROAD PROJECT**

The Chinese side is actively interested in establishing cooperation with Azerbaijan in the field of information and communication technologies, which has grown even more in the light of the launch of the first Azerbaijani telecommunications satellite, Azerspace. "High-tech Park" of the National Academy of Sciences of Azerbaijan will create a portal that will become a platform for establishing ties between entrepreneurs of China and Azerbaijan. The "Digital HUB" program involves creating a "Trans-Caspian highway" along the historical Silk Road from Azerbaijan to Central Asia along the bottom of the Caspian Sea. Speaking about the advantages that the Trans-Caspian fiber-optic cable line will have, first of all, it should be noted that the route of the line is short due to the unique geographic location of Azerbaijan. The country is located in the center of the North-South and East-West corridor. This will eliminate problems with data transmission delay. Currently, this problem is relevant in all routes of the Silk Road. Secondly, the Trans-Caspian route is designed to fully meet the needs of transit routes between Europe and Asia. The Azerbaijan-Kazakhstan route provides for the delivery of Internet traffic from Europe to Asia. Transit telecommunications routes in this direction will go to China and neighboring countries through the territory of Azerbaijan. Today, one of the directions of these routes passes through Russia. Its length is about 11 thousand km. The second route in China to the South across the ocean. They connect various data centers in the EU where Internet traffic originates. Data centers are mainly located in Frankfurt, London, Amsterdam, Sofia, etc. The length of the route through Azerbaijan will be approximately 9 thousand km. The new route will be the shortest and most profitable (Allahverdiyev F., 2020). The project is a component and strong link of a more global project that provides for the construction of a backbone infrastructure between Europe and Asia. In other words, Azerbaijan will become a telecommunications corridor of the Belt and Road project initiated by the Chinese government. The main characteristic of this project is its scale. According to official publications, the project will unite at least 60 countries with a total GDP of more than 28% of world GDP (Аббасов А., Мамедов З. Ф., 2019).

#### **5. CONCLUSION**

Azerbaijan, which is one of the important countries of the historical Silk Road, located in the center of Eurasia, at the junction of East and West, is still actively involved in the creation of international trade corridors, based on its historical traditions. This initiative is well combined with the national development strategy of Azerbaijan, thanks to which bilateral practical cooperation in trade, economic, transport, energy and other spheres is constantly bearing fruits. Thus, for Azerbaijan, supporting the initiative "one belt, one road" is a win-win option, both in economic, political and geopolitical contexts. Baku can use this opportunity to realize its transit potential more fully. At the same time, it is improving its political relations with China and Russia by supporting the idea of Eurasian integration. Baku's actions in this direction do not create problems in relations with the West, since the transport corridor proposed by Azerbaijan serves to develop global trade and communications. One belt, one road is aimed at building a corridor between two continents – Europe and Asia, and Azerbaijan will be the main link and provider of Internet and other digital services to the countries of so-called the new Digital Silk Road. In addition, Azerbaijan's participation in the new Digital Silk Road project will provide the country with advantages in creating and developing a digital ecosystem and accelerate the digital transformation of all spheres of life, which will allow our country to occupy a leading position in international rankings.

## LITERATURE:

1. Акаев А. А., Садовничий В. А. Математическое моделирование и прогнозирование китайского мегапроекта «Один пояс – один путь и его влияния на долгосрочное экономическое развитие Евросоюза, Китая и России //ООО "Издательство "Учитель", 2014
2. Аллахвердиев Фуад. “Azerbaijan Digital Hub// «Цифровая экономика: современные призывы и реальные возможности», 13-14 февраля 2020. Г. Баку. <https://infocity.az/2020/02/programma-azerbaijan-digital-hub-by-la-predstavlena-v-ramkah-mezhdunarodnoj-konferentsii/>
3. Аббасов А.М., Мамедов З.Ф. Цифровизация банковского сектора: новые вызовы и перспективы // Журнал: Экономика и управление. 2019 № 6. 81-89
4. Мамедов З.Ф. Участие Азербайджана в проекте «Один пояс — один путь» // «25-летие евразийской интеграции: истоки, реалии, потенциал» Евразийского научный форум 18 декабря 2019 года в Университете при МПА Евразии. Издательство-Университета при МПА ЕврАзЭС,2020.
5. Мамедов Сеймур. China Daily: Азербайджан – важное звено Нового шелкового пути в Европу <http://eurasiaaz.com/ru/main/7-azerbaydzhan-vazhnoe-zveno-novogo-shelkovo-go-puti-v-evropu.html>. 31-октябрь-2018
6. Мокрецкий А.Ч.(2018) Страны Закавказья в китайской стратегии «Экономический пояс шелкового пути» Международные отношения КНР / <https://cyberleninka.ru/article/n/strany-zakavkazy-a-v-kitayskoj-strategii-ekonomicheskij-poyas-shelkovogo-puti>
7. Сазонов С.Л. План строительства «пояса и пути» как приоритетный национальный проект экономического развития КНР Большая Евразия: Развитие, безопасность, сотрудничество// Ежегодник. Вып. 1. Ч. 1 / РАН. ИНИОН. Отд. науч. сотрудничества; – М., 2018. – 612 с.

## IMPACT OF FOREIGN INVESTMENT DEVELOPMENT ON BUSINESS IN AZERBAIJAN

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### ABSTRACT

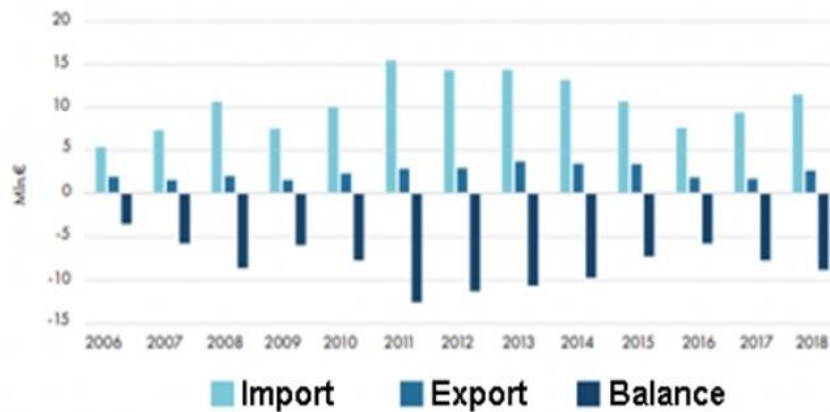
*One of the main challenges of the post-oil era in Azerbaijan is the need to attract more foreign investment. The European Union is Azerbaijan's largest economic partner and It accounts for the majority of trade and foreign investment in the country. 1, 600 EU companies operate in our country. 42% of Azerbaijan's trade turnover was with EU countries. So far, EU countries have invested \$ 33 billion in Azerbaijan's economy. Azerbaijan has invested \$ 15 billion in the EU. One of the main challenges of the post-oil era in Azerbaijan is the need to attract more foreign investment. Therefore, in addition to attracting more investment, how to attract it, under what conditions and in which sector it is part of the investment strategy. On the contrary, in recent years there has been a slowdown in the flow of foreign investment in our country. According to the Central Bank, \$ 4.1 billion worth of foreign direct investment was invested in the Azerbaijani economy in 2018, which is 28.1% lower than last year. According to the balance of payments for 2018, 76.5% of foreign direct investment was made in the oil and gas sector. Compared to 2017, the amount of foreign direct investment in the non-oil sector increased by 18.9% and in 2018 amounted to \$ 967.1 million. The article conducted various surveys among European investors about our country. There have been assessments of different areas of business as well as different sectors. The survey summarized the results of 25 business environment indicators. This research paper focuses on how to mobilize potential investment based on surveys and how to take advantage of external impulses in economic development. Improvement measures have been explored to turn economic opportunities into economic chances.*

**Keywords:** *foreign investment, economic integration, European Union, economic, non-oil sector, import-export operations, European investors*

### 1. INTRODUCTION

European investors, like other global civil investors, are attentive to international country reports. They refer to reliable sources and they pay special attention to balanced research. From this point of view, several reports related to the investment climate in Azerbaijan attract attention. On the global scale, they pay special attention to several factors directly attracting foreign investments. For example, World Bank researchers conducted a survey among managers of 754 international companies operating in a number of countries around the world. According to the results of this survey, among the factors directly related to investments, the initial places are as follows: (i) political stability and security in the country (50% of respondents consider this very important, 37% are noted as important); (ii) legal and regulated environment (40% and 46% respectively); (iii) scale of the domestic market (42% and 38%); (iv) macroeconomic stability and exchange rate (34% and 44%). [1] It is very interesting that another important document on the state of the investment climate in Azerbaijan was recently announced. The US Department of State published the Report on Investment Climate in Azerbaijan in 2019. It highlighted several points of concern for investors in our country: (i) property integrity, especially legal problems in the field of intellectual property, (ii) inadmissibility of fair judgments in the judicial legal system and the absence of an independent

judiciary, (iii) strong monopoly business trends and serious defects in the competitive environment, (iv) Weak development of the securities market and major problems in the banking sector, (v) inaccessibility of information related to the use of public funds by natural (state) companies [2]. If the basis of economic relations between Azerbaijan and the EU is the export of oil and gas, then we, in that case, can consider this economic and political space as a market for the export of natural resources. If non-oil export has a specific weight in this market and there is no straight line dependence of import-export operations, then this market will be of particular importance for us. This, in turn, brings to the surface the question of the importance of integration. Attention should be paid to several important points of economic integration at the present moment of Azerbaijan's relations with the EU countries. The EU countries continue to be the main trading partners of Azerbaijan: they account for 54.3% of total exports and 20.3% of the country's imports as a whole. And there are no reasons for explaining the importance of intensifying ties with this economic and political bloc, whose share in our foreign trade turnover is 42%. For reference, we note that 1,600 EU companies operate in Azerbaijan.



Avropa İttifaqı, Azərbaycan ilə ticarət, [https://webgate.ec.europa.eu/isdb\\_results/foctsheets/country/details\\_azerbaijan\\_en.pdf](https://webgate.ec.europa.eu/isdb_results/foctsheets/country/details_azerbaijan_en.pdf)

Figure 1: General trade - EU trade flow and balance, annual information for 2006-2018

Along with trade relations, opportunities arose for cooperation in the direction of the mutual investment flow of both conglomerates. Until now, the EU countries have invested 33 billion dollars in the economy of Azerbaijan. Azerbaijan has invested 15 billion dollars in EU countries. In terms of geographical classification, the European Union continues to be one of the two largest economic partners. It turns out that the most important part of trade, and in general a small part of foreign investment (\$ 263 billion) falls on the EU.

## 2. REFLECTIONS OF EUROPEAN INVESTORS

What European investors think about the future of Azerbaijan's economy is very important, because innovative technologies and advanced production opportunities from EU countries can be of benefit to our country. The opinions of investors from the EU about the situation in our country give reason to think. The document of the German-Azerbaijan Chamber of Commerce under the title [3]. Conducted surveys covering the opinions and behavior of European investors. Some of them are worth special mention. Thus, 48% of companies are satisfied with the stability in the country and 45% regard it as an average level. During the year, the number of companies that regarded state governance as satisfactory decreased by 12%, but most companies (60%) believe that this figure is still at an average level.



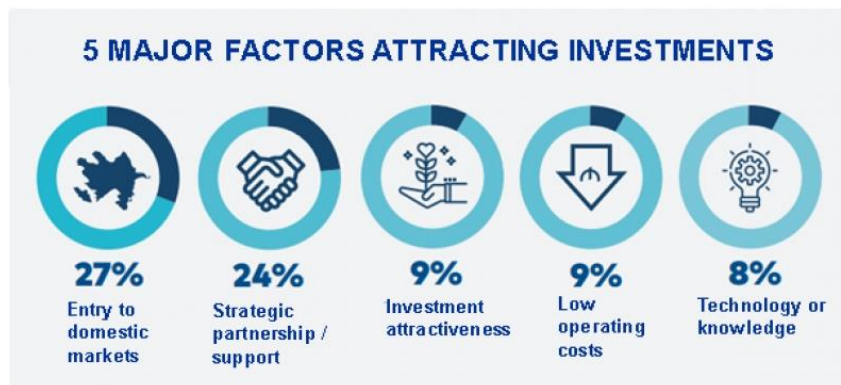


Figure 2: 5 major factors attracting investments

The increase in the number of European investors over the past 2 years and the expansion of their business in our country (an increase from 40% in 2016 to 66% in 2018) does not mean at all that we have the appropriate ground for the investment climate. The sectoral dominance of these investments continues to be in the oil and gas sector. When conducting an intersectoral analysis, it turns out that, compared to last year, the decisions of oil and gas companies (14 out of 18 companies) regarding investments this year (17 out of 18 companies) were more categorical. This shows the preservation of the good basis for the development of foreign investment in the Azerbaijani oil and gas sector. The main reason for the positive development of the dynamics of investment plans for the non-oil sector is again the construction sector. A detailed analysis of both of these results shows that, on the part of EU companies, the indicators of the business environment are mainly assessed as "medium". In the past two surveys of 25 business indicators, a deterioration of 2 was indicated (lack of specialized personnel and customs rules). And this year, EU companies have noted deterioration in 17 indicators. During the interview and during the discussion in closed groups, one point was particularly appreciated, according to which the lack of favorable credit conditions, as well as an opaque justice system, reduce the country's attractiveness for investment. In order to attract foreign companies and investors to the country and closely cooperate with the business community, it is necessary to prepare practical and long-term solutions. Investment searches covering a short period of time cannot produce long-term results. There is a need for business cooperation that meets worldly civil conditions, long-term cooperation, covering comprehensive negotiations with the business community, accelerated completion of procedures that accelerate WTO accession, as well as reaching signatures with the EU containing the real essence of the agreements (Association Agreement, In-depth Agreement). According to the responses of companies from the EU given during the survey, the situation with the transparency of public procurement, access to public funds and the assessment of customs tariffs continues to be unsatisfactory. At the same time, it is especially noted that this year the opinion of companies from the EU on the tax burden, as well as on tax policy and tax authorities, has changed for the better. Along with this, some positive aspects in the field of taxation are also emphasized. Unsubstantiated and redundant tax audits have already been eliminated. As a citizen of Azerbaijan, I would like to wish the changes in relation to companies from the EU to spread to representatives of the local private sector. The Report also shows that this year, in percentage terms, the share of companies from the EU that effectively evaluate the tax system increased from 33% in 2018 to 45%.

### 3. INFLUENCE VECTORS OF INSTITUTIONAL MEASURES: BUSINESS CLIMATE AND FOREIGN INVESTMENT

The problems of the business environment have become even more aggravated after the decision on the 2015 devaluation. The recession caused by devaluation had a particularly strong impact on the country's financial sector the following year. After a sharp drop in oil prices and

a double devaluation of the national currency, due to the fact that most of the deposits were in foreign currency, in January 2016 the dollarization level was 82.5%, overdue loans - 24%, and annual inflation reached 12.9%. After that, the volume of GDP, the main macroeconomic indicator of the country, began to decline every year. 2017 was remembered by economic growth of 0.1% or staying on the verge of stagnation. In 2018, the growth rate of the Azerbaijani economy reached 1.4%. The instability or decline of macroeconomic parameters required investors to be more careful in making decisions. And since political and social stability constitute the most important conditions for a direct influx of foreign investment into the country, this did not go without a trace for investors. Thus, 48% of foreign companies operating in the country are satisfied with the stability in the country, and 45% consider its level to be medium. These companies from the EU consider that from the point of view of implementing urgent reform programs that ensure the inflow of foreign investment, effective government is just as important. The number of companies that are satisfied with the public administration has decreased by 12% over the year, but most companies (60%) still rate this figure as average. Such a position of business entities suggests that companies have many expectations, especially in the area of improving the efficiency of public administration. Considering all this, companies from the EU countries in their well-grounded report regard the situation as follows: "Considerations about the presence of injustice, especially expressed bias, in the judicial system keep foreign investors from investing in the country and force existing companies to leave it." At the same time, European investors continue to work, mainly in the fields of ICT and construction, which they prefer. However, the number of companies that expressed satisfaction with the possibility of using new technologies this year was only 22%, which is 11% less than in 2018. Nevertheless, the growth of public investment in the ICT sector is encouraging. In subsequent years, financial resources will be directed mainly to the sphere of digital payment systems and the network of broadband Internet (AHK Azerbaijan, GTAI (April 2019). Market Analysis. Azerbaijan 2019). As for the local situation with research and development, this year 40% of respondents are dissatisfied with this indicator, while the majority of companies from EU countries (46%) working in Azerbaijan are neutral to this factor.

#### **4. INVESTMENTS: AZERBAIJAN IN CIS**

One of the main challenges of the post-oil and gas period in Azerbaijan is the need to attract foreign investment. Of course, such a quick absorption of "investment" is not the goal of a civilized country, but only one of the ways to service it. Thus, in addition to attracting more investment, part of the investment strategy is to determine the sector of application of these funds, on what conditions they are attracted and how to attract them. Recent statistics show that incentive policies in this area have not seriously affected long-term foreign investment. On the contrary, in recent years there has been a decrease in foreign investment in our country. According to the Azerbaijan Central Bank, in 2018 foreign direct investment in the amount of \$ 4.1 billion was invested in the economy of Azerbaijan, which is 28.1% lower than last year. According to the balance of payments in 2018, 76.5% of foreign direct investment was invested in the oil and gas sector. Compared with 2017, foreign direct investment in the non-oil sector increased by 18.9% to \$ 967.1 million in 2018. Our conclusion on the outcome of the past 7 years of foreign direct investment is that there has been a reduction in the flow of foreign direct investment into the country after the decision to devalue in 2015.

*Figure following on the next page*

## Foreign direct investment in the economy of Azerbaijan 2008-2011

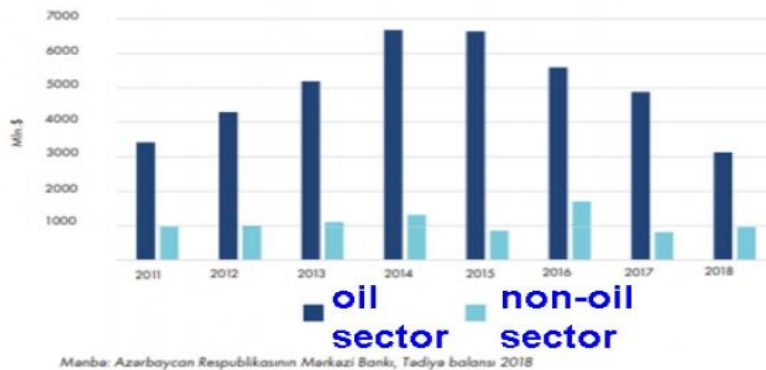


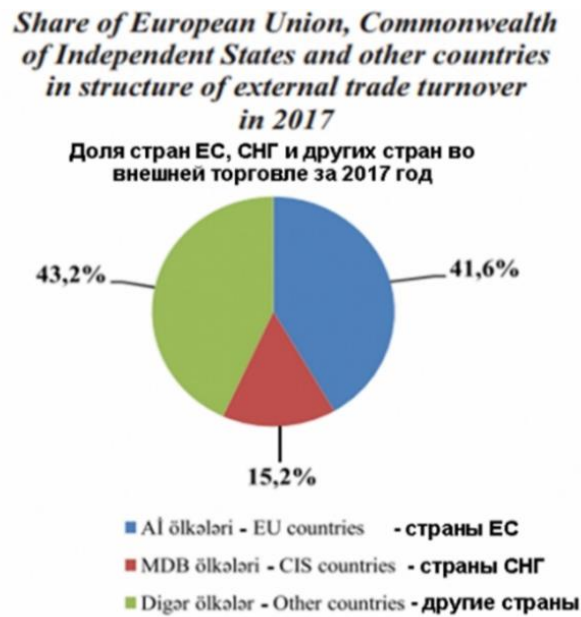
Figure 3: Foreign direct investment in the economy of Azerbaijan 2008-2011

In the past 2018, 8.2 billion dollars of foreign investment was invested in the country's economy; while taking into account domestic investments, in general only 15.3 billion dollars was invested. Total for the years of independence, the volume of investments amounted to 263 billion dollars. Half of this amount came from foreign investment. The rhetoric of Azerbaijan's integration into Euro-Atlantic structures simply expresses its intentions and is not expressed in actions. The vector of economic integration is determined by the volume of foreign trade turnover and the dynamics of the flow of foreign investment in this geographic region. As an economic entity, Azerbaijan stands at the crossroads of two economic spaces: the Commonwealth of Independent States (CIS) and the European Union (EU).

### 5. AZERBAIJAN IN THE CIS

The international rating agency Standard & Poor's has classified the investment climate, reform and corruption as the cause of a certain inhibition of specific economic development for the CIS geography, which included Azerbaijan. In the light of all these factors, Azerbaijan is one of the countries with the largest number of foreign trade operations. The CIS is considered to be our heaviest foreign trade partner. At the same time, our entrepreneurs are also actively investing in this geography. Whereas the volume of Azerbaijan's investments in the CIS (Commonwealth of the Independent States) countries (amount by year) reached \$ 2.4 billion in 2016, the volume of these countries' investments in Azerbaijan's economy amounted to \$ 0.91 billion (Russia accounted for \$ 0.89 billion) [4].

Figure following on the next page



*Figure 4: The share of the European Union, CIS and others in the volume of foreign trade investments in 2017*

Among CIS countries, import duties do not apply to products that are harmful to human health, including those that do not meet sanitary and veterinary standards and are incompatible with international food safety standards. As they say, neither the state nor the citizens earn from it. European institutions observe this commercial discrimination in confusion. The German-Azerbaijani Chamber of Commerce declared in its [4]: "The highest tariff plan applies to imported goods from Europe, while import duties are not applied to goods imported from CIS countries. CIS countries cannot provide quality that meets international standards. Europe provides this quality, but customs procedures do not allow us to take advantage of this." Despite the fact that we are the main trading partners and the intensification of investment flows, Russia is among the top five thanks to the proportion of joint ventures. Thus, according to the Ministry of Economic Development from 01/01/2017, the structure of foreign investments and joint ventures in Azerbaijan was as follows: Turkey-31.3%, Great Britain-7.9%, Russia-6, 8%, Iran-5.5%, USA-3.2%, Germany- 1.9%. The main burden of Azerbaijan's commodity turnover falls on the CIS. Thus, over the years, our country has mainly carried out import-export operations with the CIS countries. The definition of dominance between the two vectors of our country's goods turnover is still one of the components of our economic policy. The CIS space covers relations with our close neighbors and our past economic system.

## 6. RECOMMENDATIONS

- The European Union and Azerbaijan are cooperating in the context of mutual investment flows. Bringing these relations to a higher level of strategic cooperation would be an important step in terms of ensuring the interests of both actors. To continue this cooperation on a rising line in the future and to achieve intensification of foreign investment inflow to Azerbaijan;
- To continue the course of real integration with the European Union, to use modern investment tools, take effective steps to achieve multi-vector positive changes in order to become part of the civilized world;
- Promoting a more "open door" policy should be achieved by opening up the non-oil sector to European investors by improving the situation in four areas (political, economic, social and legal) that determine the investment climate in Azerbaijan;

- Signing a Free Trade Agreement with the EU, raising its cooperation to the level of strategic cooperation within the Eastern Partnership Program and in parallel, it must take persistent steps towards becoming a freer economic space by accelerating its membership issues in the World Trade Organization;

**LITERATURE:**

1. World Bank study entitled "Global Investment Competitiveness Report 2017-2018: Prospects for Foreign Investors and Policy Results"
2. <https://www.state.gov/reports/2019-investment-climate-statements/azerbaijan/>
3. EU Business Environment Report, Azerbaijan 2019
4. Report of the Eurasian Development Bank Interbank Investment Monitoring 2017
5. <https://www.cbar.az>

# VISIONS ON TOPICALITY OF PHILOSOPHICAL APPROACHES TO THE ECONOMY

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## **ABSTRACT**

*The article considers the socio-economic reality of Azerbaijan in a philosophical context. It is noted that at the beginning of the new millennium, determining the future fate of the national economy and prospects for social progress in the context of globalization and deepening integration processes becomes a difficult task. Significant changes occurred in the socio-economic life of the 21-st century created the necessity for a philosophical approach to the economy. The crisis of modern economic paradigms in the theoretical and methodological context actualizes new prospects for its development prospects. Because without perceiving and learning the natural and material resources of the country, it is difficult to understand the current economic situation and determine its future prospects. For the growth of social optimism, there arises the necessity of formulating the rationally motivated economic goals, the ideals of a “social state” and “welfare society”. This necessity allows the economy to be an integral part of national progress as a carrier and indicator of historical memory of the country and people. From this point of view, a philosophical approach is needed to form a comprehensive picture of the development trends of the national economy based on a system of cultural values, and to understand the essence of social changes.*

**Keywords:** *philosophy, philosophy of economics, methodology, economic axiology, philosophical values*

## **1. INTRODUCTION**

The topicality of the philosophical approach to the economy is conditioned by the social, political and ideological events that are taking place in reality. It is impossible to study economic issues in isolation from modern political realities and social cultural values. Systematic transformation of societies in postindustrial society, the gradual weakening of traditional economic systems and political management tools, based on the principles of state sovereignty and national-cultural integration, reduces people’s confidence in the prospects for a well-regulated social structure. Deepening of nihilism clearly demonstrates the existence of social indifference towards the socio-economic goals and ideals of welfare society. As if the classical high humanistic values give the impression that they have already “completed their mission” like realized actual practice. From this point of view, philosophical thinking plays an important role in defining the outlines of the future society, and in providing research of the methods and means that conducive to its economic organization. Coming out with the necessity of reality and its reflection, it can be concluded that, philosophical interpretation causes the rational concentration of the population on economic problems.

## **2. THE NECESSITY OF HUMANITARIZATION OF THE ECONOMY**

It should be noted that, philosophy serves as a materialistic link for all sciences, for the humanitarization and humanization of scientific principles and theories. Since ancient times, philosophers have thought about the social and economic problems of human beings, the humanitarization and democratization of the economy, its material and moral foundations. In the post-Soviet era, when ideological views and social attitudes have changed, the adaptation of the population to new forms of life style, the proper understanding of the realities of social life, as well as, humanitarization and humanization of the economy is a prerequisite for the the

strengthening of economic reforms in the public consciousness. Obviously, the economic development of the country is connected with the economic prosperity of the population. Moreover, the wealth of country is measured not only by its economic income, but also by the social status of the people who are the subject of this income. The economic revival of the country is, first and foremost, determined by “human capital”. The economic reforms serve not only to increase income and material incomes, but also to enhance the cultural level of social order in society. The intellectual activity of the population and its success in cultural life should be evaluated as the cause and consequence of economic development. Humanitarization of the economy is also conditioned by intellectual resources. Modern youth, a key driving force in the development of society, has also become an active participant in the process of creating and using economic knowledge based on scientific and philosophical principles in searching for new ways to increase the financial incomes. From this point of view, it should be noted that, in modern times the need for the formation of personnel with innovative thinking and initiative makes also necessary to add the philosophical thinking and education to a system of cultural dominants that is important to everyone in their daily professional practice. In our opinion, the philosophical approach causes the humanitarization of the attitude to the economic resources of future specialist in the educational institution. Along with providing basis for the approach to the national economy from the citizenship point of view as the carrier and as the expression of the historical memory of every nation, it also influences the ability to make independent decisions in the realization of its creative potential. We believe that, the logical thinking is developing, the active, creative, critical attitude to reality is forming, free individual outlook on social life and the relevant activities program is determined in students who possess the philosophical knowledge. Philosophy is not just a theoretical knowledge, it is also a way of life, the embodiment of moral principles, mentality and public opinion. Also, philosophical interpretation is the basis of an axiological approach to economic resources. Entirely, the peculiarities of philosophical knowledge in the humanitarization of the economy and the formation of moral value aspects are as follows:

- the philosophical perception of economy carries the axiological character and based on humanist values;
- Moral values to some extent acquire economic content, they often act as commodities.
- philosophy ensures that the economy is embedded in ethical values;
- philosophical analysis shapes the quick adaptation and the relevant attitude of the people towards the social and economical changes taken place in the society;
- philosophical knowledge can influence the socio-economic reforms undertaken in Azerbaijan to achieve the expected result and the active participation of the masses in the process [1., p.17].

### **3. THE ROLE OF PHILOSOPHY IN THE FORMATION OF THE CONCEPTUAL FOUNDATIONS OF THE NATIONAL ECONOMY**

In accordance with changing the picture of economic reality in the modern world, the concept of economics is possessing in some extent new content. Changing of system is a complex, numerous and diversified process that begins with the formation of the liberal world market and its flexible environment and including all aspects of public life, their attitude towards socio-political, cultural, national and universal values. The philosophical approach to the economy urges the need for research in modern scientific-theoretical, ideological, methodological pluralism principles and in philosophical context such issues as the influence of economic sphere on the development of society, object and subject relations in the economic sphere, property relations, economic benefit, demand, social justice, relations of the state with the economic sphere and, etc. The solution of these problems is not limited to purely economic spheres, but also includes the whole society system, therefore; it is carrying the socio-

philosophical character. Economic life itself is a social process in some sense. Creating the economic development concept that can adequately cover all aspects of this process should be based on scientific and philosophical foundations. In general, the modernity of the philosophical approach to the economy is dictated by the following principles and values:

- philosophical thinking implies that it is possible to use not only scientific, but also scientific and irrational approaches in cognition of economic processes, it tries to study economics conceptually systematized way based on theories, principles and paradigms.
- philosophy acts as the creator of the conceptual foundations, goals and ideals of the national economy;
- the philosophy can play an important role in development of the outlook of the state for the social, economic policy and in defining the theoretical and material foundations for priorities in the national economy;
- acts as a guarantor of ensuring that the economic interests of individuals constituting the society are aligned with the social needs;
- philosophical knowledge emerges as the theoretical basis for the interpretation of the macroeconomic and ideological principles of the anti-monopoly struggle ;
- an economist with philosophical thinking gives an objective, creative - critical attitude towards reality, substantiates the investigations of the existing economic realities on the basis of pluralism of ideas;
- philosophy, bringing together members of society on the basis of tolerance – patience, directs their economic power to universal prosperity.
- the will of the people, united by the national ideology, play an important role against the factors that impede the development of the national economy, which is a guarantor of our independence and state sovereignty.

#### 4. CONCLUSION

The article reviews the philosophical context of Azerbaijan's economic reality. It is noted that, it is necessary to apply philosophical approaches to the study of economic problems and the teaching of economics in order to bring economic reforms to a new level characterized by good quality. Philosophical understanding performs the spiritual foundation of the enrichment and maturity of economic consciousness developing on the basis of national interest and based on defining the perspectives of the economic life of the Azerbaijani people. From this point of view, there is a special need for formation of a complete picture of development trends of national economy based on historical and cultural values system and for realizing the essence of sociocultural changes, as well.

#### LITERATURE:

1. Philosophy and social reality. Study guide. A.S. Mammadova. “Economics University (UNEC)” publication. Baku, 2007 (in Azerbaijani).
2. Ideas on the teaching of philosophy and its role in society, A.S. Mammadova, Science Elm newspaper. 18 July, 2007 (in Azerbaijani).
3. Philosophy of economics, Don Ross, Palgrave Macmillan 2014.
4. Philosophy of economics. Anthology. Daniel Hausman. M. 2012.



## FEATURES OF ENSURING FOOD SECURITY

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### **ABSTRACT**

*A high level of integration of the economies of various countries leads to increase dependence of the level of national security on the ability of each side to provide itself with necessary food. The country's food security is an integral part of its economic well-being and national security. In its general form, it forms the vector of movement of any national food system to an ideal state. In this sense, the pursuit of food security is an ongoing process. Moreover, to achieve it, it is often necessary to change development priorities and mechanisms for implementing agricultural policy. Improving the food supply of the population of the republic is a priority socio-economic task, the welfare of the country depends on the solution of which. At present, in the world and in particular in Azerbaijan, the leading direction of state policy is ensuring food security. This direction of state policy covers a rather diverse palette of national, economic, social, demographic and environmental factors. As a consequence of the above, food security, which is based on the attraction of domestic resources, is directly related to the socio-economic system of the state. The foundation in ensuring the food security of people and achieving food independence by the state is the developed food system of the republic. The imports increase negatively affects condition of the country's food system, having a restraining effect on its development. The article assesses the current state and directions of development of the agricultural sector in order to ensure food security in Azerbaijan and analyzes the dynamics and level of self-sufficiency of the country with food.*

**Keywords:** *national security, food security, UN Food and Agriculture Organization (FAO), agricultural production*

### **1. INTRODUCTION**

Currently, the development of the world community is taking place in the conditions of intensive globalization, which covers all spheres of human activity. A high level of integration of the economies of various countries leads to an increase in the dependence of the level of national security on the ability of each side to provide itself with necessary food. The main strategic task in the new geopolitical conditions for any state is to ensure national security as a fundamental factor determining the weight and influence of the state in the world community. National security is a state of protection of an individual, society and the state from internal and external threats, which allows to ensure constitutional rights, freedoms, worthy quality and standard of living of citizens, sovereignty, territorial integrity and sustainable development, defense and security of the state. The protection and implementation of the national and state vital interests of the state in the field of food security is included in the complex of problems of national security and is one of the most acute problems of the 21st century, requiring detailed consideration and solution for the sake of present and future well-being. Against the backdrop of a rapidly changing world, development brings us not only certain benefits, but also various new threats. Mankind has come to such a line that it is becoming impossible to continue to ignore new and old threats and the problem of ensuring safe development in the modern world comes to the fore, including the problem of food security. Without solving the problem of food security, it seems difficult to solve other acute economic and social problems. It must be considered at different levels: global, national, regional, etc.

Used methods:

- analysis and synthesis
- a systematic approach
- logical generalizations
- statistical methods
- comparative analysis

## **2. FOOD SECURITY AS A DIRECTION OF STATE POLICY**

The concept of “food security” was formulated in the Rome Declaration on World Food Security on November 13, 1996, according to which food security is a situation in which all people at any given time have physical and economic access to quantitatively safe food needed to lead an active and healthy life [4]. Subsequently, the 2009 World Food Security Summit Declaration clarified this definition by including the following elements:

- social accessibility of an adequate amount of safe and nutritious food for all groups of the population;
- special attention to the problem of food for women and children;
- refusal to use food as an instrument for exerting political and economic pressure [2, p.125].

Food security is one of the main goals of the state’s international and economic policy. In its general form, it forms the vector of movement of any national food system to an ideal state. In this sense, the pursuit of food security is an ongoing process. Moreover, to achieve it, it is often necessary to change development priorities and mechanisms for implementing agricultural policy. The significance of this problem is determined, first of all, by the fact that in the structure of human needs, the need for food belongs to the first group, and its degree of satisfaction is insufficient. In addition, due to the close relationship between food production and the natural environment, non-ecological agriculture can lead to the emergence of dangerous factors that entail processes associated with a decrease in the quantity and deterioration of the quality of natural resources, on which food production directly or indirectly depends, and, consequently, and food security. It is difficult to disagree with M. Tracy, who considers food security as an argument in favor of measures aimed at protecting domestic food production. Food security - the country's ability, at its own resources, to provide food for the current and emergency needs of both the country's population as a whole and each individual in accordance with scientifically based standards. They also defend the thesis that the country is in a state of food security, when it produces at least 80% of its basic foodstuffs [7]. In accordance with the Food Security Program of the Republic of Azerbaijan, the latter is defined as a state of the economy in which food independence is ensured, physical and economic accessibility of food products for the population of the country is guaranteed, in volumes not lower than rational consumption standards necessary for an active, healthy lifestyle [5]. Based on this understanding of the named definition, two key components of the country's food security can be distinguished:

- 1) self-sufficiency in food (food independence);
- 2) maintaining the required level of per capita food supply.

## **3. IMPORT DEPENDENCY**

It is inappropriate to talk about achieving food security in the country when the consumer market is filled with imported food products, and domestic enterprises are unstable due to lack of raw materials for production or fierce competition. In modern conditions, to ensure the country's food security, it is necessary to support and develop its own production of food raw materials and food products, and reduce their imports. Many countries adhere to such a policy: for example, a high level of self-sufficiency in food is typical for the USA and France - more than 100%, Germany - 93%, Italy - 78%; for poor fertile soils in Japan, it is 50% [3].

Thus, food security is such a state of the country's economy, which guarantees the stable provision of the processing industry with agricultural raw materials, the population with an adequate amount of safe and nutritious food products, taking into account the income received, as well as relative independence from the import of raw materials and food. The latter means that for the main groups of food products (meat and meat products, milk and dairy products, eggs, bread and bakery products, potatoes, vegetables and fruits, vegetable oil, sugar, fish and fish products), imports should not exceed 30% of their volumes domestic consumption. An increase in the country's self-sufficiency in food as a result of an increase in the level of national production is central to the agrarian policy of many countries. Self-sufficiency in essential types of food is the main condition for the country's national security in relation to the main food products. When planning the level of self-sufficiency, it is necessary to proceed from the needs of the population and the corresponding goals, and not be guided by the achieved level of development of agribusiness, as it should be based on a realistic assessment, taking into account production constraints, so as not to cross the boundaries of the possible.

*Table 1: Dependence on imports in providing crop products, %*

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total cereal	43,5	35,2	35,7	36,1	39,4	35,5	36,5	33,7	26,9
Wheat	51,1	42,3	43,2	44,1	45,9	45,2	47,1	41,9	35,2
Barley	12,3	6,3	4,9	2,2	15,4	4,9	0,1	5,6	1,7
Corn	35,5	32,0	32,7	40,0	43,3	45,9	28,9	29,3	17,3
Oats	19,4	17,2	15,6	10,7	37,8	6,9	14,3	9,9	11,0
Legumes	34,9	29,6	28,9	24,2	24,0	30,7	31,7	26,4	30,2
Potatoes	6,9	8,3	7,8	7,7	15,7	14,8	18,1	16,5	16,0
All kinds of vegetables	7,0	9,5	5,7	3,1	3,4	3,4	5,1	3,8	2,8
Gourds	-	-	-	-	-	-	-	-	-
Fruits and berries	22,4	12,3	10,1	4,9	3,6	9,6	12,6	12,7	16,8
Walnuts and hazelnuts	12,1	12,8	10,1	8,3	5,1	11,1	14,0	13,6	13,8
Garnet	...	...	0,0	0,0	0,0	0,1	0,1	0,0	0,0
Grape	10,3	10,2	5,9	6,0	2,4	8,1	13,5	8,1	9,3

*Source: [https://www.stat.gov.az/source/food\\_balances/](https://www.stat.gov.az/source/food_balances/)*

*Table 2: Dependence on imports in providing animal husbandry products, %*

	2010	2011	2012	2013	2014	2015	2016	2017	2018
All kinds of livestock and poultry	12,9	13,2	8,8	8,1	8,1	5,6	12,1	15,5	17,5
Beef and meat products	5,5	12,9	8,9	14,8	13,2	8,8	6,6	13,8	15,0
sheep (goat) meat and meat products	0,3	0,2	1,5	2,3	2,1	0,7	1,3	2,4	2,1
Pork and meat products	80,3	85,3	74,3	64,2	83,4	82,2	93,0	94,4	94,5
Poultry and meat products	29,8	20,3	12,2	1,5	2,1	1,4	20,9	20,5	24,4
Milk and dairy products	29,6	29,1	27,5	24,3	23,9	16,0	12,6	14,6	13,8
Eggs	2,1	22,6	4,2	0,1	0,3	0,3	1,2	0,0	1,1
Fish and fish products	23,8	27,4	25,3	28,4	27,2	22,4	18,0	19,4	17,6

*Source: [https://www.stat.gov.az/source/food\\_balances/](https://www.stat.gov.az/source/food_balances/)*

According to the State Statistics Committee of Azerbaijan, starting in 2014, dependence on cereal imports has been steadily decreasing, and in 2018 this figure is 26.9%. However, the dependence on imports for wheat is still quite high and accounts for 35.2% of domestic consumption. For other types of crop production, import volumes range from 1.7% to 17.3%.

For livestock products, dependence on imports ranges from 2.1% - 24.4%, excluding dependence on pork, but this is due to the religious commitment of the population. In our opinion, striving to provide all types of food products is not always economically advantageous. Because, a country can achieve this by using the profit from the sale of surplus domestic products to import such types of food products that it is not economically profitable to produce in the country. Not every country has the ability to produce the entire set of food, so it is necessary to import some part of it. The country's desire to increase self-sufficiency in food of its own production should be encouraged, but not so much as to try to achieve maximum growth in agricultural production, not taking into account production costs for the country's economy as a whole. Efficiency of food import compared to its local production is carried out, taking into account the cost of transport and product quality. Moreover, it is taken into account that part of the food received in the country depends on the supply of certain agricultural raw materials for inter-regional and international exchanges. It is important to assess the possibilities of satisfying the demand for those types of food products that can be considered as "local", i.e. produced in the country. If people have the necessary means to purchase food, then one could say that nothing threatens food security, but it should be noted that food production depends not only on demand for it, but also on the possibilities of food reproduction. An increase in the solvency of the population without a corresponding development of the production base can lead to two possible consequences:

- increase in food prices, which will accordingly reduce the well-being of the poor and can be a threat to food security;
- substitution of imported domestic food products, which is also an undesirable phenomenon in terms of food security, since the reproductive capabilities of domestic producers are finally undermined [3].

#### 4. CONCLUSION

Thus, we can identify two problems that threaten food security: the lack of appropriate income from consumers and the deterioration of reproductive opportunities among producers. Accordingly, all factors that reduce household incomes and worsen the reproductive capabilities of producers are factors that reduce food security. The fight against these factors at the micro level lies entirely on the shoulders of consumers and producers, and at the macro level, the decisive role is assigned to the state. In the long term, achieving food security should be aimed at ensuring the sustainable development of the agricultural sector of the economy. At this stage, the following are provided:

- increase the production potential of the agricultural sector of the economy (the development of agricultural engineering, the creation of leasing companies);
- The solution of social problems in the countryside, combined with wage growth as the most important factor in increasing labor motivation in the agricultural sector;
- increase in agricultural production in order to export organic agricultural products, which is an alternative to oil and gas sources of replenishment of the revenue side of the budget.
- monitor the quality and safety of food, as well as public health;
- implement the achievements of scientific and technological progress in the technology for the production, processing, storage and transportation of agricultural products.

When implementing the state's economic policy, among the problems affecting national economic security, it is necessary to take into account not only direct, but also indirect ones. These include the following:

- low competitiveness of national products;
- commodity orientation of export;
- dependence of machinery and technology on imports;

- flow of capital from the country;
- discrimination of domestic products in world markets;
- dependence of the national economy on foreign loans and investments;
- high foreign debt of the state;
- intervention of international financial organizations in the processes of market reconstruction of the country;
- frequent and sharp changes in the national currency [8, p.175].

With this in mind, Azerbaijan's food security should be considered as such a state of the production potential of the agricultural sector of the economy, in which, regardless of external and internal threats, it is possible to ensure not only reliable and uninterrupted satisfaction of the needs of all segments of the population in high-quality food products according to accepted physiological standards (mainly domestic production), affordability of basic types of food, but also import substitution, agricultural expansion and export. Thus, at present, ensuring the food security of Azerbaijan is one of its most important national interests, the realization of which is impossible without the effective functioning of the country's agro-industrial complex and its central link - agriculture. The agricultural sector, which provides the country's population with food products, refers to sectors of the economy that, having a significant multiplier effect, can create a powerful impetus for increasing production in related sectors. At the same time, it should be noted that the agricultural sector of the economy, due to its particular dependence on natural and climatic conditions, low cash turnover in a market economy, cannot ensure profitability at the level of sectors such as industry or trade. In this regard, the possibilities of expanded reproduction in this sector and ensuring food security of the country on this basis will be determined by strengthening state regulation in conjunction with the entrepreneurial activity of agricultural producers, the active development of various market forms of integration and cooperation. When implementing the state's economic policy, among the problems affecting national economic security, it is necessary to take into account not only direct, but also indirect ones. These include the following:

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- frequent and sharp changes in the national currency [8, p.175].

#### **LITERATURE:**

1. N.N.Semenova - Food security as an essential national interest of Russia. National interests: priorities and security. 2014, №37 (274), p.16-22
2. V.A.Tikhomirova - Food security: essence of the notion. Vestnik of the Plekhanov Russian University of Economics. 2015, №6 (84), c.123-128
3. M.S.Chebotareva - Food Security in Russia and the World: Essence and Problems // Young Scientist. 2012. №8. C.149-151. Source: <https://moluch.ru/archive/43/5257/>
4. Rome Declaration on World Food Security and the World Food Summit Plan of Action. Rome, November 13, 1996. Source: [http://www.rau.su/observer/N3-4\\_97/019.htm](http://www.rau.su/observer/N3-4_97/019.htm)

5. Food Security Program of the Republic of Azerbaijan. March 02, 2001 Source: [http://www.e-qanun.az/alpdata/framework/data/4/f\\_4467.htm](http://www.e-qanun.az/alpdata/framework/data/4/f_4467.htm)
6. [https://www.stat.gov.az/source/food\\_balances/](https://www.stat.gov.az/source/food_balances/) «The State Statistical Committee of Republic of Azerbaijan»
7. M.Tracy - Agriculture and Food in Economy of Developed Countries: Introduction to Theory, Practice and Politics. Moscow, Economics School, 1995
8. M.A. Ahmadov, A.C.Huseyn - State economic policy. Baku – 2011, 220 p.
9. <http://www.fao.org/news/story/ru/item/471700/icode/>

## ECONOMIC AND LEGAL ASPECTS OF TRANSNATIONAL BUSINESS REGULATION AT THE COMPANY LEVEL

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### ABSTRACT

*Since the transnational business of Azerbaijan is based on crude oil and natural gas, the balance of the current account operations of the balance of payment is unstable, and as the share of the consumer goods is around 40% in the commodity import, it is important to strengthen the state control over the implementation of transnational business regulation mechanisms in the country's current legislation. This article provides a methodology for regulating transnational businesses in company level in the Republic of Azerbaijan. All the performances of SOCAR<sup>1</sup>, the largest company in Azerbaijan, were calculated to reach the goal set out in the article and it was justified that it deserves to be included in the rankings of the TNC. In general, TNC easily achieves things which can not be achieved by the state through classic diplomatic relations. We consider that the regulation of the TNC of the country as an economic entity, having more efficient and competent laws, providing the transparency at the country level, and including the state company of the Republic to the rating as TNC can create a balance in transnational business regulation. The procedure and concept of granting the transnational company status internationally has been studied and the possibility of granting a "transnational company" status to large companies in the country has been justified.*

**Keywords:** *Transnational company, Transnational business, SOCAR, oil, Azerbaijan, regulation*

### 1. INTRODUCTION AND RELEVANCE OF THE PROBLEM

In 2010-2017, the economic facilities of Azerbaijan, which is relatively small in territory, have invested 55.3 billion manat in foreign countries. All this has led to the transformation of transnational business into an integral part of integration processes. Over the past 15 years, the country's economy has grown by 3.2 times, currency reserves have increased 24 times and reached to \$ 44.2 billion, and \$ 231 billion has been invested in the country's economy, and the foreign investment was \$ 174 billion<sup>2</sup>. The country's foreign trade turnover was \$ 24.2 billion. By emphasizing the achieved successes, it should be noted that 49.6 billion in 2013 has decreased to \$ 24 billion in 2017 or 1.2 times in comparative prices (79% index of changes), non-oil products of the country are only 9-10 percent in the foreign trade. Many factors have had a decisive impact on the situation. Among them there is a decrease in crude oil export prices, a low level of production transnational level, gaps in the state regulation of foreign trade, etc. The subject of this research is the scientific research of these problems. About 70% of the investments in the economy of Azerbaijan are put on the oil industry. 80% of this is invested by external TNCs.

#### 1.1. Issues covered in the article

The problems covered in the article are mainly to justify the transnational company (TNC) concept of transnational business in the context of economic integration processes and to find

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<sup>1</sup> Azerbaijani State Oil Company

<sup>2</sup> www.stat.gov.az The State Statistical Committee of the Republic of Azerbaijan

ways to improve transnational business regulation on the basis of the formation of a new approach to the integration phenomenon existing in the Republic of Azerbaijan. Although the establishment of transnational businesses and transnational companies is based on general principles, this process takes place in a specific form in different countries. The transnational company concept differs depending on the structure of the economy in various countries, the level of socio-economic development, organizational-administrative structure, national-ethnic characteristics, and the development level of the state. At the same time, it is a matter of state and economic science to create basis for the rapidly growing, concentrated large state companies to be at the ranking as TNC and to justify it.

### **1.2. Theoretical and practical significance of the article**

The practical and theoretical significance of the article on the “Economic and Legal Aspects of Transnational Business Regulation on Company Level” is primarily based on the formation of the modern transnational companies into main institutional forms and their key role in the integration structures. It can be used in the preparation of the substantiations for the formation of internationally recognized transnational companies in Azerbaijan as the leading structure of the transnational business in the economic integration condition. Transnational business structure and the production base can be used in the central government bodies in preparation of measures for diversification. It is a valuable source of information for promoting the establishment of transnational companies on the basis of national companies.

### **1.3. Methods and approaches**

The classic economic theories, the studies of modern western and local scientists in the field of transnational business and transnational companies in the process of regulation of integration processes, various legal documents and normative acts adopted by the government in accordance with the subject of the research were used in the preparation of the present article. The complex and systematic analysis, various expert assessment and organizational modelling, method of economic-mathematical analysis, synthesis and similar methods were used in the thesis. A set of research methods has been used to determine the criteria for transnational companies and the various parameters of transnational business. The materials of the World Bank and UNCTAD (United Nations Conference on Trade and Development), State Statistical Committee, the Customs Committee, and the Ministry of Economy of the Republic of Azerbaijan have been used in the article. Moreover, experimental materials from different transnational companies (both country and worldwide) have been used.

### **1.4. The contribution possibility of the article to the world's economic science**

In our opinion, research materials in the article and findings obtained in terms of scientific polemics, suggestions put forward are of some scientific-practical significance and may be of interest for the world economists in their research. The substantiation of the more effective aspects of the regulation of transnational business in the world economy and the importance of rating of state transnational companies as transnational corporation is relevant in modern time and the materials in this article may be helpful in this regard.

## **2. THE LEVEL OF STUDYING THE PROBLEM AND THE LITERATURE REVIEW**

Western scholars have actively studied the transnational company and their regulation problems. While investigating research, it is clear that most of these investigations cover the legal aspects of transnational business. H. McDougal and Y. Freedman consider transnational companies as subjects of international law (Ю.М. Колосов, В.И. Кузнецов. М. 1999, p.64). O.Lokaychuk, S.Chernichenko, I.Lukashuk expressed objections to transmitting many powers of the state to transnational companies and their transfer to subjects of international law in the



regulation of the transnational company (Локайчук О.В., 2011 p.14). They state that the state is considering increasing the state budget while taxing, while transnational companies are only trying to increase their own capital. E.V. Anisimova points out the importance of the problem of transnational business regulation in her research and substantiates the importance of establishing an Organization for World Investment Cooperation (Анисимова Э.В., 2012). I.S. Krilov points out the political aspects of the transnational corporation regulation (Крылов, И. С). А.А. Shamilov studies the international regulation of offshore business in global economics (Шамилов А. А.,2007). Е. Yakunina has substantiated the state's stimulating role in regulating the transnational company in its research (Якунина Ю.С., 2013). G. Kremer considers the state's regulatory intervention is necessary at the initial stage by studying the initial conditions of transnational business in the economic integration (Ю.М. Колосов, В.И. Кузнецов. М., 1999, p.65). А.Аlexey analyzes the corporate structure of the transnational business and its main trends in this research. The transnational business regulation is based on the integrated interconnection of the transnational companies. In most cases, however, the activity of the TNC is determined by the State (Rugman, Alan M, 2005, p.211). Famous professor of the Hungarian Academy of Sciences M. Shiman considers the relationship between state and transnational business as neutral, conflicting and coordinating. It should be noted that the composition and structure of the TNC should comply with the specific features, normative-legal acts of the country in which they operate. TNC shapes the country's competitiveness in the global market. As we have noted many scientists have been involved in the study of transnational business in the economic and legal sphere. In the present period, S. Shagurin and P.Simkoon can be attributed to them. They argue in their research that TNC is not a free legal model (Шагурин С.В., Шимко П.Д. 2008.p 335). But in today's more interconnected and dependable world, the role of non-governmental actors and the transnational companies on international legal relationships within the framework of international law can not be undermined in the active participation in the international relations (Тарасова Л.Н., 2013, p. 63-69). Peter Dicken noted that the global network is versatile and polygamy (Peter D., 2003, pp. 221-224). In recent years, local scientists have also interesting research works in transnational businesses and transnational companies: А. Bayramov, I.Karimli, Sh.Hajiyev, K.Heydarov, Z.Mammadov, M.Mammadov, N.Sabiroglu, Z.Samadzade, А. Shakaraliyev, D.Valiyev, G.Ganjiyev, H.Hasanov, E.Hajizade and others. The works of Azerbaijani scholars mainly focused on international economic relations and foreign investment. However, theoretical and methodological basis of transnational business and transnational companies' regulation in Azerbaijan, has not yet been developed, systematic, complex research has not been conducted. Development strategy of transnational business, tools, mechanisms and methods of improving the competitiveness of transnational companies, and the studies on regulation of the transnational business on company level are practically not available. In this study, the transnational business of the largest national company of Azerbaijan was evaluated and the following indicators were calculated.

### **3. ANALYSIS OF THE THEORETICAL AND METHODOLOGICAL AND PRACTICAL ASPECTS OF REGULATION OF TRANSNATIONAL BUSINESS IN AZERBAIJAN**

In the present study, the regulation of transnational companies has been classified according to the following cumulative parameters:

1. Revenue and expense parameters of transnational companies:
  - Calculation of minimum revenue parameters in the volume of production;
  - Calculation of parameters that minimize product output costs.
2. Profit and Effectiveness of transnational companies:
  - Determination of the economic profit indicator of SOCAR's export;

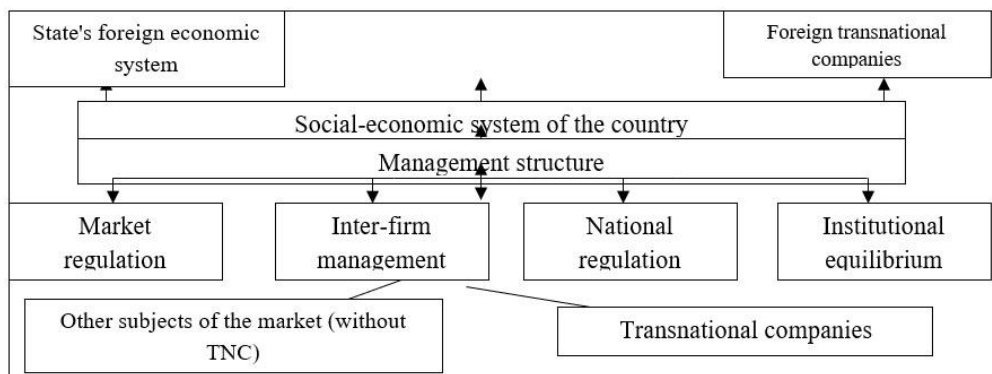
- Determination of the economic profit indicator of SOCAR's import;
  - Determination of the economic effectiveness indicator of SOCAR's import;
  - Determination of SOCAR's import-export economic effectiveness indicator;
  - Determination of SOCAR's import-export economic profit indicators.
3. Index parameters of transnational companies:
- Transnational companies' transnational index;
  - Index of involved investments of transnational companies;
  - Potential investment index.

It should be noted that transnational companies' transnational index was recognized as the most important indicator in the aforementioned parameters. But in our opinion, it is necessary to apply all of the abovementioned parameters to systematically approach to the study of the transnational companies' regulatory process, the research of which will be carried out below.

#### 4. THE ADVANTAGES OF A TRANSNATIONAL COMPANY AS A LEADING SUBJECT OF TRANSNATIONAL BUSINESS

There are several approaches on the essence of the term “Transnational Company”. According to J.H. Dunning, a transnational company is a business entity that controls or operates a variety of activities in 2 or more countries. At the same time, this ownership and control can be achieved not only through foreign investment, but also through strategic alliances. The Organization for Economic Cooperation and Development believes that a transnational corporation is an organization that unites companies in more than one country and manages their operations in different ways [Dunning J. 1990, p. 78]. According to the Convention on “Transnational Company” financial-industrial groups, associations, holdings, joint ventures, foreign investment enterprises, stock societies, etc. can be transnational company [Convention, 1998, p.1]. Bringing ready-to-use products by the transnational businesses to the countries with poorly developed economy can help to solve some of the economic problems. Under current conditions, transnational companies are the main source of restructuration of the economic structure and transnational business efficiency. Transnational companies have a crucial role in the economic development of the countries.

*Figure 1: The place and management of transnational companies in the country's economic system*



*Source: The scheme was drawn by the author*

As a rule, transnational companies act as the core of one or another financial-industrial group and represent the highest level of monopoly in the modern economy. At present, the financial-industrial group reorganization occurs. The ultimate goal of the reorganization is to strengthen the technical-production and financial capabilities of large-scale capital, improve the trading

and procurement mechanism, and increase the competitiveness of the industry in the world markets. Transnational companies have the potential to benefit from the advantages of international production cooperation and international labour division by creating international production complexes and affect the nature of international economic relations, including the situation of transnational business. By having subsidiaries and branches in different countries, TNC can provide the effective activity focusing on the production or activities in the countries with cheap raw material and low wage and will have opportunity to earn higher returns in countries with low tax rates, they are able to adapt their sales and production programs to the specific conditions of the markets, they can have a major impact on the regions by using financial and political lobbying and public relations. Transnational companies use new technologies in the regions, increase the number of jobs and tax collections.

## **5. LEGAL FRAMEWORK FOR REGULATION OF THE TRANSNATIONAL COMPANIES**

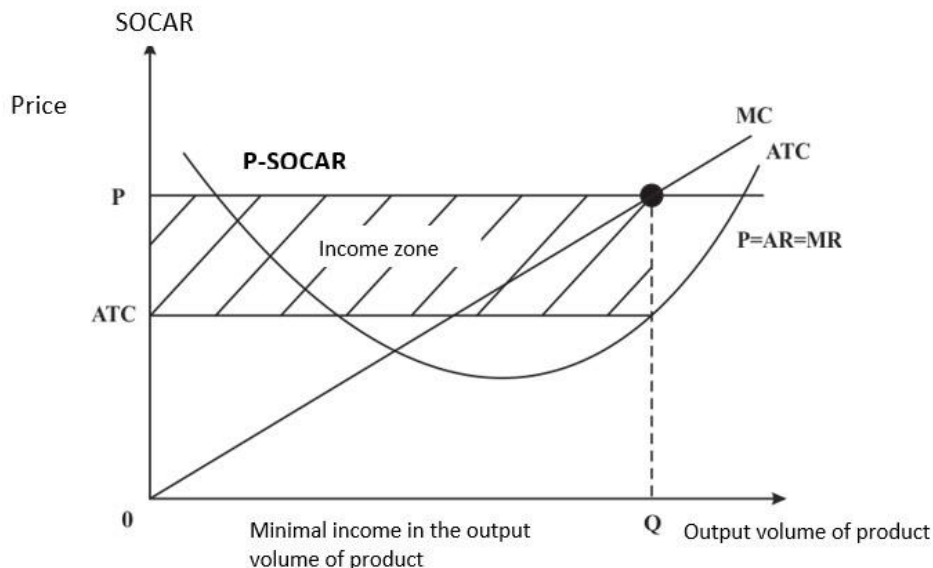
There are a number of normative acts that can be used to establish transnational companies and regulate their operations internationally. Thus, the convention on “Multinational Companies” was adopted by the Organization for Economic Co-operation and Development in 1976, the convention on “Principles and Social Policies on Multinational Enterprises” by the International Labour Organization in 1977, convention on “Code of Conduct of the Transnational Companies” by the UN in 1983 and convention on “Transnational Companies” in 1998. An agreement to regulate social-labour relations in transnational companies operating on their territory by the CIS countries was signed in 1997. In addition, the UN Centre for transnational companies, the Commission, the International Investment Centre and other international organizations operate here. On March 6, 1998, the convention on Transnational Companies was adopted by the Council of Heads of State of CIS. It was signed by Azerbaijan, Belarus, Tajikistan, Moldova, Georgia, Turkmenistan, Kazakhstan, Uzbekistan, Ukraine and the Kyrgyz Republic. Members of this alliance have adopted this convention for the purpose of providing favourable conditions for the development and support of production cooperatives. The participating States of the Union have adopted this convention for active industrial policy, integration and investment involvement. This convention is composed of 19 Articles in 3 parts. Thus, our opinion is that, it is required to establish a regulatory legal framework regulating the establishment of transnational companies in Azerbaijan taking into account international experience, the above-mentioned convention and relevant UN normative acts.

## **6. ANALYSIS AND EVALUATION OF THE TRANSNATIONAL BUSINESS OF THE STATE OIL COMPANY OF THE REPUBLIC OF AZERBAIJAN (SOCAR)**

Azerbaijan ranks in 65<sup>th</sup> place for the convenience of business within 190 positions in the ranking of the World Bank's business regulation. Despite the transition of the Republic of Azerbaijan to the market economy, transnationalization of enterprises is in the first stage of development. Transnationalization of many large companies such as Azersun Holding, Gilan Holding, Pasha Holding and SOCAR has not been approved in accordance with international standards, i.e. it is not formalized. Sluggish development of Azerbaijani companies' transnationalization process is associated with a number of problems. For example, the lack of practical experience of large companies in Azerbaijan to realize the global strategy and financial shortage, low competitiveness of Azerbaijani companies in the world market and the negative image of Azerbaijani companies in developed countries. In addition, the government is not particularly interested in the transnationalization of large companies due to the incompatibility of state and corporate interests. There is no state strategy for transnationalization of the major companies. SOCAR is one of the first public institutions in the International Financial Reporting Standards in Azerbaijan.

Its consolidated reports are audited and approved by one of the world's leading companies, Ernst & Young, in accordance with the best practices of international financial reporting standards. International ratings issued by the prestigious agencies like “Fitch Ratings”, “Standard & Poors” and “Moody's” enhance the business reputation of the company and extend its international cooperation capabilities. In this process, long-term contracts have been signed international organizations for the purpose of developing a standard accounting and consolidation mechanism, many modules of the SAP ERP system on accounting, management budget forecasting, production, planning, maintenance and quality control systems have been introduced. Effective cooperation has been established with well-known audit firms and rating agencies such as Ernest & Young, Fitch Ratings, Standard & Poors, Moody's. SOCAR accounts for 7.5 million tonnes or 18.3% of 38.8 million tonnes of oil extracted from the country since 2018. More than 70% of 16 subsidiaries of SOCAR were founded in foreign countries (Cayman Islands, Turkey, Georgia, Switzerland, etc.) (See: Annex 1) Start from the calculation of the minimum yield parameter in the volume of production in SOCAR (see Figure 2).

Figure 2: Calculation of minimal income in the production volume of SOCAR<sup>3</sup>



As it is seen in the Figure 2, SOCAR reflects the transnational company form having revenue as a whole. The hatched part of the Figure acts as the maximal area of revenue, where the price and the sum total is equal to the difference of average costs. Thus, the hatched part of the Figure is considered to be SOCAR's revenues. Now, calculate the parameters that minimize losses in the volume of production (see Figure 3)

Figure following on the next page

<sup>3</sup> Figure 2. It is based on indicators of SOCAR for 2017.

Figure 3: Calculation of minimal loss in the production volume of SOCAR

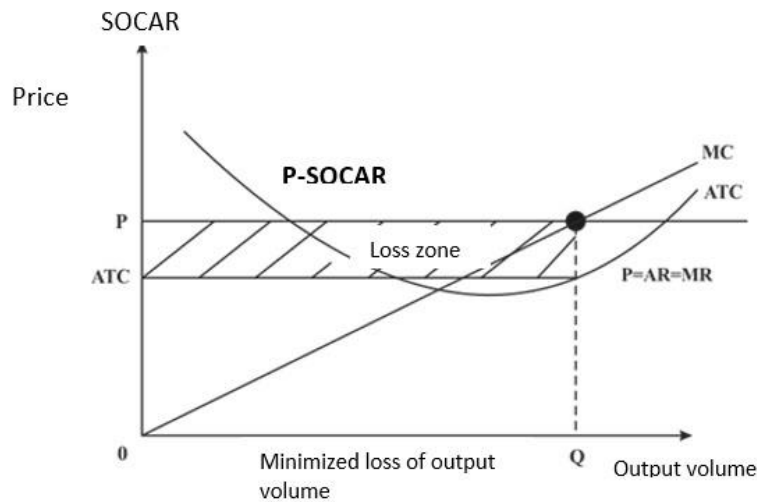


Figure 3 shows the loss zone (hatched part of the image), where the production of SOCAR should be reduced. As a result, SOCAR effectively regulates its transnational business with optimal use of profits and profitability indicators. Then the research on the group "b" should be continued and the economic profits and economic efficiency indicators of SOCAR export should be determined. The following parameters are used to calculate the economic effect of SOCAR exports: manat equivalent of disbursements from the currency fund, income from mandatory sales with manat and all expenses incurred by transnational companies.

Table 1: Key indicators of transnational business regulation at the company level

Calculated indicators	SOCAR, mln.manat				
	2013	2014	2015	2016	2017
Economic profit indicator of export, $E_f$	33772	36309	2745	44152	83506
Product sale and profit indicator of production in the local market, E	12539	12673	20713	12503	20881
Economic profit indicator of import	2579,0	2615,0	2329	2980	3380
Transnationalization indicator	0,395	0,391	0,348	0,510	0,455

Source: Author

Calculations are given in Table 3 in Appendix 1. Calculation of SOCAR's potential investment indicator was made. According to the results of the report, investments attracted to SOCAR have decreased from 0.961 to 0.661 in 2012-2015. As a result, the above-mentioned indicators of SOCAR give a basis to note the effectiveness of the transnational business of this company.

## 7. DISCUSSION

In order to accelerate integration of the national economy to the world economy step-by-step, it requires the formation of new approaches to the state regulation of the transnationalization of the state companies. In addition to traditional functions in many countries, including in Azerbaijan, the new functions of the state, such as ensuring the competitiveness of domestic companies in the world market, and supporting the development, protecting the ecological balance have occurred. Global processes make the states to face the formation of complicated international relations. A number of scholars believe that states are the key elements of the international political system and the main subjects of the international law process. As a result international law defining the rules of conduct of other participants of international law relations is established.

However, it is impossible to deny the real involvement of non-state actors in the conditions of the sharp expansion of the activities of transnational companies and other non-state actors in international relations in the modern world [Tarasova L.K. 2012, p.18]. More sensitive point in the unilateral regulation of transnational companies' activity is that it is able to escape the state control by its organizational structure. Therefore, national legislation of the host country is not sufficient to regulate the activities of transnational companies. At the same time, research shows that regulation of transnational companies' work at the international level has a number of advantages in comparison to the national and regional levels. So, the Convention on the Protection of the Environment in 1998; International Convention for the Suppression of Terrorism Financing in 9 December 1999, UN Convention against Corruption in 31 December 2003, and others were adopted. There are different reasons for the lack of a free legal model of transnational companies. According to western scientist K.Waylert, transnational companies are oriented towards their economic interests and operate in the developed industrialized countries, passing by the legal standards, on account of the wide choice in location for their complex, cooperative structure and firms. They are free to choose the production area, to obtain certain concessions from the host country, to conclude beneficial contracts. Using their superior position, they use the national law of the host country for their own benefit. [K.Waylert.2012, p.44] In Table 2, the indicators of SOCAR have been calculated and reflected in terms of requirements of transnational companies. Transnational companies identify the structure of the world market and the level of competitiveness of goods and services, international capital flows and technology transfer.

*Table 2: Comparative Indicators of the State Oil Company of Azerbaijan Republic (2015)*

No.	Indicators	Unit	UNO standards	Indicators of oil company
1.	Number of countries where the company operates	pcs	At least 2-6 and more	10
2.	Placing the company's production power in a number of countries	pcs	More than 2	2
3.	Company's capitalization level	billion dollar	2	9
4.	Specific weight of foreign operations in the company's revenues or sales	%	25	35
5.	Being the principal owner of the shares with right to vote	%	3 and in more countries 25	8
6.	International composition of the company staff	%		5
7.	Including, management	%		5
8.	Annual turnover (UN criteria)	Dollar	100 mln.	1.2 billion dollar
9.	Annual turnover (Forbes's criteria)	Dollar	207 mln.	1.2 billion dollar

*Source: It has been prepared by the Bidder on the basis of the annual report of SOCAR*

There are several criteria for granting transnational company status in economic literature. Granting SOCAR status as a transnational company can significantly increase its regime internationally. Moreover, SOCAR is partnering with international rating companies. Thus, to facilitate the involvement of financial resources in case of necessity, to increase the influence of SOCAR as an international company, to enable investors to obtain important information about SOCAR, to encourage investment, a contract on consulting services was signed with Citibank in 2007; international rating companies have been cooperated with since 2008; Fitch Ratings has rated SOCAR with BB + (Stable) in 2009;

Fitch Ratings company has raised the rating of the Azerbaijani state and the SOCAR to BBB – (Stable) in 2010; there was presentation ceremony at the State Oil Company of the Azerbaijan Republic (SOCAR) for being rated by the “Fitch Ratings” International Agency. In 2010, Moody's company rated the SOCAR with score (Stable); a contract with Standard & Poor's was signed in 2010.

## 8. CONCLUSION

There are large companies at the transnational company level in Azerbaijan. For example, SOCAR, Gilan Holding, Gamigaya, Azersun, Akkord, etc. We have determined the level of transnational business of these companies, especially SOCAR, and how much to they meet the TNC criteria. Currently, Azerbaijan acts as a host country accepting the TNC in transnational business. SOCAR cooperates with international rating agencies - Fitch Ratings and Moody's. It signed the agreements with Fitch in 2016 and Moody's in 2017. Fitch's representatives expressed their confidence that the company will be awarded a proper rating after being acquainted with SOCAR's indicators. Rating the SOCAR by “Fitch” agency should be considered as a next important step towards the transformation of the State Oil Company into a transnational company. The government support for the large state companies of Azerbaijan to become the TNC is essential. We think that the development and implementation of a long-term strategy for Azerbaijani companies to gain the competitive advantages abroad (application of innovation, production and management improvement, product quality improvement), exploring the ways to obtain relatively cheap natural resources from overseas companies, the formation of a regulatory legal framework for the acquisition of TNC status, the state support to the large companies in obtaining the foreign assets and the application of different forms of international economic cooperation are needed to accelerate the process of transnationalization of Azerbaijani companies.

## LITERATURE:

1. Якунина, Ю. С. (2013) Транснациональные корпорации в российской экономике как объект государственного регулирования. Диссертация. Томск.
2. Анисимова ,Э.В. (2012) Институциональное регулирования транснациональных инвестиционных потоков. Краснодар.
3. Крылов, И. С. (2011) Эволюция политических механизмов регулирования глобальных экономических процессов: 1990-2000-е годы. Москва
4. Шамилов А. А. (2007) Международное и национальное регулирование оффшорного бизнеса в условиях глобализации экономики: диссертация... кандидата экономических наук: Москва. 183 р.
5. Алексеев, А.А. (2005) Тенденции и перспективы транснационализации российских корпоративных структур.Москва
6. Ю.М. Колосов, В.И. Кузнецов. М., (1999). Международное право. Москва. р.64.
7. Локайчук,О.В. (2011) Проблемы правового регулирования деятельности транснациональных корпораций. Сибирский Юридический Вестник.
8. Кривопапов Г.Н. и др. (2006) ТНК Как элемент хозяйственного механизма открытой экономики.Москва .Вестник ОГУ. № 10. Ч.2
9. БатмановаЕ.С., ТомиловП.С.(2005) Мироваяэкономика и международные кономические отношения. Москва ,ГОУ ВПО УГТУ-УПИ. р. 2 - 111.
10. Бондаренко В.А. и др.(2012) Маркетинговая деятельность в условиях глобализации. Москва. ЦКБ «Биб-ком». 260 р.
11. Логинов Б.Б., Рудеева А.О. (2013) Международные факторы производства в национальных экономиках. Москва: ИНФРА-М.312с.

12. Мониторинг прямых инвестиций России, Беларуси, Казахстана и Украины в странах Евразии — 2014. – ЦИИ ЕАБР, 2014. – 66 р.
13. Бондаренко В.А. и др. (2012) Маркетинговая деятельность в условиях глобализации. Москва. ЦКБ «Биб-ком». 260 р.
14. Bakan, Joel, 2004. The Corporation: The Pathological Pursuit of Profit and Power. New York: Free Press.-240 р
15. Шагурин С.В., Шимко П.Д. 2008 Экономика транснационального предприятия. Москва СПб.: ГПУ. , - 335 р.
16. Скуфьина Т.П., Баранов С.В.(2016) Проблемы развитие территорий, отраслей и производственных комплексов. Москва. Вып.2(82), 2016.
17. Hausmann, Ricardo and Dani Rodrik (2003). “Economic development as self-discovery”. Journal of Development Economics, 72, pp. 603-633.
18. Питер Дикен (2003). Глобальный переход. SAGE. р. 221-224
19. Rugman, Alan M, 2005. The Regional Multinationals: MNEs and “Global” Strategic Management. Cambridge, UK: Cambridge University Press. 290р
20. Мэнько Н.Г. Принципы экономикс. (1999) СПб.: Питер. 784 р.
21. [www.stat.gov.az](http://www.stat.gov.az) The State Statistical Committee of the Republic of Azerbaijan
22. <http://www.stat.gov.az/menu/13/>. The State Statistical Committee of the Republic of Azerbaijan
23. [www.weforum.org/docs/](http://www.weforum.org/docs/) The Global Competitiveness Report 2016–2017- weforu
24. “Transmilli şirkət haqqında” Konvensiyaya.1998,Moskva
25. ВайлертК.Транснациональные копорации вне правововго поля./ [www.dpp.mpil.de/01.2012/](http://www.dpp.mpil.de/01.2012/)
26. Хангер Дж.Д., Уилен Т.Л. Основы стратегического менеджмента. М.: ЮНИТИ. 2008, 319 р.
27. Бак Г.А. Инновационные стратегии транснациональных корпораций в отдельных секторах мирового хозяйства. М.: // Креативная экономика. 2013, № 8 (80).
28. Даннинг Дж. ТНК укрепляют свои позиции М.: Наука, 1990. р. 78.
29. <http://www.socar.az/socar/az/home/>
30. [www.books.ru/authors/bulatov-as/](http://www.books.ru/authors/bulatov-as/)
31. ТарасоваЛ.Х.К дискуссии о правомерности признания ТНК международной право субъектности /[www . file///C: Users/user/Downloads/2013/](http://www . file///C: Users/user/Downloads/2013/)



## APPENDIX

Table 3: Economic profit indicator of SOCAR export, mln.manat

Year	Calculation formula	Net income from the export, $\varepsilon\varepsilon_E$	Exchange difference, Ek	Sale income, V	Full cost of the enterprise in export, Z
2014	$\varepsilon\varepsilon_E = \mathcal{O}_k + V - Z$	36309	465	35844	2865
2015		27145	201	29849	2805
2016		44152	586	47387	3821
2017		83506	424	87352	4270

## Profitability indicator of SOCAR export

Year	Calculation formula	$\varepsilon_F$	Ek, mln.manat	V, mln.manat	Z, mln.manat
2014	$\varepsilon_F = \frac{\mathcal{O}_k + V}{Z}$	12,6	465	35844	2865
2015		10,7	201	29849	2805
2016		12,5	586	47387	3821
2017		20,9	424	87352	4270

## Economic profit indicator of SOCAR import

Year	Calculation formula	Net income from the import, $\varepsilon\varepsilon_i$ , mln.manat	Costs on main priority products, Z, mln.manat	Purchase price of imported products, CP, mln.manat
2014	$\varepsilon\varepsilon_i = Z - CP$	2615	2865	250
2015		2329	2805	476
2016		2980	3821	841
2017		3380	4270	890

## Economic profit from SOCAR's import-export activities mln. man.

Year	Calculation formula	Indicator of economic profits from import-export activities, $\varepsilon\varepsilon_{i3}$	Amount of economic profits from export, $\varepsilon\varepsilon_{31}$	Amount of economic profits from import, $\varepsilon\varepsilon_i$
2014	$\varepsilon\varepsilon_{i3} = \varepsilon\varepsilon_3 + \varepsilon\varepsilon_i$	38924	36309	2615
2015		29774	77145	2329
2016		47132	44152	2980
2017		86886	83506	3380

## Determination of SOCAR transnationalization indicator, (mln.manat)

Year	Calculation formula	Yt	S <sub>1</sub>	S	P <sub>1</sub>	P	Ç <sub>1</sub>	Ç
2012	$Y_t = \frac{S_1/S + P_1/P + C_1/C}{3}$	0,363	14031	21866	1393	3282	1585	66234
2013		0,395	15099	23046	1651	3270	1571	61088
2014		0,391	16.269	24067	1798	3830	1590	56460
2015		0,348	25.990	39954	1287	3254	1580	52576
2016		0,510	32452	53007	4518	5219	3800	53009
2017		0,455	33042	61347	1,896	2522	4280	54552

# OPTIMAL PROGRAM OF PRODUCTION OF MACHINE-BUILDING PRODUCTS FOR MARKET ECONOMY

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## **ABSTRACT**

*The study of the influence of the optimal program for the production of engineering products. The problem of assigning an optimal production program for the production of machines and mechanisms in a competitive market economy is considered in the research. The designing of technological process for the manufacture of machines and mechanisms is based on the working drawings of the product and finished production program. The problem of calculation of the size of optimal products lots requires its solution. Errors in the assignment of the size of the manufacturing program can lead to big losses for the enterprise. To this end, the analysis of the production program of the machine-building enterprise was implemented based on the profitability schedules. It was demonstrated that optimal program for the production of machines and mechanisms was directly proportional to the period of obsolescence. Main means of ensuring the profitability of an machine-building company is to reduce the cycle of the machine production. On the basis of the analysis of the obsolescence of the machine, analytical dependencies are proposed for calculating the number of manufactured products, ensuring that the company obtains the required profit. The optimal program for the manufacture of machines is directly proportional to the period of “obsolescence” of the product and inversely proportional to the release stroke. At the same time, “moral obsolescence” is due to the degree of perfection of the design of machines, and the tact of release – the level of organization of the life cycle production. In the context of reducing the period of “obsolescence” of the product, the main means of ensuring the profitability of a machine-building company is to reduce the tact of production of machines while at the same time solving the problem of a painless transition to the manufacture of a new product.*

**Keywords:** *product release program, product sales strategy, profit of the enterprise, optimal machine production time*

## **1. INTRODUCTION**

It is known that in the design of manufacturing technology of the machine, as a baseline data, the working drawings of the product and the so-called annual program issue appear in pieces. If the design documentation should be developed at the previous stage of the product life cycle (LIC), the question of determining the size of the optimal series of machines or a batch of products remains open. The fact is that with the planned economy that existed earlier in Russia, the program of release was appointed on the basis of the state needs and interests of the entire population. With the transition to the market relations in a competitive environment, this task has become particularly acute, since the number of manufactured and sold products must, on the one hand, reimburse the costs of organizing their production, and on the other, bring some profit to the owner of the enterprise without overproduction of these products. Therefore, errors in the appointment of the value of the release program in one direction or another can lead to bankruptcy of the enterprise.

## **2. RESEARCH**

Let's analyze the production program of the machine-building enterprise on the basis of the so-called profitability graphs [1,3,6], which are built in the coordinates of the “product release program-cost” (Fig. 1). Total costs for the production of certain types of products, expressed in

conventional units of value (CU), are made up of the initial capital investments necessary to organize the production of new machines and the current costs (cost) for the manufacture of products according to the formula. [2,8]

$$Z_i = K_i + C_i N, \quad (1)$$

Where is the cost of a single product, (CP), current production program of release, pieces. Dependencies (1) correspond to the line of total costs (see Figure 1), which in the case of constant value is a straight line. On the other hand, the general approach of the enterprise from the sale of manufactured products is directly proportional to the program of their release:

$$D = J_i N, \quad (2)$$

Where - the price of the product, in

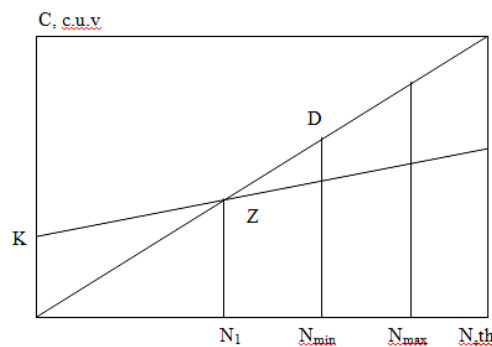


Figure 1: the schedule of profitability of release of products

With a certain number of manufactured and sold products, the lines of total costs ( $Z$ ) and total income ( $D$ ) will overlap. The point of intersection of the lines has a coordinate on the abscis axis:

$$N_1 = \frac{K_i}{S_i - C_i} \quad (3)$$

Up to the value  $N_1$ , the company incurs losses due to the need to compensate for the total costs made by this point  $N > N_1$ , and when it starts to receive current profit. It should be noted that the company will be able to receive full compensation for the absolute total costs with the absolute total income only when it produces and sells more than  $N_1$ , the number of products that we denote as  $N_{\min}$ . In the case of straight line dependencies  $Z$  и  $D$  and on the release program, we have the ratio  $N_{\min} = 2N_1$  or, taking into account the equality (3):

$$N_{\min} = 2K_i / (S_i - C_i) \quad (4)$$

Since, starting with a value  $N_{\min}$ , the enterprise under consideration will receive an absolute profit; this value is the lower limit for determining its profitable production program. Analysis of expression (4) shows that a profitable release program is determined by the difference between the price of the product and its cost, or, equivalently, the profit from the sale of the

product. The greater is this difference, the smaller is  $N_{\min}$  and vice versa: as the price of machinery approaches the cost price of its production, the profitable output program rises sharply [7,9]. It should be noted that the scheme presented in Figure 1 for the definition of  $N_{\min}$  gives a rough and fairly straightforward idea of the value of a profitable program for the production of engineering products. The fact is that for the actual conditions of production and sales of products, both the value of the product's cost price and its price do not remain constant as the output of the machine of this model increases. As a rule, at the very beginning of mastering the production of a new machine, the manufacturing technology is processed and at the same time the working personnel adapts to the new methods of work with gradual accumulation of the skills and abilities necessary for the coordinated work of the entire production team. Therefore, the cost of production during this period is significantly higher than in the subsequent one. (3) There is a footnote: "In general, they consider that they will build the first copy of a newly invented machine almost five times more expensive than the second." In the process of further production of products, the machines are improved, which also helps to reduce the cost of subsequent batches and copies. Monotonous cost reduction with an increase in the production of products can be expressed by dependence:

$$Z_i = K_i + C_i N^\alpha \quad (5)$$

Where  $\alpha \leq 1$  - the degree of reduction in total cost growth.

At the same time, the terms of trade dictate a different sales strategy for products as they become saturated with the market. In most cases, the price follows cost, i.e. each subsequent car is sold cheaper than the previous one. At the same time, the opposite strategy is possible, associated with the emergence of a fashion for a product and the accompanying rush demand, as well as with inflationary processes. In the more general case, first, a certain number of products increase the price, and then as the construction approaches the "obsolescence" period, the price decreases [5]. Finally, in a number of strategies, a manufacturer uses deming (reducing prices to or even below the cost of manufacturing a product) to gain a dominant position in a certain market sector, and then after suppressing competitors, the selling price sharply increases. All these strategies can be described by expressions for total income:

$$D = S_i N^\beta \quad (6)$$

where  $-\beta < 1$  - with a monotonous decrease in the growth of total income  $\beta > 1$  and with its monotonous increase;  $S_i$  - initial price;

$$D = S_i N^\gamma (1 + N^{\beta-\gamma}) \quad (7)$$

Here  $\beta > 1$  and  $\gamma < 1$ , if at first there is an increase, and then a reduction in the price of products;  $\beta < 1$  and  $\gamma > 1$ , if the opposite happens.

Of course, non-monotonic dependencies like (5) - (7) are also possible, due to the volitional decisions of the enterprise management and the policies of the seller of products; however, you should always calculate, predict and, finally, know these dependencies in numerical characteristics, since cost-effective production program releases products. Consider, for example, the case when total costs vary in dependence (5), and total income in relation (6), in

which  $\beta < 1$  (Fig. 2). Then, the value  $N_{\min}$  is determined by equating total costs to total income, or, equivalently, the equality of areas  $F_1$  and  $F_2$  curvilinear figures in Figure 2. The point of intersection of the given dependences is determined by the coordinate  $N_1$ , the value of which is found by numerical solution of the equation.

$$S_i N_1^\beta - C_i N_1^\alpha = K_i$$

In the case of using other strategies for changing the total income of an enterprise, which are shown in Figure 2 by dashed lines  $N_{\min}$ , is determined in the same way. Thus, the minimum release program with a combination of expressions (5) and (7) is determined by the equation

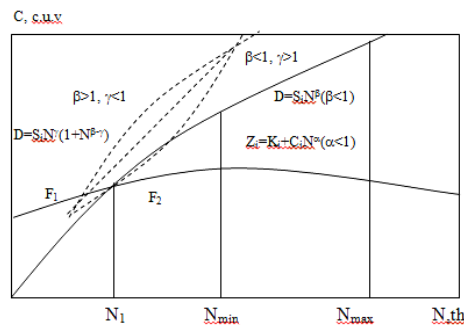


Figure 2: Profitability graph for various product sales strategies

We should remind that  $N_{\min}$  determines the number of products, the implementation of which on the market allows you to offset the total cost of their production. When  $N \geq N_{\min}$  the company begins to receive an absolute profit, maximizing the value of which in the capitalist mode of production is a global goal [10]. Thus, there is a fundamentally important task of determining the maximum release program  $N_{\max}$ , after which the product is removed from the production. The key to solving it should be the so-called obsolescence of the machine. For the first time, this concept was introduced by Karl Marx, writing in his work [3]: “But besides material wearing, a machine is subjected, so how to say to moral wearing”. It loses its exchange value as the machines of the same design start to reproduce cheaper or the best cars enter into competition with it. In both cases, no matter how new and viable a machine is, its value is no longer determined by the working time actually implemented in it, but by that which is necessary for reproducing it itself or for reproducing the best machine. Therefore, it more or less loses its value. The shorter the period during which its value is reproduced, the less happens the risk of obsolescence ...” Note that the term “moral depreciation”, like all major political economies, is unclearly defined. Therefore, in the future, we will understand the calendar time period of the LCP, starting from the moment of the release of the first copy of the new machine to the moment of removal of this model from production. If we designate through  $T_M$  the period of obsolescence of the product in arbitrary units of time (USD), then the maximum production program can be expressed as:

$$N_{\max} = T_m / t_d \quad (8)$$

where-  $t_d$ , is the time interval through which the product is periodically released (release stroke (4), (USD).

In Figure 1 and 2, the lines  $N_{\max}$  limit the area of absolute profit from above, and from below, as it follows from the above, it has a zero limit along the line  $N_{\min}$ . If these values are known, then for straight-line dependencies, the size of the obtained profit  $\Pi$  corresponds to the area of the cross-hatched zone (see figure 1). After integrating this area, taking into account the expression (4), a formula was obtained for calculating the absolute profit value:

$$P = N_{\max} [0,5N_{\max}(S_i - C_i) - K_i] \quad (9)$$

From the analysis of the expression (9), it follows that the profits of the enterprise will increase with an increase  $N_{\max}$  and the difference between the price of the product and its cost, as well as a decrease in the initial capital investment in the organization of production of these products. The value  $N_{\max}$  is the most effective means of increasing absolute profit, as it is in the formula (9) in the second degree [11]. Figure 3 shows an example of the calculation of profit according to (9) for different values of the cost of manufacturing products and at a constant price of their realization on the market. As you can see, the curves obtained are parabolic in nature, with positive values  $P$  starting, as shown above, with a certain value of the production program  $N_{\min}$ , and the minimum of the curves correspond to the values  $N_1$  calculated by formula (3). As the cost of the product approaches its price, the moment of the beginning of the enterprise's profitability is at the same time

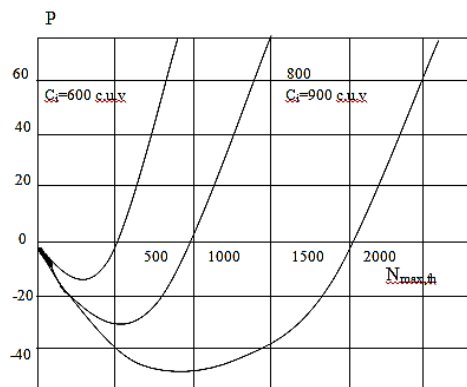


Figure 3: Dependencies of profit on the maximum program of product release:  
 $K_i = 100000, S_i = 1000$

The degree of increase in profits decreases (the flatter nature of the positive branches of the curves). Such dependences allow you to visualize the planned profit of a machine-building firm, depending on the intended program of production. If we now return to relation (8), we find that it is possible to increase  $N_{\max}$ , either by increasing the period of obsolescence of the machine, or by reducing the tact of product release. In the modern economy, the market is mainly saturated with products of one quality or another, and in these conditions, the increase in value  $T_m$  is substantially difficult. On the contrary, competition leads to a reduction in the "moral" life of a particular product design. This trend noted more prof. G.A. Shaumyan in his fundamental work [5] "Many machines, apparatus, devices, household products are improving so quickly that it is impossible to talk about long periods of production of the same quality ... In many cases, the release dates are reduced to one year, or even several months. This inexorable trend in the development of technology requires a revision of ingrained views..." Thus, only the appearance of fundamentally new products that satisfy the prospective demands of consumers,

allows us to significantly postpone the moment of their “moral wear and tear”. For traditional products, the opposite picture is observed - a reduction in the value  $T_m$  to a certain minimum. The limit of this reduction is the period of  $T_e$  “physical wear and tear” of the machine if then all manufactured products will become obsolete without having served their economically reasonable period [12]. Substitute the relation (8) and the formula (9):

$$P = \frac{T_m}{t_d} \left[ 0,5 \frac{T_m}{t_d} (S_i - C_i) - K_i \right] \quad (10)$$

From expression (10) it follows that, as noted above, with a certain value of the period of “obsolescence” of a machine, the profit of a machine-building firm is inversely proportional to the tact of release of products. Figure 4 shows an example of the calculation of profits for equality (10) which indicates a high gradient of increase in profits as the output stroke approaches the minimum values. At the same time, for more promising products that have an increased period of obsolescence, the same value of the total profit can be obtained with a larger value of the production stroke. On the contrary, a similar profitability of products with a small value  $T_m$  can be achieved only through a more strict organization of production, due to a decrease in value  $t_d$ . Thus, in order to achieve the maximum possible profit within the limits of the considered restrictions, the main direction should be the way of a worldwide reduction in the tact of product release. And the value corresponding to this tact  $N_{\max}$  will be the optimal production program for the production of products. Ways to reduce the tact of production of products have long been known in engineering technology [4]. They are primarily associated with mass and large-scale production. The organization of these types of production is based on the principles of direct precision manufacturing processes. The first principle is realized by minimizing in time and space the route of the passage of the object of production from the first to the final stage.

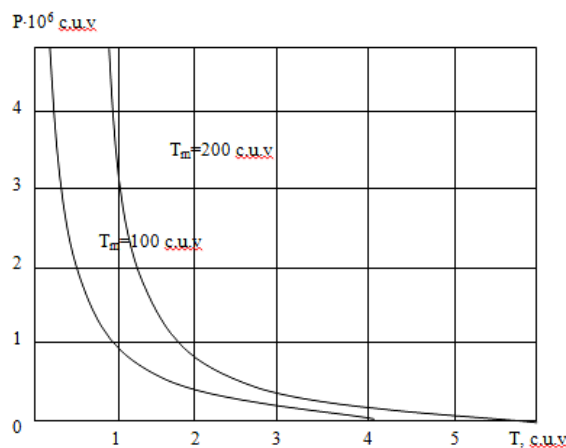


Figure 4: The impact of product release tactics on profits:  $S_i = 100$ ;  $C_i = 800$ ;  $K_i = 100000$

This reduces organizational losses. The second principle requires synchronization of operations in the procurement, mechanical and assembly industries in which the time required to perform a single operation is equal to or multiple to the production cycle. The initial data for the rational organization of the manufacturing stage of the machine should be the value of the optimal tact  $t_{D.OPT}$  release of products.

If it is determined on the basis of formula (10), then the piece time to perform individual technological operations should be equal to or a multiple of this value:

$$t_i = mt_{d.OPT}, \quad (11)$$

Where –  $m = 1, 2, 3$ , is an integer.

In the case when the operation time is longer than the exhaust stroke and it is determined by the speed of the physical process (heat treatment, drying after dyeing, etc.), it is necessary to use  $m$  jobs in parallel in this operation. In other cases, seek  $m = 1$ . In turn, the calculated formula time unit has the form: [4]:

$$t_i = (t_0 - t_B) \left( 1 + \frac{\alpha + \beta + \gamma}{100} \right), \quad (12)$$

Where  $t_0$  - is the main technological time of the operation, USD  $t_B$  taking into account as auxiliary time USD,  $\alpha, \beta, \gamma$  respectively, on the technical and organizational maintenance of the workplace and on regulated breaks in work.

From expressions (11) and (12) we consider:

$$t_0 + t_B = \frac{t_i}{1 + \frac{\alpha + \beta + \gamma}{100}} = \frac{mt_{d.OPT}}{N_1} \quad (13)$$

Thus, in order to ensure the maximum possible profit in these conditions, the production of products must satisfy condition (13), in the left part of which is the sum of the main and auxiliary time for each operation of the production process (operational time). By reducing the period of obsolescence of this machine design, condition (13) becomes rigid. As a rule, it is necessary to find various ways to reduce operational time. It is recommended to solve this problem by appropriately constructing operations and applying high-performance technological equipment (PTE) that implements this technology. In contrast to the traditional methodology, the design of technological processes is proposed to lay the principle of operation synchronization at the head of the technological process pressure on operations, as is customary when implementing a conveyor assembly of machines [13]. For the design stage of machining workpieces of machine parts, this condition is the most difficult to ensure. Let there be a working drawing of the part and the corresponding blank, the shape and dimensions of which are as close as possible to the dimensions of the part. For each surface of the part, based on its shape, requirements for accuracy and surface quality, a processing route is drawn up in the traditional way as a series of consecutive technological transitions, inter-operational allowances, cutting conditions are calculated and the main technological and auxiliary time is normalized with consideration of alternatives. Next, an enlarged summation of the execution time of technological transitions is carried out in the bottom of the operation subject to the conditions:

$$t_{OPTj} = \sum_{i=1}^n (t_{oi} + t_{Bi}) \approx t_{D.OPT} / C_1, \quad (14)$$

Where  $n$  - is the number of technological transitions concentrated on the  $j$ -th operation.



As a rule, condition (14) will be satisfied approximately. To establish strict equality it is necessary to vary in further approximations by the following characteristics:

- single and multi-instrumental adjustments;
- single and multiple processing;
- sequential, parallel-serial or parallel scheme for constructing an operation;
- universal, adjustable or special equipment;
- universal, specialized or special machine;
- manual, automated process control or control from CTU;
- mechanization or automation of auxiliary transition operations.

As a result of this design stage of the technological process, the content of each technological operation is refined and the total labor intensity of mechanical processing is determined. Thus, PTE should be selected successive approximations based on a given machine release cycle. Given the tendency to reduce the size of the equipment, the main production should mainly consist of automatic machines, automatic, rotary, and rotary conveyor lines. At the same time, we note that for the stable operation of the main production, it is necessary to create an appropriate material base for auxiliary production, the main task of which is to design the manufacture of the technical service station PTE for the production a new machine. Moreover, this work should be carried out systematically and constantly to ensure the optimal transition to the release of a more perfect product [4,8]. Since in this production area the type of production corresponds to a single and small-scale, it is advisable to widely use flexible technology. Powerful instrumental and experimental production should serve as an additional pillar of the modern machine-building enterprise and thereby ensure the stability and high profitability of the machine-building industry.

### 3. CONCLUSION

The optimal program for the manufacture of machines is directly proportional to the period of “obsolescence” of the product and inversely proportional to the release stroke. At the same time, “moral obsolescence” is due to the degree of perfection of the design of machines, and the tact of release – the level of organization of the life cycle production. In the context of reducing the period of “obsolescence” of the product, the main means of ensuring the profitability of a machine-building company is to reduce the tact of production of machines while at the same time solving the problem of a painless transition to the manufacture of a new product.

### LITERATURE:

1. A.H.Abdullayev “Machinery details and the basics of making constructions” Manual.Baku, Elm, 2003.
2. Eroshov A.A. ,Osipov., Y.N.,Klyuchkov, “General methodology for assessing the factors that determine the performance of engineering products. Mathematical modeling and control in complex systems” Moscow, MSUPS.2006.
3. “Quality Management in Mechanical Engineering” Y.N.Osipov, A.A.Ershov.-M., Nauka,2009-399p.
4. QS 9000. Quality system requirements.
5. Kleinemeyer J. “Standardisation as a Tool for Strategic Management”in W. Hesser (ed.) From Company Standardisation to European Standardization, Hamburg: Universitet der Bundeswehr, 1995, -15p.
6. Canəhmədov Ə.X. və başqaları. Tribologiyanın əsasları. Dərslik. Bakı: Çəşioğlu, 2001. – 276 s.

7. International Trade Center (UNCTAD|WTO). Road map for quality: Guidelines for the Review Of the Standardization, Quality Management, Accreditation and Metrology (SQAM) Infrastructure at National Level. Geneva, 2004, -95 p.
8. Асланов З.Ю. Влияние эксплуатационных факторов на работоспособность редуктора. Вестник. АИА, Баку-2016, стр.35-45
9. Малкин Д.Д. Теория и конструирование вибрационных устройств // Вибрационная техника в машиностроении. Львов, 1987, 210 с.
10. Избирательный перенос в тяжело нагруженных узлах трения / Под ред. Д.Н. Гаркунова. М.: Машиностроение, 2002, 246 с.
11. Ершов А.А. и др. Влияние смазочной жидкости на качество поверхности при виброобработке // Технологические процессы и материалы в машиноприборостроении. М.: МГАПИ, 2003, 34 с.
12. Поляков В.С. Справочник по муфтам. Л.: Машиностроение, 1979, 256 с.
13. Старосельский А.А., Гаркунов Д.Н. Долговечность деталей машин. М.: Машиностроение, 1997, 234 с.

## THE EXPERTISE OF QUALITY INDICATORS OF SHRIMPS (PALAEMON ELEGANS) FROM RESERVOIRS OF SHAMKIR AND MINGACHEVIR

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### ABSTRACT

*The article is devoted to the expertise of organoleptic and physical-chemical methods of shrimp hunting from Mingachevir and Shamkir reservoirs (Palaemon elegans). In the salty and sweet waters of Azerbaijan, the shrimps (Palaemon elegans) are the main part of the food reserves of the fishes that have fishery importance which fed by predatory and benthic organisms and have high nutritional value and curative properties. There are more amino acids that are indispensable in proteins in the meat of the shrimp. Vitamins B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>12</sub> and micronutrients iodine, manganese, cobalt, copper and other elements are far superior to them in comparison with the meat of terrestrial animals. The qualitative indicators of shrimps (Palaemon elegans) from the Mingachevir and Shamkir reservoirs in 2019 were investigated by organoleptic and physical-chemical methods. The appearance, consistency, odor and taste of shrimp (Palaemon elegans) were organoleptically identified. The size and weight, mass composition, nitrogen-based volatile substances, and fat content of the shrimp were determined with the physical-chemical method (Palaemon elegans). The investigated shrimp meat contains 76,67% of water and 17,5% of protein. The average weight of shrimp hunted from the Mingachevir reservoir (Palaemon elegans) is 16,6 g, the eatable portion of the tail is 42% of the body, and the average weight of the shrimps in the Shamkir reservoir is 16,2 g, and the eatable portion of the tail is 41,4%.*

**Keywords:** *Mingachevir reservoir, Shamkir reservoir, shrimp, expertise, organoleptic method, physical and chemical method*

### 1. INTRODUCTION

6 types of crabs which related to shrimps were found in the freshwaters of Azerbaijan and the Caspian Sea. 2 types of shrimps *Palaemon adspersus* and *Palaemon elegans* accidentally were brought from the Black Sea to the Caspian Sea during the introduction of mullet in 1931-1934 and included in the fauna of Azerbaijan. *Palaemon elegans* shrimp is currently more widespread of the freshwaters of our Republic and the Azerbaijan is shores of the Caspian Sea, as well as in Mingachevir and Shamkir reservoirs. Although the *Palaemon elegans* shrimps spread in the whole area of Mingachevir and Shamkir reservoirs, mainly they are more densely inhabited in the coastal zone which is rich with plants. *Palaemon elegans* shrimps take part as detritophagous in bioremediation of both reservoirs. At the same time, it forms a feed base of valuable trout in the food chain of the reservoirs. In addition, *Palaemon elegans* shrimps play an important role as delicacy food in people's food. The shrimps which have rich chemical structure are easily and quickly assimilated by organism. The body contains 76,67% of water, 17,5% of protein and 100 gr shrimp gives 92 kcal of energy. There are much irreplaceable amino acids in protein of the shrimp meat. Vitamins B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, B<sub>12</sub>, microelements iodine, manganese, cobalt copper and other elements have many times rather than the meat of the terrestrial animals. The quality indicators of shrimps (*Palaemon elegans*) hunted from the Mingachevir and Shamkir reservoirs have been investigated by physicochemical and organoleptic methods.

## 2. ASSESSMENT OF QUALITY INDICATORS OF SHRIMPS (*PALAEMON ELEGANS*) BY ORGANOLEPTIC METHOD

The expertise of the quality indicators by organoleptic method of the shrimp was carried out in accordance with the requirements of CAC/CL 31-1999 adopted by the European Union. Therefore, the quality indicators (appearance, size, colour, scent, presence the signs of injury and illness features) of the shrimps hunted from Mingachevir and Shamkir reservoirs firstly were examined by organoleptic method. The average size of the shrimps hunted from the Mingachevir reservoir was 6,8 cm, the average size of shrimps hunted from the Shamkir reservoir was 6,6 cm. The surface of the shrimps hunted from both reservoirs was clean, bright and undamaged. No extraneous odors and signs of illness were observed in the shrimps. Thus, the results obtained during the organoleptic expertise of the quality indicators of shrimps hunted from Mingachevir and Shamkir reservoirs meet the requirements of existing standards and normative-technical documents and no specific deviations from the standards have been reported.

## 3. EVALUATION OF THE QUALITY OF SHRIMPS (*PALAEMON ELEGANS*) BY PHYSICO-CHEMICAL METHOD

During the physicochemical examination, the mass composition of shrimps (*Palaemon elegans*) hunted from Mingachevir and Shamkir reservoirs, the amount of nitrogen-based volatile substances and lipids were determined.

### 3.1. The specification of the mass composition of separate parts of shrimp

For research, the mass composition of separate parts of shrimp hunted from Mingachevir and Shamkir reservoirs were determined. The total weight of *Palaemon elegans* shrimp hunted from Mingachevir reservoir was 16,60 gr, head-chest part 7,34 gr, the shell part of 1,63gr, internal organs 0,66gr, edible tail part of 6,97 gr. The total weight of *Palaemon elegans* shrimp hunted from Shamkir reservoir was 16,20 gr, head-chest part 7,28gr, the shell part of 1,57gr, internal organs 0,64gr, edible tail part of 6,71 gr. The calculation was conducted with an accuracy of 0,01 and the results are given in Table 1.

№	The names of the parts of shrimp	(Palaemon elegans) shrimp hunted from Mingachevir reservoir		(Palaemon elegans) shrimp hunted from Shamkir reservoir	
		Weight, gr	The waste by weight of shrimp, in %	Weight, gr	The waste by weight of shrimp, in %
1.	The whole body of shrimp	16,60	100	16,20	100
2.	Head-chest part	7,34	44,21	7,28	43,85
3.	Shell	1,63	9,82	1,57	9,69
4.	Internal organs	0,66	3,97	0,64	3,95
5.	Tail part	6,97	42,0	6,71	41,41

Table 1: The mass composition of separate parts of shrimp

As seen from Table 1, the edible tail part of the *Palaemon elegans* shrimp hunted from Mingachevir reservoir is 6,97 gr and contains 42,0% of the body and the edible tail part of the *Palaemon elegans* shrimp hunted from Shamkir reservoir is 6,71 gr and contains 41,41 % of the body.

### 3.2. Specification of the volatile substances nitrogen based in Shrimp meat

The total amount of volatile-based substances in shrimp meat is determined according to the result of titration of 0,1n sodium hydroxide in the presence of methyl red. The expulsion of trimethylamine from shrimp meat is based on titration with formalin. In this case, ammonia and the first volatile amine combine with formalin. The amount of nitrogen trimethylamine is determined according to the difference between the volatile-based nitrogen, nitrogen in ammonia and the first amines. The amount of the volatile-based nitrogen in the fresh meat of shrimp isn't more than 15-17 mg%, the amount of the volatile-based nitrogen in the muscle tissue of spoiled shrimp is 30 mg %. The trimethylamine is 7 mg% in the fresh meat of shrimp, 7% to 20% in the meat of shrimp which is suspected of freshness and is more than 20 mg % in the meat of old shrimp. The amount of the trimethylamine and nitrogen-based volatile substances in shrimp meat (*Palaemonelegans*) hunted from Mingachevir and Shamkir reservoirs was determined. The amount of the trimethylamine ( $X_2$ ) and the amount of nitrogen-based volatile substances ( $X_1$ ) in shrimp meat hunted from Mingachevir reservoir was determined.

$$X_1 = \frac{(22,1-19,8) \cdot 1,4 \cdot 100}{20} = 16,1 \text{ mq \%} \quad (1)$$

$$X_2 = \frac{(22,1-19,8-1,5) \cdot 1,4 \cdot 100}{20} = 5,6 \text{ mq \%} \quad (2)$$

The amount of the trimethylamine ( $X_4$ ) and the amount of nitrogen-based volatile substances ( $X_3$ ) in shrimp meat hunted from Shamkir reservoir was determined.

$$X_3 = \frac{(25,6-23,2) \cdot 1,4 \cdot 100}{20} = 16,8 \text{ mq \%} \quad (3)$$

$$X_4 = \frac{(25,6-23,2-1,5) \cdot 1,4 \cdot 100}{20} = 6,3 \text{ mq \%} \quad (4)$$

According to the results obtained, the amount of nitrogen-based volatile substances in shrimp meat (*Palaemon elegans*) hunted from Mingachevir and Shamkir reservoirs was 16,1mg % and 16,8 mg %, the amount of trimethylamine was 5,6 mg% and 6,3 mg%, respectively. And this shows that the shrimp hunted from both the reservoirs is fresh.

### 3.3. Specification of the fat content in shrimp meat by acidimetric method

The studied shrimp sample is dissolved in the sulfuric acid. The fat solution diluted with ethyl alcohol is then separated by a centrifuge and the amount of the fat is determined with a fat meter. The fat content in shrimp meat (*Palaemon elegans*) hunted from Mingachevir and Shamkir reservoirs was determined for expertise.

The fat content ( $X_1$ ) in shrimp meat hunted from Mingachevir reservoir is determined.

$$X_1 = \frac{0,52 - 0,01133 \cdot 100}{2} = 0,29\% \quad (5)$$

The fat content ( $X_2$ ) in shrimp meat hunted from Shamkir reservoir is determined.

$$X_2 = \frac{0,48 - 0,01133 \cdot 100}{2} = 0,27\% \quad (6)$$

The fat content in shrimp meat hunted from Mingachevir reservoir is 0,29%, the amount of fat in shrimp meat hunted from Shamkir reservoir is 0,27%. Thus, the results obtained on the basis of the research work once again confirmed that the organoleptic and physicochemical quality indications of shrimp meet the requirements of the existing standards and no serious deviations from these standards have been reported. This ensures that the shrimp meat is suitable for food and commodity.

#### 4. CONCLUSIONS

The results obtained during the examination of the organoleptic and physicochemical quality indications of shrimps hunted from Mingachevir and Shamkir reservoirs meet the requirements of the existing standards and normative-technical documents and no specific deviations from these standards have been reported. The average weight of (*Palaemon elegans*) shrimp hunted from Mingachevir reservoir was 16,6 gr, the edible part of the tail contains 42% of the body, the average weight of shrimp hunted from Shamkir reservoir was 16,2 gr, the edible part of the tail contains 41,4 % of the body, this allows shrimp to be used by people as delicacy food. The amount of nitrogen-based volatile substances in shrimp meat (*Palaemon elegans*) hunted from Mingachevir and Shamkir reservoirs was 16,1mg % and 16,8 mg %, the amount of trimethylamine was 5,6 mg% and 6,3 mg%, respectively and this shows that the shrimp hunted from both the reservoirs is fresh. The fat content in shrimp meat hunted from Mingachevir and Shamkir reservoir is 0,29% and is 0,27%. So that the shrimp meat which has a rich chemical composition, has not only dietary features, but also is quickly and easily assimilated by organism.

#### LITERATURE:

1. Андрест, Б.(1980). Справочник товароведов продовольственных товаров. М.: Экономика, т 2.
2. Базарова В. (1986). Исследование продовольственных товаров. М.: Экономика.
3. Касымов А. (1996) Отряд десятиногие ракообразные – Decapoda. В кн.: Животный мир Азербайджана, т. II, Членистоногие.
4. Кулиева Л. (2009) Химический состав и пищевая ценность мяса креветки (*Palaemon elegans* Rathke ) из пресных водоемов Азербайджана /VII Международная научно-техническая конференция . Тезисы докладов техника-технология пищевых производств., 21-22 мая, Часть 2., Могилев.

## INSTITUTIONAL VIEW OF THE NATIONAL ECONOMY

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### **ABSTRACT**

*Purpose of this paper is to study the theoretical views on the national economy, as the difficult economy, social, organizational, scientific and technological system and the rationale for the peculiar features. In this paper this we used systematic approach and methods of comparative analysis. Findings are focused on identification of new scientific and theoretical justification in terms of theory development on the national economy. In terms of scientific and theoretical studies this paper require more extensive research. Practical implication of the paper is ability to use as a research source in the development of new concepts of national economies. Value of the paper stands as a one of the new research studies related to the theory of national economy.*

**Keywords:** *national economy, institutionalism, economic systems, peripheral economy*

### **1. INTRODUCTION**

National economy of each state is very complex economic, social, organizational, scientific and technological system. It possesses the total economic benefits accumulated in the process of implementation of the potential of national economy. It is advisable to distinguish natural resources, production, labor, scientific-technical and other potential among them. Development of national economy provokes establishment and improvement of national market, and within the boundaries of these different segments of national market, such as commodity and capital markets, services market, labour market, real estate market, intellectual property market, means of production markets and etc, are shaped and operated. This article is also an effort to percept national economy as institutional issue.

### **2. HISTORICAL APPROACHES WHICH CRITICIZE CLASSICAL POLITICAL ECONOMY AND THEIR SPECIFIC FEATURES**

German economist Friedrich List (1789-1846) was the first critic of classical political economy. In his «National System of Political Economy», he approaches political economy not as universal and the most advanced system, but as historical science and divides five stages of the nation's economic development. This historical approach was not a coincidence, because in the first place F. List wanted to reflect the characteristics of the development of his own country (Germany). History itself is the biggest nationalization. Therefore, criticizing «cosmopolitan economics» by Adam Smith, F. List primarily performs as a national economist. [F. List «National System of Political Economy» 1841]. In his «The political economy of exchange valuables», he opposes the theory of national economic production forces, which stays in the center the priority of internal market on external, not division of labor [F. List «The political economy of exchange valuables» 1843]. Understanding that the relative advantages mainly can be used by rich countries, free traders<sup>1</sup> are profitable for advanced nations, he protects complex development of Germany under the guise of protectionist policy. (the harmonious combination of agriculture and manufacturing industry). He considers that raising prices as a result of protectionist policy will be industrial education method of nation. Just F. List views defined the development of the historical school which prepared formation of national economy as a free

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<sup>1</sup> Free trader- in economic theory, direction which announce state not interfere free trade in political and economic life and business activities.

field. Historical school was a strong protest against formalism and abstraction of classical political economy which made person second class detail. He reflected the growing idea of the human factor role in the development of humanity. Historical school has gone three stages in its development: old ( V. Rocher, B. Gildebrand, K. Knis), new ( G. Schmoller, K. Bucher) and newest (W. Sombart, M. Weber). German economist, critic of classical political economy Gustav von Schmoller promoted a fair description of actual economic behavior, emphasized the role of the development of non-economic factors, first and foremost, the economic life of moral norms, ethics and culture. German economist Werner Sombart (1863-1946) analyzed the role of institutions in shaping special features of the economic structure regarding genesis of modern capitalism as a specific manifestation of life. German economist Max Weber(1864-1920) showed different types of capitalism: political, imperialist, fiscal, industry. But, probably, his contemporaries were much more influenced by the honest opinions Max Weber's «Protestant ethic and the spirit of capitalism» and «The Three Types of Legitimate Rule» works. The first work which connects directly the source of market economy with unique features of European civilization, suggested sharply the issue about tradition of life in other countries, in this regard, were demonstrated inability rapid capitalist modernization of then peripherals of world economy.[ M. Weber «Protestant ethic and the spirit of capitalism» M.2003. p44-135]. As showed by M. Veber, classification of the main types of management have different bases: the rational-legal- legitimized rational administration, historically traditional norms, the charismatic personality of the leader's commitment and its unique skills: courage, confidence, moral qualities and talent. These three "ideal" types of sovereignty is not only showed the differences, as well as substantiated the necessity of a civilized approach an analysis of economic phenomena more adequately. M.Veber was sure that the laws of economic development may not be taken directly from history. The study of real trends allows to identify this or other events. It is very diffucult to confirm the importance of scientific research in the theory of ideas. M.Veber does not deny the construction of a Marxist development, believed that if they are true, even if they are theoretically more perfect species. Source of research German philosopher and economist K.Marx (1818-1883) is material, in the socio- historically determined production. He described production method as dialectical unity of production relations and forces, the forces of production in itself as the size of the man's power over nature. According of K. Marx`s opinion, major production forces of humanity arent production tools, but they are the people with general and professional knowledge, manufacturing experience , the skills of workers, working, employee, skills and a creative force. K. Marx separates different stages of their development qualitatively, and it occurs through them within the relations of production ( the production of natural forces , the forces of social production , the total production capacity ) [ K. Marx , F.Engels Works . 2nd edition . 4th ed , s168 1955-1981 ] . But understanding these stages became possible at the end of the twentieth century. At the beginning of the twentieth century completely different picture was dominated. Thanks to Q.V.Plexanovun - famous scientist (1856-1918), the vision of the instruments of labor was intensified by determining production capacity[ QVPlexanovun " Marxism and the main issues ," 1908 ] . Boundaries separating the economic systems is industrial and scientific-technical revolution. Within each of these systems can be further partitioned topology, which allows you to determine the formation and civilized ways for the synthesis of approaches. K. Marx and German philosopher F.Engels (1820-1895) by the materialist understanding of history developed a new methodology for the analysis of the national economy that has created prerequisites [K. Marx, F.Engels Works. 2nd edition. Volume 1, p.47-49, 1955-1981]. The study of economic systems of modern times is usually possible in the case on the institutional basis of economic theory. Institutionalism that formed in America assembled on itself the basis ideas of the German historical school English Fabist, French sociological tradition. We can not deny impact Ood marxisim on institusionalizm.



The old institutionalism emerged in the late nineteenth century and formed as a trend in 20-30s of twentieth century. He tried to catch the "middle line" between marxism and economix. In 1898th year American economist Tornsteyn Veblen cticisized German economist Q.Smoller for excessively emprizm. Attempting to answer to the question why economy is not science of evolution he proposes social philosophy ,anthropology and psychology instead of narrow economist approach. This was attempt to transform economist approach into social problems (Torsteyn Veblen ‘‘Approach of poor class’’ M.Proqres.1984). So historical approaches criticizing classical political economy and analyzing their specific features play substantial role in investigation of theoritical views of national economy and submitting their specific features.

### **3. SCIENTIFIC PROVISION OF STRATEGIES WITH RELEVANT TO INSTUTIONALISM**

Firstly, scientific provision of strategies due to ‘‘institutionalism’’ mentioned as actions and thought style through traditions of nations and groups In 1998th it was dubbed notion of ‘‘institutionalism’’. It was used by Uilton Hamilton. He defined institute as actions and thought style through traditions of nations and groups. A ccording to his view institutions define past procedures, shows general agreement, loyalty in the society. Institution means traditions, unions, states and so on. Usually, traditional institutionalists are T.Veblen, American economist-institutionalist U.Kler Michael(1874-1948), American economist-institutionalist C.Kommons(1862-1945), German economist K.A.Vittfogel(1896-1988), Norway economist Q.Myrdal(1898-1987), American economist-institutionalist C.K.Gelbreyt (1908-2006), American economist R.Haylbroner (1919-2005). Institutionalism as special orientation although formed in the end of 20th century, for a long time was in the periphery of economist thought. Explaining of economic welfare actions only by institutional ways did not cause more proponents. There are profound differencies between ‘‘ past’’ institutionalists (Torsteyn Veblen, C.Kommons, C.K.Gelbreyt) and non-institutionalists(R.Kouz, D.Nort və ya C.Byükenen). First, ‘‘ past’’ institutionalists ( for example, C.Kommons ‘‘ About law aspects of capitalism’’) attempted to learn problems of modern economist approaches by the help of methods of other sciences,law and policy; non-instituionalists went by opposite way-problems of politology and law problems by methods of neoclassic economist, before all involving modern microeconomic apparatus and game theory. Second, traditional institutionalist approach deals with inductive method, attempting to go from specific cases to general that as the result general institutionalist theory could not be formed; non-institutionalism by deductiv way- went from general principles of neoclassic economic theory to concrete events of social life. Third, the "old" institutionalism as radical economic thinking focuses on activity of groups( mainly trade unions and government) which protect the interests of individual; non-institutionalism considers independent individual as main and this solve the becoming of a member of appropriate group by will and interests. The table which describes the differences between "old" institutionalism and non-institutionalism is below.

*Table following on the next page*

Sign	"old" institutionalism	Non-institutionalism
Movement	From law and politics to economy	From economy to politics and law
Methodology	Other humanitarian sciences ( law, sociology)	Economic neoclassic ( the methods of microeconomics and game theories)
Method	Inductive	Deductive
Attention focus	Collective movement	Independent individual
Background for analysis	Holism	Methodological individualism

*Table 1: The differences between "old" institutionalism and non-institutionalism*

In recent years, interest in institutional researches increased. This is partially related with overcoming of limitations to several conditions which is specific for economics( full efficiency, perfect competition axioms, creation of balance only by price mechanisms and etc.) and attempt to looking through modern economic, social and political processes in detailed way and partially with analyzing of issues which occurred during Scientific and Technical Progress. Traditional research methods do not gives proper results that's why let's take a look at its improvement through neoclassic theory conditions. There are general provisions which related to non institutionalists: First, social institutes are important and second they are analyzed by standard tool of microeconomics. In 1960-1970th "economic imperialism" of G. Becker has appeared. In this period the economic concepts: balance, efficiency, education, family relationship, health, crime politics and etc. began to be applied in the fields of economy. As a result of this, the basic neoclassical economic categories had a deeper interpretation and application in a wider sphere. In modern theory institutions are understood as "game rules" and limited frames "created by humans" and these organize interaction between people as well as providing fulfillment of measures system. Below is given description of society, institutions and mutual relations of economy:



*Figure 1: Description of society, institutions and mutual relations of economy*

Institutions is classified as formal (eg the U.S. Constitution) and informal (eg, the Soviet Union, "telephone law"). When we speak about non-formal institutions we can realise the generally acceted conditionality and human's rules of ethnic behaviour. This are tradition, "laws", habits, rules and regulations which are the consequences of close existence of people. Because of them people easily learn desires and can easily understand each other. This behaviour forms cultural codes. On the other hand, when we speak about formal institutions we can realise the rules which are created and defended by authorized people( government officials). With the development of society changes are possible both in formal and informal rules, as well as means and effectives of coercion to the implementation of rules and restrictions. The changes in formal rules (or in mechanisms ensuring their compliance) usually require significant spending of

resources. Economic entities can direct their talents and knowledge for the search of beneficial opportunities through the creation of both final and intermediate organizations that can act in economic and political spheres. It is important that they would ensure the required changes in formal rules. Economic changes can occur quickly enough (as in the periods of revolutions or conquests). When coming to the changes in informal rules, they are implemented gradually. The rate of changes is absolutely different here; culture, occasion and natural selection play an important role here. Various variants for the emergence of institutions are possible as a result of collision between old and new, formal and informal rules. All these four variants are available in modern Russia. As a result, we have the restructuring of all restrictions in both directions. Organizations play an important role in institutional changes. In the broadest sense of the word, organization is a group of people united with the inclination to work together in order to achieve a certain goal. Aimed at maximizing the revenues, organizations and their leaders form the directions of institutional changes. There are two main strategies of change: one is carried out within the existing set of limitations, while another requires changes of the limitations themselves. Effective rules are those which block unsuccessful activities and support the successful ones. Namely they initiate the economic growth. Nevertheless, questions arise: why ineffective forms are preserved? Which factors ensure the survival of economies with persistently low parameters of functioning? What causes the block of new forms of economic management? What is the role of the previous development trajectory? Are only due to accidental circumstances the ineffective technologies and the form of economic management find a sufficient number of supporters? Given that the institutional system of any economy generates both productive and counterproductive incentives for the organization, the national economy is a combination of various development trends. If the feedback is fragmentary, and transaction costs are high, then the direction of development will be shaped by subjective models of players. A variety of institutional constraints and unique institutional catches are set here. All these questions are put by Douglass North (born in 1920) in his work titled "Institutions, institutional changes in functioning of the economy". Long-term economic changes are the result of the accumulation of countless short-term decisions of political and economic agents. Choices that are made by the agents reflect their subjective view of the outside world. Therefore, the degree of compliance between the results and intentions depends onto what extend these ideas are correct. Since the models reflect the ideas, ideology, beliefs (which can only partially subject to correction and improvement of feedback) , the consequences are often not only uncertain, but also unpredictable. The development problems of the national economies of the backward states were studied mainly by left-wing radical economists. Their concepts of a peripheral mode of production can be considered as a special kind of institutionalism. The theories of flawed, peripheral, dependent development were at the focus of left-wing radicals. The study of a peripheral development began not with the analysis of a production, but analysis of the scope of exchange, and the exchange of not internal, but external, i.e. international trade. The failure of attempts of rapid transformation of traditional society not only made to draw attention to the internal problems of peripheral economies, but also contributed to the search of foreign economy reasons for failure. The problem of antagonism of relations between developed and developing countries was at the center of research of a number of scientists, primarily of Latin American ones (P. Prebisch, S. Furtado). Left-wing radicals clearly showed that many internal factors of developing countries were the reflection of external factors. Weak development became a product of dependence as well as dependence flew out from a weak development in turn. The desire to establish reasons of emergence of that phenomenon turned their eyes to history. A number of works in which the emergence of modern capitalist world economy were traced appeared. Among them we should first of all mention the works of A. Frank and I. Vallerstein.

The idea of strengthening of the asymmetric interdependence has received an original interpretation in the concept of World- Economy of I. Vallerstein (p. 1930). The main stages of the evolution of capitalist World- Economy over a long period since XV till XX cc. were showed at the books of supporters of World- system approach. The stages of hegemony of Holland (1620-1672), Great Britain (1815-1873) and USA (1945-1973) were distinguished. How the colonial era turned to a neocolonial one was showed. The main blame for third wave states' backwardness of capitalism development lies on the countries of "golden billion". These highly developed countries of first class direct the system of capitalist world economy in such a way that underdeveloped countries are just doomed to remain as backward ones: their raw resources are bought at low prices and products of high technology are sold to them overpriced; they aren't admitted to the advanced technologies; not only capital, but even "brains" are pumped out from them. In short, "the aristocrats" of first tier not only don't intend to submit a hand to those who are trying to catch them up, but, on the contrary, "hit the hands" of those who are trying to hold on the handrails of this foremost express. A group of countries which occupy intermediate positions (semi periphery) also appears. They are peripheral to the more poor countries.

#### 4. CONCLUSION

The theories of national economy developed as an alternative to the main stream of economic thought. If the main stream is mainly engaged with the theories of universal development of national economies, then the cameralists, German historical school, old institutionalism, post-Cainsionism, left-wing radical economy school and new institutional theory laid to the theoretical foundations of national economy analysis. The economic systems are a set of interrelated economic elements which form a certain integrity, economic structure of society; relations' unity, which are accumulated under the production, distribution, exchange and consumption of economic benefits at the different stages of human society development. Let's consider the typology of main approaches of the economic systems in historical aspect. With a certain degree of conditionality, the existing approaches can be divided into the formational and civilizational ones. Consideration of the humanity development as a combination of ethnic groups adjoins to the last one. From the development point of view, a number of researchers consider that humanity passes advanced stages; the others consider that development makes a cycle.

#### LITERATURE:

1. Marx C., Engels F. Composition 2 edition. Tome 4. 168 p.
2. Blaug M. "Economic thought in retrospective". M.: "Economy issue Journal" 2004. 416 p.
3. Weber M. Chosen works. M.: Progress 1990 345 p.
4. Weblen T. Theory of indolent class M.: Progress 1984, 312 p.
5. Nosova S. S. "The economic theory" M.: "Vlados" 2007, 272 p.
6. Nort D. Institutions, institutional changes and functioning of economy. M.: Fund of economic book "Nachalo" 1997, 180 p.
7. Williamson O. "Economic institutions of capitalizm" S-P.: LenIzdat 1996, 582 p.
8. Basics of economic theory. Politeconomy of training genus, D.D. Moscovin edition M.: Nauka 2000, 576p.
9. <http://www.gallery.economicus.ru>

## METHODOLOGICAL ISSUES OF ASSESSING THE ECONOMIC EFFICIENCY OF FOREIGN TRADE

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### **ABSTRACT**

*The formation and development of the national economy in the conditions of a market economy is closely connected with the system of foreign economic relations. Effective organization and implementation of foreign economic relations has a significant impact on the functioning of the country's economic system. Effective organization of foreign economic relations is also a means of realizing the benefits of international division of labor. The article explores the effectiveness of foreign trade and economic relations and methodological issues in its assessment. In a market economy, the formation and development of close economic relations and the implementation of effective organization of activities, a significant impact on the effectiveness of economic relations, as well as the organization of the international division of labor of foreign trade and economic relations and methodological issues, it was studied its assessments of the effectiveness of the implementation of precisely the advantages of the country's economic system, the system of external economic relations of the national economy.*

**Keywords:** *Foreign trade, economic integration, foreign economic relations, economic efficiency, assessment*

### **1. INTRODUCTION**

The modern level of development of the world economy system, the rapid development of economic integration along the rising line have a strong impact on the study of international economic relations. Multifaceted practical activity requires a careful and creative approach to these or other considerations proposed by existing economic theories. In other words, studying foreign economic relations as isolated from other economic processes will not yield any results, or rather, the result obtained will not be correct and durable. As an inevitable result of expansion of international economic integration, the strengthening of the degree of economic openness of the countries is increased. The economic ties of each country with other countries, that is, the world around them, influence their economic efficiency. This leads to the economic benefit of the countries in the benefits of the international division of labor. Naturally, both aspects have interaction. At the same time, the effectiveness of economic relations as a more universal indicator covers the main points of the second aspect. In this regard, this issue has been studied in more detail in classical economic literature. Taking into account the purpose and intention of the article, it was decided that it was necessary to have a more detailed approach on the study

of this problem. The problem of economic efficiency is one of the most “ancient” important problems in economic science. However, mainly because of the many aspects of the problem, the scientific literature has not given the correct definition and interpretation to be accepted by all in this economic category. Efficiency as an economic category has always been explained and justified in the direction of serving the purpose of the study and the desires of the customers. Like all economic processes, the abovementioned applies to foreign economic relations as well. As is known, foreign economic relations as a whole, including foreign trade relations, which make up the absolute majority of these relations, are a means of reintegration of the international labour division. Considering that the direct economic result of the international labor division is an increase in the social productivity of labor, we recognize that the main sources that can create the efficiency of foreign economic relations are related to labor productivity in a broad sense. By showing the activity of the law of saving time for public work in the context of international labor division, David Ricardo proved in his famous “principle of comparative costs of production” on the basis of the theory of labor that mutually advantageous trade between the countries participating in this division is always possible by principle [3, p.84]. However, since the criterion of convenience of mutual trade carries a relative character, it is expressed in practice through various indicators. The choice of these indicators is characterized by the purpose and capabilities of the study as we mentioned. For example, in scientific literature, it is used such concepts and indicators as “economic efficiency of foreign trade”, “profitability of foreign trade”, “profitability in a broad and narrow sense”, “economic profitability”, “currency efficiency”, “budget efficiency of foreign trade”, etc. Many economists, including V.V.Novojimov, Q.L.Shagalov and others perceive economic efficiency as the ratio of public labor consumption and the result it brings. Obviously, this can only be a measure of efficiency, that is, the essence of the concept of efficiency is not revealed here. Some economists consider the economic efficiency of foreign trade as the economic expediency of meeting the demand of society through “production of products and its subsequent exchange abroad to other products”. Supporters of this idea explain the economic efficiency of relations only by the economic efficiency or expediency of the country's participation in the international labor division. But a number of authors, including G.M.Tuchkin show that such an explanation does not fully reveal the essence of economic efficiency. In his view, it is more correct to perceive efficiency as the achievement of any social results, either as a result of public work or as a result of certain public labor costs. Namely, such rapprochement also gave grounds to the claim that the role of foreign trade in the growth of the productivity of social work depends on the historical and socio-economic conditions. Even when proving the “class limit” of Ricardo's theory, K.Marks recommended that foreign trade consider the possibility of saving labor in the context of existing production relations [1, p.137]. As is known, when joining the international division of labor, the manufacturer tries to reduce its costs. In the conditions of free competition and market-driven regulation of supply and demand, cost reductions are characterized by deepening of specialization and increase in production. As a result of international specialization in the production of any product, the technical economic indicators of production improve: cost decreases, capital investment per unit of production decreases, labor productivity increases. That is, the public labor savings obtained as a result of the development of foreign trade are directly generated in production. It is also known that trade, including foreign trade, is to some extent a continuation of production, although it belongs to the circle of circulation. A number of features of trade, including the process of storing, sorting, packing and transporting products, give grounds to say that the production process continues there and thus this process also has a role to play in increasing the productivity of public labor. But the main function of foreign trade is not the continuation of production, but the exchange of products of specialized manufacturers. However, the exchange of goods, as is known, does not create value, but realises advantages gained in production.

Such bonds are expressed in a favorable ratio of national and international value or prices. The savings of public labor arising from the direct exchange of products through foreign trade are called economic benefits directly in foreign trade. The dimensions of such efficiency depend on the ratio of national and international values of imported and exported products. The criteria for determining the direct economic effect have been determined unequivocally. Thus, in international trade, the exchange of goods with an equivalent price on the world market takes place. And the price of goods exchanged at national prices can be different. The greater part of the national price of imported goods than the value of the goods being sold represents the savings of national labor and is called the direct effect of foreign trade. In practice, this more measurable excess part of export volume than the volume of import is replaced by an indicator of the balance of foreign trade relations [2, p.97.]. However, the effectiveness of foreign trade does not end there. Because foreign trade has a complex impact on production and creates additional savings of public labor. Such additional savings are called indirect economic benefits. It is important to note that foreign trade affects all phases of recycling: production, distribution, exchange and consumption. However, it is important to study the impact of foreign trade on production, as a determining role in recycling belongs to production.

## **2. RESEARCH METHODS**

The main directions of indirect impact of foreign trade on production can be grouped as follows:

- 1) The country's accession to the international labor division creates a certain structural change in its specialization in the production of certain products and thereby in the economy. Such structural changes lead to the creation of such general economic rates, in which the economy is more efficient. The general economic proportions that are affected more often and voluminously by foreign trade are: the ratio between the production of means of production and the production of consumer goods in separate production areas and the internal rate of a number of areas.
- 2) In addition to economic rates, foreign economic relations also affect territorial rates. That is, it affects the solution of such problems as the deployment of productive forces and the increase in the level of development of territories. The most effective way to change the territorial rates in recent years is to create economic zones with different regimes.
- 3) One of the most important areas of influence of foreign economic relations is the acceleration of scientific and technical progress in the country. The application of high-tech machinery and equipment, i.e. technology, labor science, stock and energy, increase of labor productivity, the need to raise the import product to a new level of quality in order not to lose its position in the foreign market, etc., necessitates the acceleration of scientific and technical development.
- 4) Foreign economic relations increase the efficiency of capital investment. Thus, technical advancement increases labor armament and at the same time increases the productivity of live labor. In addition, as foreign trade deepens specialization, it prevents the collapse of capital, that is, it creates conditions for its concentration in a small number of objects. It accelerates the “yield” of capital investment with import of ready-made production means and reduces its lag step. In all cases, the increase in the efficiency of capital investment leads to an increase in the productivity of public labor or its savings in all areas.
- 5) Foreign economic relations create favorable conditions for the formation of production contacts. This is due to the development of international specialization and cooperative relations. In addition to increasing the productivity of labor, it reduces the price of the product and allows saving labor in related areas. The use of the exported product nomenclature in the country contributes to the improvement of the quality level, acceleration of technical progress and rationalization of the economic rate, etc.[4, p.217.]

The above-mentioned directions of direct and indirect efficiency of foreign economic relations are constantly developing. In other words, the created conditions can increase and decrease the results of each of these directions and even create new directions. For example, the emergence of “new economic rules” in international economic relations in recent years, the strengthening of economic integration and polarization in the world have strengthened the political, psychological and military effects of foreign economic relations. The experience of the Republic of Azerbaijan is also remarkable in this area. Due to the fact that the category of efficiency according to its internal content and purpose should evaluate the economic process, its system of indicators and the method of calculating these indicators were developed depending on the characteristics of the research area. For this purpose it is necessary to determine the criterion of economic efficiency, which corresponds to the objective legitimacy of development, which is equally relevant to the economic system as a whole and its separate parts. In fact, it reveals all the methodological features of the process of determining the effectiveness of selecting this or that criterion. A large number of efficiency criteria are proposed in various economic studies. These proposals sometimes contradict each other, and sometimes complement each other. The main thing is to correctly determine the principle of selection of criteria. Thus, the criterion should not be numerous, since it is the principle of the main assessment of the economic process, its comparison with other processes. The proposed majority of criteria can not be characterized by a single indicator of economic efficiency indicators. A comprehensive analysis of efficiency makes it necessary to study multiple indicators in terms of a single criterion [6, p.243.]. It is important to note that two of the criteria for economic efficiency proposed by different researchers for different processes, so far, are the criteria for saving public labor and improving the overall well-being of society have attracted more attention. However, due to its measurable nature, the criteria for saving public labor in practice and improving the overall well-being of society attract more attention. Thus, due to its measurable nature, the criterion for saving public labor in practice is more favorable. As is known, foreign economic relations, including all economic consequences of various forms, are characterized by an increase in the speed of production growth, a decrease in the cost of production and capital capacity, an improvement in quality, a decrease in material consumption, an increase in labor productivity, etc. in fact, save working time. According to some researchers, the effect of foreign trade can be characterized by an increase in national income, which is functionally dependent on it. However, the determination of which part of the national income growth is taken directly at the expense of foreign trade is associated with methodological difficulties. As it is known, trade does not create any new value as a whole turnover, that is, national income does not increase at the expense of trade exchanges. This can only be said about the increase in the physical volume of national income within the framework of stable public labor consumption. Then, to allocate and calculate the impact of foreign trade on both production costs and consumption funds, which are part of the national income, is associated with quite specific difficulties [18, p.235]. These challenges further increase when determining the indirect effectiveness of foreign trade. Therefore, in order to determine the full extent of the economic effect of foreign trade, it is necessary to study the interaction and a number of mutually conditioned indicators that reflect its various aspects. Important indicators of economic efficiency of foreign trade can be grouped as follows:

- 1) Indicators that reflect the savings of direct public labor on foreign trade exchanges. The public necessary time spent on the production of products through value categories is compared with these indicators. They include indicators of economic efficiency of the export, import and foreign trade turnover.
- 2) Indicators of profitability of the above parameters. These determine the degree of profitability of external exclusion due to actual financial results. These indicators are



calculated as the difference between the costs incurred in foreign trade and the profit from there and are called budget efficiency of foreign trade

- 3) Indirect effects of foreign trade on the country's economy. These include broader recycling rates, cost and production capacity, material consumption rates, product quality indicators, structural changes in the economy and more, which is an indication of the impact of foreign trade on the scientific and technical progress of the country and other industries. [5, p.128.]

### 3. MODEL SPECIFICATION

Since the 1st and 2nd group of these indicators are directly related to foreign economic relations, we consider it important to interpret them in detail. The parameters included in the third group were analyzed in the studies on other economic problems from the point of view of efficiency and are observed very quickly in the economic literature. The efficiency of foreign trade turnover is expressed in the ratio of public labor savings to export costs:

$$S_{xtt} = (M_{ximp} - M_{xexp}) / M_{xexp}$$

$M_{ximp}$  - National costs required for the production of imported products or their substitutes,  $M_{xexp}$  - actual national costs incurred in the production and export of products and  $S_{xtt}$  - is the efficiency of the trade turnover. This indicator indicates the level of direct savings of public labor or the savings amount per unit of labor cost. In practice, they often perceive this indicator as the ratio of costs incurred on imported products or their substitutes to the cost incurred on exported products.

$$S_{xtt} - M_{ximp}$$

It is clear that this indicator characterizes the volume of saved labor. As it seems, if  $S_{xtt} > 1$ , the absolute saving of public labor occurs in the country, and if  $S_{xtt} < 1$  on the contrary, public labor is lost in the country. The indicator of the efficiency of the trade turnover can characterize efficiency in individual concrete transactions. In addition, this indicator can be assessed both absolute and relative. As we noted, the direct savings of public labor depends on the difference between the national and international values of exported and imported products. These values are mainly determined by the amount of work time spent on production of products, so the indicators of efficiency of export and import are characterized by labor savings. The economic efficiency of export is calculated as the ratio of foreign exchange earnings from the sale of exported goods, i.e. its international value to the domestic value of the goods, i.e. the cost of its production for export:

$$S_{exp} = Q_{exp} / M_{exp}$$

$S_{exp}$  - efficiency of the product export,  $Q_{exp}$  - profit from the product export (international value),  $M_{exp}$  - labor consumption for production and export of the product (national value). The economic efficiency of imports is calculated as the ratio of the value of the imported product or its substitutes to the volume of the international value expressed in currency costs.

$$S_{imp} = M_{ximp} / V_{imp}$$

$S_{imp}$  - the economic efficiency of imports,  $M_{ximp}$  - the volume of labor expenditure on the production of imported goods or its substitutes (national value),  $V_{imp}$  - the volume of currency spent on import (international value). Obviously, the currency gain and expense used in this formula as an international value may not coincide fully with the fact.

However, such a comparison is important to calculate the direct effect. It should be noted that by means of these formulas, it is possible to calculate the efficiency of both the whole import-export and the import-export of individual products. Thus, if the import-export net-balance condition is set ( $Q_{imp}-V_{imp}$ ), that is, all export earnings are spent on imports, then the efficiency of export performance on imports is an indication of the overall trade turnover efficiency:

$$S_{exp} \times S_{imp} = (Q_{exp}/M_{xexp}) (M_{ximp}/V_{imp}) = \\ S_{xtt} = M_{ximp} / M_{xexp}$$

This equality shows that to detect the pros and cons of import and export, the efficiency of trade turnover is equal to the production efficiency of export and import, so high-efficiency imports can cover less efficient export and vice versa. Therefore, to determine the effectiveness of foreign trade, it is necessary to separately calculate the efficiency of imports and exports. It seems that the calculation of the direct efficiency of foreign economic relations is associated with a number of methodological difficulties. Some of these difficulties are due to the multifaceted nature of the process, the tendency of various economic parameters to develop without a price, etc., the other part is related to the collection of preliminary data for the conduct of reports. In addition, the above parameters are more important for determining the perspective development of cost relations in the first place. At the same time, such indicators include, first of all, the profitability and efficiency of foreign economic relations, including foreign trade. Indicators of profitability of foreign trade are calculated both on the total trade turnover and on imports and exports, as well as on individual goods. The profitability of the turnover of goods is determined by the ratio of pure money received from imports as a whole to all the expenses spent on production. The net monetary income of imports includes the rest after the sale of imported goods at domestic prices, after subtraction of domestic transportation and other additional costs. The formula for calculating profitability is as follows:

$$R_{fer} = (P_{imp}/P_{exp}) * 100\%$$

$P_{imp}$ -net cash income from the sale of imported goods;  $P_{exp}$ -the full cost of export.

Both parameters involved in this ratio are measured in the same monetary unit, which is calculated by the domestic prices of the countries. Therefore, in this case, there is no additional difficulty in calculating profitability. However, when calculating the profitability of exports and imports separately and on individual goods, there is a problem of reconciling prices and monetary units. In such cases, the profitability of export is calculated as the ratio of the net income from export to the expenditure of money spent on export:

$$P_{ixr} = (G_{exp}/P_{exp}) * 100\%$$

$G_{exp}$  - net export income (the rest after deducting additional costs from income in foreign exchange)

The profitability of imports is calculated as the ratio of the net monetary income from the sale of imported goods across the country to the full cost of purchasing and transporting the goods to the border of the importing country:

$$R_{imp} = P_{imp}/X_{imp}$$

It should be noted that the indicators of profitability should be interpreted depending on the calculation of levels of their country, area, enterprise, etc. Because, since these indicators are of relative nature, you should consider them virtually based on existing domestic prices currency efficiency. Speaking about the effectiveness of foreign economic relations, one can not only be satisfied with the efficiency indicators of the trade turnover. At present, many forms and types of foreign economic relations are relevant in the world experience. Each of these forms can be put on the issue of efficiency, depending on its logical characteristics and purposefulness. It is clear that the concept of economic efficiency for the spheres of concrete activity may differ from each other more or less in terms of forms of expression and manifestation. However, these forms can be divided into several large groups, including: international specialization and cooperative relations of production: joint cooperation within the country; joint cooperation in a foreign country; joint ventures; scientific and technical cooperation; association, trading houses, exchanges, etc. For each of these forms, as mentioned above, efficiency can be put in place.

#### 4. CONCLUSION

Determining specific effectiveness formulas requires special research as it depends on the purpose, tasks, conditions and conditions of the relationship to be investigated. In other words, it is not always enough to determine the degree of effectiveness of the relationship in terms of formal criteria. Therefore, it is necessary to look at the issue of expediency of foreign economic activity in a broader sense in the sense of assessing its contribution to the improvement of the work of the economic system. It is this view that, as we mentioned earlier, constitutes the second important aspect of studying economic relations. The fact that the problem is very complicated and requires a lot of complicated calculations. Therefore, an important direction of scientific research creates the need to apply economic and mathematical methods. At present, we have experience in this field. Taking into account the importance, relative independence and character of this scientific apparatus, we considered it expedient to give its interpretation in the next research.

#### LITERATURE:

1. A. Aliyev. A. Shakaraliyev "Transition to market economy: economic policy of the state", "Adiloglu Publishing House", Baku 2002, 376 pp.
2. A. Aliyev "Foreign trade and economic relations of Azerbaijan", Baku. Ozan 2001. 318 pp.
3. K. Sadiqov, E.K.Gafarov, "Macroeconomic regulation of foreign economic activity", Scientific Publishing House, Baku 1994, 187 pp.
4. J. Karimov, Sh.Ganjaliyev "World Economy" "Cooperative Publishing", Baku 2005. 476 pp.
5. A. Maharramov, H.Aslanov "Regulation of foreign economic activity", "Chashoglu Publishing House", Baku 2008. 399 pp.
6. M. Ahmadov "Globalization and Formation of National Economy", Scientific Publishing House, Baku 2003, 487 pp.
7. Bunkina A.N., National Economy. Moscow. 2000. 645 pp.
8. Gradov A.P., The national economy. Saint Petersburg. 2007.458 pp. (80 p.)
9. Ahmadov M.A., Globalization and the formation of the national economy. Baku 2009. "Chashioglu", 430 pp.
10. Timoshenko I.V. Customs regulation of foreign trade activities. Moscow, 2003, 675 pp.
11. Akhmedov A.L. Theoretical and methodological problems of foreign economic relations. Baku, Elm. 1999, 167 pp.
12. Madatov M.A., "World Trade Organization and Protection of the Domestic Market", Baku 2008;

13. Gubad Ibadoglu, Azer Mehtiyev, Rashad Aliyev “Azerbaijan and World Trade Organization”, Baku 2006;
14. Vugar Bayramov, “Azerbaijan's WTO Membership Process Assessment Document”, 2010;
15. 15.R.B.Atakishiyev, E.A.Mikayilov “Membership of Azerbaijan in the WTO and the private sector: Analytical report of the research results”, 2008;
16. Adalat J. Muradov “Azerbaijan and the WTO: Services”, Baku 2006;
17. A. Shakaraliyev "Economic Policy of the State: Realities and Prospects", Baku 2009;
18. Damirov Y.R. The role of foreign investment in the economic development of Azerbaijan and the analysis of the current situation. Scientific News of Azerbaijan State University of Economics. Issue 5, April-June, 2017. pp.231-243.

# **DEVELOPMENT TRENDS OF INCREASING THE ROLE OF SMALL AND MEDIUM ENTREPRENEURSHIP IN THE CONDITIONS OF THE ECONOMIC GLOBALIZATION**

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## **ABSTRACT**

*Socio-economic globalization is the most important form of globalization. Economic globalization not only accelerates the movement of capital in the international capital market, but also accelerates the process of expansion and formation of the global information and financial space. The solution of the problems faced by business entities in global business is hindered due to the imperfection of the legislation that had to govern the normal operation of business. This leads to the situation when the businesses begin to operate without a comprehensive analysis. These include internal and external environmental factors, the level of inflation, production without accurate study of the market price of the product, as well as the technological factors. One of the necessary conditions for maintaining the competitiveness of special technological factors is the timely use of new, modern technologies. Because, as the existing business activity expands, the competitive conditions change accordingly and take on new forms. Along with the increase of social responsibility, at the same time, an important issue such as fully meeting the needs of customers is being addressed.*

**Keywords:** *Entrepreneurship, economy, business, financing*

## **1. INTRODUCTION**

The establishment of a sustainable economic system is possible only through the integration into the international economic system, the implementation of the concept of comprehensive socio-economic development of the country, making more effective use of existing opportunities. This can create favorable conditions for solving socio-economic problems and improving the living standards of the population. Acceleration of socio-economic development is directly related to the development of small and medium enterprises. To do this, first of all, it is necessary to thoroughly study and analyze the existing economic problems and determine their solutions. Consolidation of national infrastructure markets in one system will lead to the globalization of production and the emergence of a global market. At the same time, it can strengthen competition in the world market and protect domestic national markets from external influences.

## **2. SUSTAINABLE DEVELOPMENT OF THE ENTREPRENEURSHIP IN THE CONTEXT OF GLOBALIZATION IS AN IMPORTANT PART OF THE ECONOMIC POLICY OF THE STATE**

The main advantage of globalization is also to serve the implementation of important public policy - primarily socio-economic policy, such as the protection of national interests. The driving force of the globalization process is the development of various areas of economic activity, economic liberalization and the development of SMEs; - because the process of globalization has a direct impact on the world economy:

- The labor market is globalizing;
- Strengthens competition;
- Availability of financial risk;
- Can create new dangers;

- Possible impact of the financial and economic crisis;
- Influence the political stability, political freedoms, people's well-being.

Economic integration, based on the free movement of capital, goods and services, as well as the implementation of scientific and technical policy, will ultimately lead to the acceleration and increase in efficiency of production. This can accelerate the implementation of ideas of economic integration. In the context of economic integration, the division of labor between the national economies of different countries occurs at different levels. As a result, there is a need to further expand the international division of labor between different objects on the basis of principles such as mutual efficiency, independence and equality. Irrespective of the form of ownership, SME activity is an activity carried out independently in the form of production, sale and provision of services. According to the direction of activity, ownership and organizational-legal form, there are mainly entrepreneurial areas such as trade, production, consulting and financial services. In the modern economy and globalization, the development of business and entrepreneurship is determined by the specifics of each country. The main purpose of the "Rules for the use of the "Green Corridor" and other throughput systems for the movement of goods and vehicles across the customs border" is to improve the components of business entities dependent on foreign activities by simplifying import and export operations. However, minimizing the economy's dependence on oil and increasing the competitive production potential based on entrepreneurial activity make it necessary to take additional measures in the future. For this reason, the continuation of reforms to further improve the business and investment environment has been identified as one of the main strategic goals, and to achieve this goal, it is important to develop state-entrepreneur relations and support the business and investment environment. To this end, the elimination of illegal interference and artificial barriers to entrepreneurship, the improvement of administrative rules and procedures in state regulation of entrepreneurship, the introduction of incentive mechanisms and the expansion of e-government services will remain a priority. The development of entrepreneurship in our country will make it necessary to further increase the business and investment environment for local and foreign investors, to create a more attractive business and investment environment in accordance with the best international practices. With the main purpose of the further improving the investment and business environment in the country, improving the system of business regulation and effective coordination, increasing the role and competitiveness of small and medium enterprises in the country's economy, adapting the management system to modern requirements, expanding access to financial resources and institutional support mechanisms the "Small and Medium Business Development Agency" with the status of a public legal entity was established under the Ministry of Economy. The goal is to ensure sustainable development on the basis of formation, strengthening of legal support of entrepreneurship and creation of favorable conditions for entrepreneurship development in the regions. This agency is a public legal entity that supports the development of entrepreneurship, provides a number of services to business entities, coordinates and regulates the services of government agencies in this area. At a time when the economy is largely liberalized and restrictions on entrepreneurship have been lifted, total state control over economic entities is no longer practically possible. Under the new conditions, the state's economic control should be mainly financial. Such control, in turn, should increase financial discipline, ensure the fulfillment of financial obligations of all economic entities to the state, regardless of the form of ownership, and ensure the country's financial security.

### **3. PROBLEMS OF ACCESS OF SMALL AND MEDIUM ENTERPRISES TO THE FINANCIAL RESOURCES**

Public services have been further expanded with the creation of an e-government portal in line with international practice. The innovation framework for entrepreneurs has been improved through both infrastructure and financial support. In this regard, improving the overall business environment, more affordable and effective access to financial resources, providing access to local and foreign markets for small and medium-sized businesses, and the creation of skilled and qualified staff are important steps to be taken. The processes taking place in the economic sphere in the region and in the world once again emphasize the deepening of cooperation between business entities and the increase of state support. In order to diversify the economy in the country, there is a need to make a number of changes in this area in order to fully realize the potential of business entities. Although some progress has been recently made in improving the legal framework, some improvements are still need to be made. Thus, the legislative framework on issues such as private credit bureaus, real estate encumbrance registers and regulation of collateral transactions still needs to be improved. Priorities should be identified for a unified approach to entrepreneurship, including SME policy, innovation, wider application of international standards, increased state support for export market research, further expansion of financial, consulting and other support mechanisms, monitoring and evaluation mechanisms for government support instruments. Entrepreneurship development should be strongly supported. Although measures to support innovation and internationalization are being implemented in our country, activities in this area should be further deepened, and clear strategies or coordination mechanisms should be established. At present, the state policy on innovation is expanding the focus on the telecommunications and information technology sector. In addition, support measures aimed at internationalization should be further expanded to expand financial services for exports, as well as to enable entrepreneurs to benefit more from the global value chain. This requires a wide range of activities, from macroeconomic policy to the approach of citizens, especially entrepreneurs and related government officials, to clear targets. Therefore, the implementation of institutional changes that support the development of entrepreneurship and the creation of favorable conditions for their development is of strategic importance. In practice, the experience of public-private partnership is widely used to ensure the participation of the private sector in the financing of infrastructure projects. Thus, due to the fact that the implementation of infrastructure projects requires large investments and the state financial resources are limited to meet these needs, private investment is preferred during the implementation of these projects. In this case, the private sector finances infrastructure projects and manages such projects over a long period of time, gradually withdrawing its investment and handing over the infrastructure facilities to the state. According to the World Bank information, significant investment has been made in infrastructure projects around the world through public-private partnerships. Through this mechanism, the world provides funding for the repair and construction of airports, railways, seaports, highways, infrastructure facilities for utilities such as electricity, water, gas, telecommunications lines. Further increase in the effectiveness of economic reforms in our country also makes it necessary to establish close cooperation with the private sector, the main issue that requires attention in this direction is public-private partnership. In some cases, entrepreneurs face certain difficulties in obtaining a number of services, as well as in obtaining information for production and various other purposes. Such services include utilities, logistics, laboratory and business services, access to sector statistics, etc. an example can be given. At the same time, due to the lack of specialized zones or their remote location, entrepreneurs incur a number of additional costs when using the services, which increases the cost of their products and services and has a negative impact on competitiveness. To this end, businesses can better benefit from joint management of infrastructure and access to a range of services.

Entrepreneurs from different sectors can make better use of the opportunities created by special zones. Entrepreneurs can use these zones to build relationships with international companies and institutions working in the field of foreign direct investment in order to develop their integration into global value chains. In the current approach of entrepreneurs, traditional litigation still remains, and the role of the judiciary as a legal guarantor in the modern sense is not fully understood. Going to court directly to resolve disputes can have a number of negative consequences for businesses. Thus, in this case, the parties to the dispute, as a rule, terminate the business relationship. At the same time, the involvement of qualified lawyers in the defense process during the litigation process is costly, which often creates greater difficulties, especially for businesses that do not have separate legal departments. In international practice, however, the classical judicial system is complemented by alternative procedures, and thus both approaches create conditions for the full protection of the rights and legitimate interests of citizens. As an alternative dispute resolution methods negotiations, negotiations with the participation of a mediators, arbitration court or jury trial, mediation, independent expert opinion, investigation, conciliation proceedings, private court, etc. such forms are observed. Thus, in resolving disputes, depending on the details of a particular event, negotiations are held with the direct participation of the parties, and if no agreement is reached, an independent and neutral mediation institution is involved. To this end, the necessary legal mechanisms should be created to ensure the application of alternative dispute resolution methods, propaganda and advocacy mechanisms for alternative dispute resolution should be formed, business entities should be informed about the nature and importance of alternative dispute resolution methods, and obstacles to business relations should be eliminated. Leasing is widely used in developed countries as a means of investing in the economy. In those countries, 25-30 percent of investments in the economy are made through leasing, and about 80 percent of new products are produced through rented equipment. Leasing is one of the main financial instruments supporting the development of entrepreneurship, combining elements of bank credit, rent and investment. The share of leasing in total investments is about 30 percent, and the share of leasing operations in GDP is about 2-6 percent. The carried analysis shows that local businesses can use leasing as an effective tool for the purchase of new machinery and equipment, as well as the replacement of obsolete machinery and equipment. At the current stage of development of the national economy, the simplification of the conditions for leasing equipment can be one of the main forms of state support for industry. Although some types of these financial instruments are used in financial markets, increasing their number will encourage businesses to finance through these financial instruments. In this regard, it is necessary to expand the use of existing alternative financial instruments, explore opportunities for the creation and use of new types of instruments and expand their application. The majority of non-oil exporters are large enterprises, which indicates a small share of the private sector in exports. In developed countries, as well as in countries whose exports are based on non-oil products, entrepreneurs have a significant share in exports. At the same time, businesses entities play an exceptional role in the production of import-substituting goods. The development of domestic production among the subjects has a strong impact on improving the country's balance of payments, preventing foreign exchange inflows from the country and reducing dependence on imports. Access to foreign markets is very important not only in terms of exports of local goods, but also in terms of access of local production to advanced technologies and the involvement of specialists. At present, continuous reforms are being carried out in our country to simplify international trade operations of business entities, increase export-oriented financial opportunities and promote investment. Despite the measures taken in this area, the number of export-oriented financial products for businesses remains limited. An analysis of the financial products offered in the country shows that at present, businesses can obtain two types of support instruments. These instruments cover the credit mechanisms offered before or after shipment.



The following are examples of other export financing products used in developed countries:

- Grants for sales exhibitions in foreign countries - allows exporting companies to participate in sales exhibitions abroad;
- Short-term export credit insurance - provides coverage for losses due to commercial risks;
- Local and international factoring - this financial service offers receivables management and financing mechanisms based on these debts;

Documentary transactions such as letters of credit and bank guarantees - such transactions are international financial instruments that protect both exporters and importers from a number of risks. Business incubators play an important role in the development of entrepreneurship. Proper organization of business incubators has a positive impact on reducing unemployment, development of regions and promotion of innovations, especially among young people. There are also favorable conditions for the implementation of startup projects within business incubators. Business incubators are spread all over the world and provide a wide range of services to entrepreneurs, depending on the country, as well as the profile of the incubator. At the same time, important steps have been taken to establish business incubators, which have been provided with the necessary technical infrastructure, and in parallel, business incubators have been established to provide training and consulting services. However, there is a need to increase the number and coverage of these incubators. According to international experience, support services for business incubators include:

- Consulting services;
- Training services;
- Mentoring;
- Organizational services.

The types of these services and their importance to entrepreneurs vary depending on the stages of the incubation period. One of the opportunities that can contribute to the development of entrepreneurship is the creation of model enterprises. In our opinion, the creation of a model enterprise can serve as a necessary platform for experimental training of entrepreneurs. Model enterprises typically demonstrate the application of best practices and skills within an enterprise. Special attention is paid to the use of cost-effective production practices in such enterprises. The model enterprise will offer a comprehensive training curriculum, including the process of transformation from the current situation to the future. These enterprises incorporate all the key elements of a cost-effective production system and provide an active specialization environment based on the concept of the so-called “seeing, hearing and performance”.

#### **4. CONCLUSION**

Obviously, the process of globalization is a key factor in the world economic system and policy, as well as one of the necessary conditions for the formation of an effective system of international economic relations. From the above, it can be concluded that the most important factors that significantly affect the activities of SMEs are the creation of a legal environment in line with globalization in business and the level of legal documents that meet modern requirements. The unification of the national economic system into a single system and the liberalization of economic relations between countries occur as a result of economic globalization. Globalization mainly occurs and manifests itself in the economic, political and, in many cases, cultural spheres. Globalization is a complex process and economic globalization is one of its main forms. The emergence of economic globalization in modern times is mainly due to the rapid expansion of these areas, complementing each other.

**LITERATURE:**

1. Kurbanov T. X. and others. Budget financing in state programs for small business support. // Soc. politics and sociology. 2010. № 6. С. 77–93.
2. Pleslov A.A. Factors and opportunities for the development of small business // Russian entrepreneurship. - 2018. - Volume 19. - № 2. - p. 507-518.
3. Pozdnyshev A.A., Bogatikova O.V. / Optimization of the mechanism of financial support for small and medium business in Russia / Society: politics, economics, law. 2014. № 2. С. 36-43.

## **MODERN TRENDS IN THE DEVELOPMENT OF THE COMMUNICATIONS INDUSTRY IN AZERBAIJAN**

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### **ABSTRACT**

*The paper discusses the progress and results of transformations in the communications industry, the role of this industry in the development of the economy and society, the potential of positive effects on the modernization of the country and the barriers to its implementation in the context of the problems facing the economy of Azerbaijan, and in comparison with foreign countries. The study describes main features of the development of different domestic market segments of the industry. Problems requiring solutions in the future are characterized. The proposals formulated to address the problems in the development of communication services market of Azerbaijan. Organizational and economic measures to improve regulation of communications industry in the Republic are proposed.*

**Keywords:** *communication services market, telecommunication, communication operators, strategy, information society, state programs*

### **1. INTRODUCTION**

Telecommunication sector is one of profitable and rapidly growing market of Azerbaijan Republic, being a most important part of economic development, the basis for the country entry into the global economy and information area. The role of the communications industry significantly increases as a result of increasing business activity, the growth of the educational and cultural level of people, the expansion of ties in the national and international scale. Recently, it has been considered as one of the national resources that make up the country's national wealth. In an emerging market of Azerbaijan, with its dynamics and competition, the role of communication services will increase as a high-quality communication is the most important part of infrastructure and a powerful catalyst for market relations, key to commercial success. Therefore, the research for effective ways and methods of developing communication services, improving the regulatory framework is among the prior scientific objectives.

### **2. ANALYSIS OF THE DYNAMICS OF COMMUNICATION INDUSTRY IN AZERBAIJAN**

During the years of reforms, after the adoption and consistent implementation of strategic policy documents as "The State Program on Socio-economic Development of the Regions", "National Strategy for the Development of the Information Society in Azerbaijan" and other state programs, concepts and strategies, much has been done in the country for the development of information and communication services. The technical and technological base of informatisation has been significantly strengthened, the volume of sales of communication means, computers, equipment, including domestic production is steadily growing [5,6].

During the period of 2005-2016 the communications industry has constantly increased the dynamics of its development, which allowed to significantly increase its contribution to the GDP growth of the country. During this period, communication services provided annual revenue growth, which averaged 9.9%. The total market for the communications industry in 2016 was 942,8 million manats (abbreviated as man.), which is 8.8 times more than in 2005. Revenues from the provision of landline telephone services in the cities increased 2.8 times to 59.5 million man., in rural areas – 5.4 times to 9.2 million man. Revenues from postal services amounted to 47.8 million man., which is 4.8 more than in 2005. Incomes from telecommunication services, broadcasting, television, and satellite communication have increased by 98.6% to 35.8 million man. The growth of revenues is largely due to the attraction of domestic and foreign investments in the communication development. More than 177 million man. were allocated to the fixed capital of the industrial enterprises in 2016, the domestic investment increased by 26.5% compared to 2005. Foreign investment in 2016 also has increased 24.1% compared to 2005 and amounted to about 22.1 million man. The number of employees in the industry is currently more than 26 thousand people, which is comparable to such sectors of economic activity as tourist accommodation (21.8 thousand people), electricity, a gas supply (25.4 thousand people), administrative services (24.7 thousand people) [3]. The rapid development of the industry, a significant increase in the number of non-state telecom operators' affected the provision of communications organizations with senior and middle managers. In recent years, there has been an outflow of qualified specialists from state-owned communication enterprises to communication enterprises of other forms of ownership (due to higher wages of other telecom operators) [14]. Among the problems faced by telecommunications companies, there are low wages, outdated equipment. However, the average monthly nominal accrued salary per employee of this industry branch in the Republic of Azerbaijan in 2016 amounted to 782 man., which is higher than the average salary in the Republic (in 2016 it was 498.6 man.). Positive dynamics is achieved at the expense of mobile and landline operators. In recent years, the industry is actively undergoing the process of modernization. The transition to new equipment and technologies, the introduction of new telecommunications services, the reform of the postal service affects the number of staff, the additional demand for personnel in new specialties, professions and the growth of requirements for professional training of employees. However, the gap with the leading countries remains, although not as significant as in the early 90-ies. According to experts, the level of development of telecommunication systems - the most important factor in the successful conduct of modern business - is 15-20 years behind the developed countries. The density of telephone network in Azerbaijan in 2016 made up of 15 lines per 100 people, which is 8.1 times lower than in Western Europe and the United States. Although a significant breakthrough in the development of communication services has been made recently, the potential of the domestic market remains unsaturated [8]. The predominant share of market is accounted for foreign software supplied together with imported electronic equipment. At the same time, the country has qualified domestic specialists in this field, who have created many competitive software products on the international markets [11]. Table 1 shows the structure of communication services in Azerbaijan in recent years, from the official statistics. Analysis of the data in this table shows a marked decrease in the share of telephone, data communication services and a rapid steady increase in the share of mobile communications and the Internet. The domestic communication market has a number of features that distinguish it from all other spheres of the economy of the Republic, namely:

- high growth rate;
- high competitiveness of the services provided;
- a sharp increase in the number of companies and, as a result, tougher competition;

- almost all companies that provide telecommunications services, are mixed by ownership of capital, and are national by the field of activity;
- the absence of major domestic manufacturers of telecommunications equipment.

*Table 1: Structure of communication services rendered to the population in 2005-2016 years, %*

Services	2005	2010	2015	2016
Total	100.0	100.0	100.0	100.0
Postal service	1.2	1.5	2.1	2.6
Documentary electrical communication	0.1	0.1	0.05	0.1
Long distance and international communication	9.6	6.1	1.1	1.0
Urban and rural telephone	4.1	4.7	4.6	4.8
City telecommunication	3.6	3.8	3.8	4.0
Rural telephone connection	0.5	0.9	0.8	0.8
Radio, broadcasting and satellite communications	0.2	0.5	1.4	1.4
Mobile communications	84.2	84.6	84.7	84.2
Internet	0.5	1.3	4.8	5.6
Other services	0.1	1.2	1.3	0.3

Let's briefly highlight the features of certain types of communication services. Postal communication plays a crucial role in the economic and social progress of society. Linking the production and consumption of goods and services, serving both producers and consumers, postal services actively affects the economy, management, business development and improving the welfare of people. Postal communication in Azerbaijan is still a public mechanism of targeted communication of citizens, one of the factors that ensure the political and economic integrity of the Republic. The market of postal services intersects with the markets of logistics services, info-communications. Postal services both compete and integrate with modern ICT services and financial services (pensions, etc.). The accelerated development of the postal market, which includes information and financial flows, is a necessary condition for the creation and development of such business areas in Azerbaijan as targeted distribution of advertising products, e-commerce, etc. The total volume of postal services rendered in 2016 amounted to 47.8 million man. that is 0.8 % of Azerbaijan's GDP. Postal organizations are major employers and taxpayers. In postal organizations, the average monthly number of employees in 2016 amounted to six thousand people. At present, along with the organizations of the state postal communication, 33 non-state operators, which have received licenses for the provision of postal services, provide postal services in Azerbaijan. The services of the new companies included express mail, courier mail, shipment and delivery of parcels, address delivery of printed and promotional products. One of the new projects of the Ministry of Transport, Communications and Higher Technologies of the Republic of Azerbaijan is "Shebeke". Since the beginning of 2017 the service centers of "Shebeke" provide services of traditional mail, all types of telecommunications, the sale of electronic signatures, international and local payment cards, compulsory insurance policies, registration of mobile devices, budget payments, payments on the State Mortgage Fund, sale of tickets, etc. [5,6]. An important component of the communications industry is fixed telephony. Fixed-line telephone services in the territory of the Republic of Azerbaijan are provided mainly by two major operators—Aztelecom LLC and Baku telephone communications (Baktelecom). Aztelecom LLC continues to work on the introduction of new technologies to improve the quality of broadband internet services, expand the coverage area, ensure the stability of communication. Fiber optic cable network has been expanded in 2016 and the new optical lines were prolonged 124.3 km. 11 telephone exchanges stations were put in use in different regions.

Repair work has been carried out in about 100 electronic automatic telephone exchange stations, which are in compliance with the technical preventive measures. Rapidly developing company Baktelecom occupies a leading position in the telecommunications market of the Republic of Azerbaijan. Today Baktelecom is a leader in the provision of fixed telecommunication services in the Republic and in Baku, includes 11 enterprises and the number of employees is about 2500 people. Baktelecom has 193 ATES, provides telephone, radio, high-speed internet, video telephony, reference- information services, as well as relevant services to public authorities, residents of Baku, foreign legal entities and their representative offices, enterprises, and organizations. Currently, the mounted capacity is 850 thousand numbers, about 70% is NGN technology. In addition, when using the capabilities of new NGN Technologies, Baktelecom successfully provides multimedia and other broadband services (ADSL, VDSL, IP-TV, Video-phone, IP-Centrex VPN, etc.). Now there are more than 50 services and multimedia options in the list of the rendered modern telephone communication services. In Azerbaijan, for the first time in the CIS, the fixed telephone network was fully electronic. All regional centers of the Republic are connected to the main fiber-optic telecommunication network. In the framework of the implementation of investment projects in the telecommunications sector 5 ATES of a new type was commissioned, the expansion work has been done on 18 ATES, the capacity of the network was increased by 7.8 thousand phone numbers, 56 km fiber-optic cable laid. For the analyzed period the number of subscribers of the fixed network sector increased by 1.2 thousand and amounted to 170.1 thousand. Currently, for every 100 people in the country there are 17.46 subscribers of the fixed network, for every 100 householders - 63 subscribers. The international communication market is dominated by Delta Telecom, which transmits about 80% of all long-distance and international traffic. At the same time, operators and other networks to some extent use the infrastructure of this JSC in the provision of communication services. It provides international communication to 25 providers and maintains communication with 31 telecommunications operators and an international provider. The company also owns and operates the largest fiber optic data network in the country. The company "AzerTelecom" increased competition, capturing market share from "Delta Telecom". AzerTelecom completed the construction of a fiber-optic cable network in 2011 and today offers broadband internet access to the consumer and business markets of Baku. The company also offers Ethernet LAN ports to help providers develop their own networks in the capital and extend service in the regions, thus stimulating the expansion of the range, without attracting large investments in infrastructure. The main shareholder of "AzerTelecom" is the mobile communications provider Azerfon. Two significant projects were completed in 2015: The Trans-Eurasian Information Super Highway (TASIM) and the Europe-Persia Express Gateway (PEEG). TASIM, proposed by Azerbaijan in 2008, aims to establish a digital link between East and West. The initiative covers 20 countries, including Turkey, Iran and a number of Eastern European, CIS and Central Asian States, and will be the main transit route between Frankfurt and Hong Kong [18]. Let us consider other segments of the telecommunications market of Azerbaijan. Mobile telecom is a dynamically developing communication subsector in Azerbaijan. For more than 15 years, this sector has been the main driver of the industry. Over the past 10 years, revenues in the mobile sector and subscribers' number in Azerbaijan have doubled. Today, mobile networks have covered almost the entire territory of the country, the revenues of mobile operators have provided more than 51.5% of the sector's revenues. Mobile operators working in the GSM standard started the introduction of 3G technology since 2009, and 4G technology since 2012. Currently, the number of mobile subscribers in Azerbaijan is about 10,316 million. This means that for every 100 people there are 106.28 mobile subscribers. Most of the revenues in telecommunication sector are generated by mobile services. The investment and marketing strategy of mobile operators is not controlled by the state. The market potential is estimated as high. The number of mobile subscribers is constantly increasing.

There are three main mobile operators in Azerbaijan: Azercell, Bakcell, and Azerfon. Privatization of companies "Azercell" and "Bakcell" in 2007 increased competition between providers. The number of mobile subscribers grew gradually and by 2012 reached 110% of national penetration with a population of over 9.9 million people. Azercell has the largest number of subscribers (over 4.5 million). The second largest is the Bakcell with the subscribers' base up to 3.3 million. Azerfon has the smallest subscribers' base - more than 2 million subscribers. The structure of the mobile market of Azerbaijan and Eastern European countries is similar: in both cases the 3 largest operators occupy from 85 to 100% of the market. There is a constant decrease in tariffs for mobile services. Tariffs and investments of traditional telecom operators are regulated by the Ministry of Economy in accordance with the legislation. Telecom operators concentrate their efforts on attracting customers, offering them a full range of the most modern and high-quality services.

- TV and Radio

In accordance with the Action Plan for the implementation of the "National strategy for the development of the information society in the Republic of Azerbaijan for 2016-2020", analog television broadcasting in the country has been stopped and a full transition to digital television has been carried out. Currently, 99.6 per cent of the country's territory is covered by television. National radio and television programs, along with terrestrial broadcasting, are also broadcast from the Azerspace-1 satellite.

- Internet

Internet technologies, having quickly penetrated into all spheres of the socio-economic system of our country and the daily activities of people, have become an integral part of socio-economic relations. "National Strategy for the Development of Information and Communication Technologies in the Republic of Azerbaijan (2003-2012)" aimed to accelerate the dynamic and democratic development of the country and to ensure the transition to the information society by widely applying ICT. As a result of a targeted ICT policy in the country, the transition to the information society has entered a new phase. At the moment, a new "National strategy for the development of the information society in Azerbaijan" covering 2014-2020 is being implemented.

Revenues in the ICT sector have positive dynamic over the past 10 years. The corresponding figure in 2016 compared to 2005 increased by 7.6 times and amounted to 287.38 million men. About 80% of these revenues come from the private sector [4]. It should be emphasized that Azerbaijan is the 9th country in Europe and the 37th in the world that uses 4G services. Currently, there are 77 internet users for every 100 people [18]. 19.76 out of 100 people use broadband connections in Azerbaijan. According to this indicator, the country ranks 53rd in the global ranking. Thanks to the created opportunities, at the beginning of 2017, the number of mobile broadband internet subscribers has reached 5.5 million. Azerbaijan has improved its position in the world ranking in terms of the number of mobile broadband internet subscribers, rising from 68 to 60 [18]. Internet tariffs have been reduced by 80 times. The number of internet-connected households, educational institutions, and health facilities is growing from year to year. 78.2% of the population are internet users. Among developing countries, Azerbaijan ranked 11th in this indicator and 13th in the number of internet-connected households among 145 countries. Internet users in the country are widely using social media. Only the number of Facebook users exceeds 1.4 million. Internet radio and television, electronic newspapers and magazines are widespread. The use of new technologies and services in recent years has expanded the possibilities of using the "Internet of things" (Machine-to-Machine, M2M) in Azerbaijan.

Currently, the use of M2M devices in "smart houses", power meters, car parks management, portable payment terminals, ATM payment points, security and cash registers is expanding. Further implementation of mobile communication in Azerbaijan leads to the preparatory work on 5G technology in accordance with the best foreign experience. Relevant work is already underway in this direction. It should be noted especially that at moment, the provision of public services in electronic form is about 30%, and the citizen's access to electronic services - 80%. The government has set a goal to increase these figure up to 100% in 2020. Also, one of the strategic goals is to increase the proportion of citizens using e-services from 20% to 80% in 2020. Satellite communications are also developing rapidly. Delta Telecom is the largest provider of satellite internet services in Azerbaijan. As the official distributor of the international satellite operator EUTELSAT, Delta Telecom manages the rental, use and leasing of satellite channels to the Caucasus region. Azerbaijan has made significant investments in its satellite program under the leadership of the state company Azerkosmos. The first regional communication satellite Azerspace-1 was launched on February 7, 2013. Azerspace-1 promises to improve the quality of telecommunications within Eurasia and the CIS, positioning Azerbaijan as the main relay station for the transmission of signals between Europe and Asia. The satellite will cover the area of Eastern Europe, Central Asia, and Africa. Thus, the analysis showed that the Azerbaijani communication market has become one of the most dynamic in terms of growth, competition, and profitability.

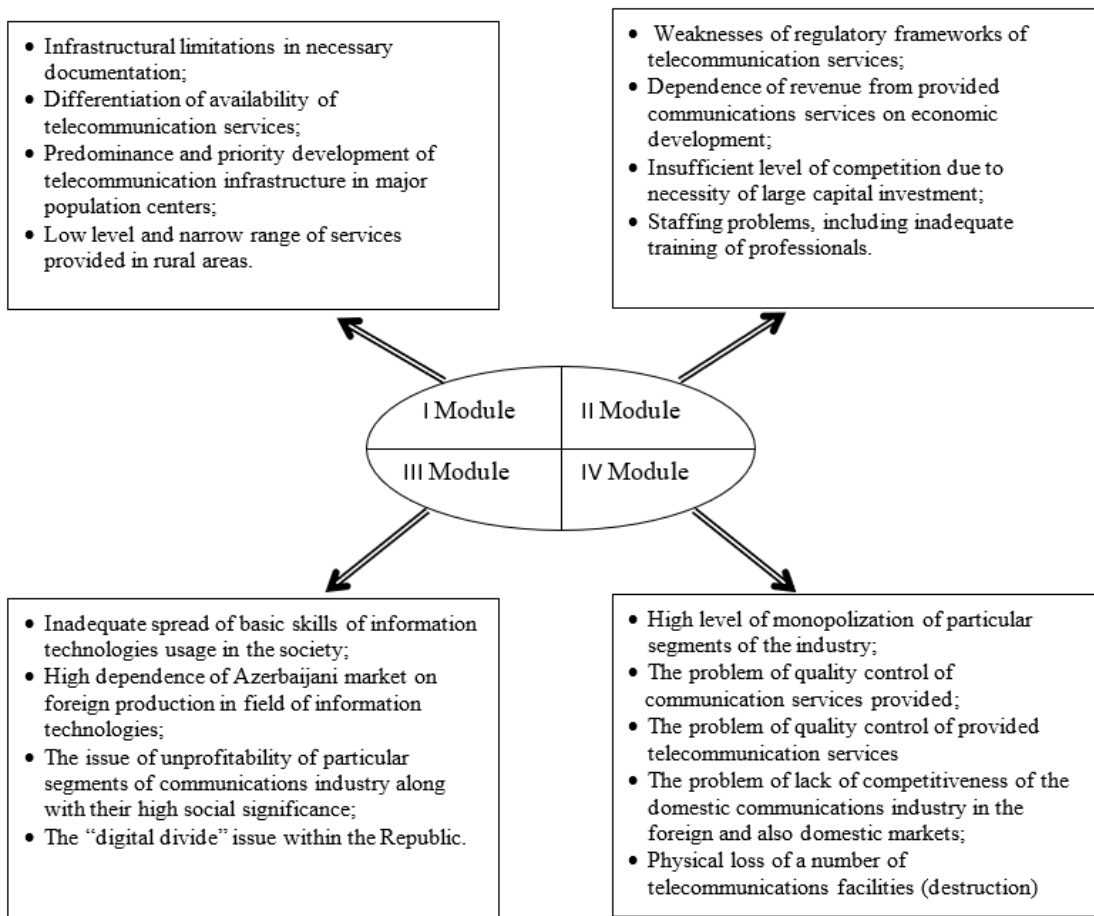
### **3. ISSUES IN THE COMMUNICATION INDUSTRY RESTRICTING ITS MODERNIZATION**

High demand on increasingly complex and various services, strengthening competition in the communication services market, users' high requirements for diversity, functionality and quality of the services contribute to seeking innovative approaches to development of the communication industry. Further qualitative development of the communication industry of AR is especially important since need of population, public authorities, commercial structures in telecommunication services is growing year by year. Despite the rapid development of telecommunications services in recent years, the market for these services is still far from complete saturation, and there are problems in the telecommunications industry of the republic that need to be resolved in the future. The following key problems in the communications industry for our republic are grouped into 4 modules:

*Figure following on the next page*



*Figure 1: Key issues in the telecommunications industry in Azerbaijan*



As seen from Figure 1, the transition to a market model of the communication industry not easily occur and, in Azerbaijan, numerous problems that constrain the modernization of the industry require their solution:

- The unevenness distribution of the communication facilities, Internet access points within the country and the differentiation of accessibility in the provision of telecommunication’s infrastructure services for the population, especially in rural areas; the duration of coordination with the authorities construction sites for the new communication facilities.
- Infrastructure limitations in terms of registration (coordination) of the necessary documents and interaction with network organizations in the conclusion of contracts for technological connection to power grids.
- The predominance and priority development of the telecommunications infrastructure in major population centers of Azerbaijan due to the high cost and long payback period of construction in rural areas.
- The low level and narrow range of provided services using telecommunications infrastructure in rural areas.
- Dependence of income received from the provided communications services on economic development.
- The discrepancy between the number of post offices in cities and rural areas and service delivery standards.

Among the problems faced by the communications enterprises, there are low wages, outdated equipment.

The average monthly nominal accrued wages per worker in this industry in Azerbaijan amounted to 782 manat in 2016, which is in average higher than wages in the Republic as a whole (it was 498.6 manat in 2016). However, the positive salary dynamics in the industry is achieved mostly owing to the salary of mobile operators and fixed-line operators. We can characterize also other problems of the communication industry:

- Difficulties in organizing broadband access for end users;
- Inadequate competition due to necessity of large capital investment;
- Inadequate spread of basic skills of information technologies usage in the Republic;
- High dependence of Azerbaijani market on foreign production in field of information technologies.

Today, the problem of unprofitability of the individual sectors of the communication industry, with their high social significance, is relevant. The Republic has a high share of the rural population, unevenly distributed throughout the territory, which is a regional feature of the telecommunications industry. This fact has an impact on the formation of services' cost. Thus, the problem of unprofitability of individual sectors of the industry appears. Telecom operators do not construct telecommunication infrastructure in small settlements. There is a problem of substantial "digital divide" within the Republic. Due to the uneven placement of networks, there is no communication in many hard-to-reach and remote locations. There is scarcity of bandwidth in general education institutions. Note also a lengthy procedure for agreeing on the allocation of land plots to placing telecommunication infrastructure facilities. This significantly slows down the pace of development of construction of telecommunication facilities and negatively affects the investment attractiveness of the Republic. Note a high degree of monopolization of urban infrastructure, where telecom operators have to set lines of communication and communications facilities and, as a consequence, existence of economically unjustified tariffs on support services. Lack of interest of support owners in development of networks and annual increase of already high rent for placing of fiber-optic communication lines. There is a problem of a lack of space for placing post offices in new buildings: the lack of special spaces for placing communications facilities in multi-apartment residential buildings in major cities of the Republic, the unwillingness of citizens to negotiate a placing of equipment in residential buildings. Placing mobile facilities on the territory of city in the target zone is not possible in most cases due to lack of nearby non-residential high-rise buildings. Deficiencies in regulations (failure to comply with property rights and contract law, corruption, overregulation of many activities and other constraints), worsening the business and investment climate, reduce attractiveness and increase the risks of private entrepreneurship in the communications industry. Incentives to invest and innovate weaken as a result of high tax burdens on business, the weakness of the credit and financial system. This also includes problems associated with insufficient funding of the communications industry, underdeveloped mechanisms for attracting extra budgetary funds, etc. All this leads to the problem of insufficient competitiveness of the domestic communications industry not only in the external, but also in the domestic market.

#### **4. PRIORITY AREAS IN THE REGULATION OF COMMUNICATION INDUSTRY DEVELOPMENT**

It is possible to solve the main problems of AR communication industry development by means of coordinated actions of authorities at all levels and representatives of the business community, by formation of attractive conditions for telecom operators and complex use of both traditional and non-traditional telecommunication solutions, such as: development of radio access systems, cellular networks, creation of multiservice networks, etc. One of the most important areas of communications industry development is to ensure customer satisfaction with the quality of

communication services and the possibility of a conscious choice of service providers. The problem of the quality control of the provided communication services is relevant both in the cities and in the settlements of the Republic. The continuous development of communication infrastructure and the existence of effective and fair competition in the market of communication services are important conditions affecting the quality of communication. In addition, in order to accelerate the development of the information society in Azerbaijan, it is advisable to improve the quality of services in the communications industry and ensure the development of the basic infrastructure of the information society. The implementation of control actions should be carried out taking into account the peculiarities of development of individual segments of communication, the level of their innovation potential. According to the degree of innovation potential, business entities of the telecommunications industry should be divided into two groups. Enterprises and organizations of the first group have significant opportunities to introduce innovations that affect the results of entrepreneurial activities throughout the national economy. In the service sector, this group includes business entities of the communications industry that produce software that can be sold on the foreign market. A special place in this group is occupied by educational institutions that have the necessary human, scientific and technical potential for creating innovations. The enterprises of the second group do not have the necessary capacity to produce innovations across the national economy, but can provide a significant increase in productivity, increase the quality of communication services through the implementation of innovative technologies. In this case, the introduction of innovations is based on the use of state budget resources, providing them on a competitive basis. On the way to the development of the telecommunications services market, as well as the entire economy, the problem of shortage of highly qualified professionals grows. There is also a general decline in the quality of labor resources, as a result of the inability of the education system to determine the volume and quality of the demand, to prepare professional workers who meet market requirements. The introduction of modern technologies in education, facilitating access to high-quality training programs in the field of information technology, as well as the development of programs to attract qualified specialists from abroad will increase the number of qualified personnel working in the IT industry. The implementation of these decisions and other necessary measures can allow IT professions to enter the top five most popular professions in the Republic of Azerbaijan already in 2025. It should also be noted that currently in the developed countries, the sphere of communication services is evolving from their focus on the needs of individual groups of the population to a system of various types of them, focused on meeting the interests of a significant part of society. These are the sprouts of the new post-market system, which must be taken into account in the Azerbaijani communications legislation and in the regulatory models of the communications industry.

## **5. CONCLUSIONS**

Summarizing the results obtained in the article, the following main generalizations and conclusions can be made. In the context of increasing globalization, modern communication services are becoming increasingly important, the degree of their development largely determines the place of Azerbaijan in the international division of labor, and hence the future of our Republic. Therefore, the study and search for effective ways and means of the communication services development are the priority scientific tasks. This study analyzes the current state of the domestic market of communication services, which showed that the main organizational and economic characteristics of the market largely lost the signs of natural monopoly. First, this is confirmed by the number of market participants. Secondly, the natural monopoly is characterized by the absence of a substitute entity for services, which is not typical for the most product segments of the sectoral market. Third, in a highly monopolized market, it is difficult for new producers to enter it, which is unusual for the domestic communication

market, where today there are practically no barriers to entry for new operators. We will highlight the following factors that stimulate, in our opinion, the development of competitive communication markets in Azerbaijan:

- increased competition has led to improved communication services and lower costs;
- modern access to communication services markets is characterized by the elimination of barriers that made it difficult for new partners to enter the markets. Readiness and reduction of costs for the introduction of new technologies facilitate the entry of new companies into the market of communication services;
- (3) a clear list of obligations to prevent abuse of their position has been drawn up for dominant operators;
- optimized the use of limited radio frequency resource, resource license, interconnection, etc.;
- the increasing transparency of regulatory processes strengthens public confidence in the communication services markets and creates a favorable investment environment;
- the availability of communication services is expanded through the use of effective mechanisms for interconnecting networks;
- the protection of the rights of the consumer of communication services is strengthened.
- Analysis of the situation in the communications industry of Azerbaijan against the background of the rapidly changing situation in the world allows us to outline the tasks that need to be solved:
- improvement the mechanism of state regulation aimed at the development of the telecommunications services market;
- creation of conditions for the effective work of telecom operators;
- the further development of the competitive environment in the market of communication services;
- ensuring equal rights for all telecom operators;
- increasing the investment attractiveness of the communications industry;
- new technologies development;
- construction of a modern national telecommunications infrastructure;
- integration of telecommunication complex of the AR into the European and global telecommunication systems, taking into account national interests;
- improvement of the system of normative legal regulation of the industry.

The solution of these and other tasks of improving the organization and regulation of the communications industry will help expand the range of services of the industry, improve their quality, develop the infrastructure and competitive environment in the market for its products and services.

#### **LITERATURE:**

1. Azerbaijan Republic “Law on Telecommunications”
2. Azerbaijan - 2017. Statistical Yearbook, Baku, 2019, 239 p.
3. Telecommunication and post in Azerbaijan. Statistical Yearbook, Baku, 2017, 160p.
4. “Strategic Road Map for the prospects of the national economy of the Republic of Azerbaijan”. Order of the President of the Republic of Azerbaijan, December 06, 2016.
5. "State program on implementation of the National Strategy for Development of Information Society in the Azerbaijan Republic for 2016-2020”
6. Алиев А.Б. Экономика сферы услуг. Учебное пособие. Баку, “Тахсил”, 2017,136с.
7. Болданова Е. В. Рынок услуг связи: учеб. пособие / Иркутск: Изд-во БГУЭП, 2010. 232 с.

8. Жигульская Г.М. Тарифы на услуги связи - проблемы регулирования. Вестник связи, № 7, 2012
9. Каграманзаде А. Г. Этапы развития Телекоммуникации Азербайджана. Баку. “Элм”. 2011. 726 с.
10. Mammadova M. G., Jabrailova, Z. G., Mammadzada, F. R. Supply and demand in the IT-segment of the labor market in Azerbaijan. Journal "Problems of information technologies", Baku, 2016, №2, p. 107-122
11. Мардер Н.С. Современные телекоммуникации. М.: ИРИАС, 2006. 384 с.
12. Разроев Э. Инфокоммуникационный бизнес: управление, технологии, маркетинг. - СПб.: Изд-во "Профессия", 2003
13. Рахманов Ф.П. Диверсификация экономики Республики Азербайджан на базе устойчивого развития ненефтяного сектора. Анализ аналогичного зарубежного опыта. MANEKO (Journal of Corporate Management and Economics), Bratislava, №1, 2017
14. Рейман Л.Д. Закономерности функционирования и регулирования инфокоммуникаций. М.: Научная книга, 2003.
15. Рустамов Э. Экономическая модернизация Азербайджана: вызовы и решения, Москва: Эконом-Информ, 2010, с. 209.
16. Салахов Р.М. Проблемы развития отраслей сферы услуг Азербайджана, Международная Научно-Практическая Конференция «Актуальные проблемы экономики посткоммунистических стран», Тбилиси, 2013, с.549
17. O. Aras, E. Suleymanov, K. Mammadov. Economy of Azerbaijan, 25 Years of Independence, Baku, ‘Sharq-Garb’. 2016, p.412

## MODERN MILITARY EXPENDITURES AND PROBLEMS OF SUSTAINABLE DEVELOPMENT

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### ABSTRACT

*Increasing military costs not only in individual countries but in the world as a whole have a huge impact on the world's financial system which affects global material and financial resources negatively and hampers its sustainable development. The nature of modern military weapons is so complex that it greatly affects the scale of the redistribution of world revenues and expands its scope. Financial operations carried out in these areas undermine the sustainability of international and regional economic growth, as these operations focus on non-productive fields of economy, impeding sustainable development. In this regard, the common consensus was made among Caspian littoral states on disarmament and demilitarization of the Caspian Sea according to the convention signed on August 12, 2019 in Aktau, Kazakhstan, and the latter drew the attention of international community. This convention helped reduce the military expenditures of the Caspian littoral states as well as states which have political interests in the Caspian region. Therefore, developed countries, including major industrial countries, which have a significant impact on economic growth in the world and share more than 75% of global revenues, regularly increase their military spending. On the one hand, the increase in the number of budget items related to the financing of military expenditures is observed. The above-mentioned issues highlight the importance of determining and clarifying the reasons for increasing military expenditures in the world. Furthermore, it is necessary to clarify the factors influencing that level. At last, in the modern world, political militarization is one of the major factors that contribute to rising military spending in times of political tension. This process involves not only increasing military spending but also spending more money on military expenditures from other budgetary items. Thus, a huge amount of money has spent the financing and maintenance of military forces, including the acceleration levels of militarization.*

**Keywords:** *military weaponry, militarization of the budget, military personnel, military situation, military-industrial complex, national guard, Ministry of Army, Ministry of Defense*

### 1. INTRODUCTION

Increased spending, not only in individual countries, but in the world as a whole, has a huge impact on the global financial system by wasting huge amounts of material and financial resources, hampering its sustainable development, and contributing to the growth of new military weapons associated with the globalization of revenues. Due to the complexity and composite of the modern military weaponry, it significantly broadens the scope of the redistribution of world revenues. Due to the fact that financial transactions formed in this area are ineffective, the international economy undermines the sustainability of this growth and impedes sustainable development. This is because developed countries, including large industrial countries, which have a significant impact on economic growth in the world and gain more than  $\frac{3}{4}$  of the world's revenues, regularly increase their military spending, which means increasing the redistribution of world revenues for military spending.

## 2. RESEARCH

Over the past 20 years (1995-2015), military expenditure of the US federal budget increased by 4,5, the German federal budget by 2,5 times, the UK state budget by 5,0 times, the French government spending by 3,0 and Federal budget expenditures in Russia increased by 4,0 times [1,59]. Military expenditure from the budget of other influential countries, which have a wide range of political influence on the world, is increasing rapidly. As these countries allocate excessive budgetary funds for military weapons and thus the use and testing of new types of weapons, the process of budgeting of these countries is accelerated. This is reflected in the increase of the specific weight of military expenditures in the total amount of military expenditures and budget allocations on the one hand, and increasing the number of budget items related to military expenditure financing on the other hand. The foregoing provides the reasons for the increase in the level by formulating an initial vision for determining the level of military expenditure in each state and in the world at large. At the same time, it is necessary to clarify the factors affecting that level. First and foremost, in the modern world, political militarization is one of the major factors that contribute to rising military spending in times of political tension. This process is not only a direct increase in military expenditure, but also a greater use of funds for military expenditures on other items in the budget industry. Thus, in addition to the military expenditures expressed in the maintenance and supply of military forces, a budget with a greater number of other items for the financing of rapid armament related debt should be formed. These budget expenditures include government grants, military personnel, especially military personnel, and scholarships and benefits, based on the impact of the creation of military weapons and military personnel under the influence of modern militarization or in some regional and local conflicts. The above mentioned items of expense allocations from the budget has been received from the relevant periods of time, and this is referred to as the provision of assistance to foreign countries and has in itself the essence of military aid, the bulk of this aid. In all cases, such costs also include the cost of defense, including the costs of maintaining the National Guard and military guards. These costs also include the cost of creating military infrastructure, especially the construction of military-strategic roads, aircraft and ship ports. An unexpected increase in the level of military expenditures and thus taxes, redistribution of national income allocated to armament rapid increase in unit revenues in the military direction of the country and thus can be considered as methods of making trips. The use of such an important method reveals that a significant increase in the country's tax burden can be achieved, first and foremost, by the increased taxation of individuals and legal entities, i.e. entrepreneurs and ordinary citizens, and this leads to a sharp decline in real incomes and overall purchasing power in the country. Currently, according to the world average, about 35-40% of taxes are deducted from the income of the population. In the modern world practice, military objectives, especially the production and testing of new weapons, need to be increased in direct taxes as well as indirect taxes, which in any case is a more serious and intensive method of taxation. In this way, countries that have political influence, along with centralized taxes, have a strong focus on intensive growth in local taxes. With the intensive increase in taxes coming into the centralized budget across the country, the rate of military spending increase is almost consistent. This can be seen in the example of the United States, Great Britain, Russia and other countries. The experience of other countries shows that tax revenues and, despite the strengthening of the central and local budgets are being taxed to the taxes paid in the budget. Because those costs are not divided between military expenditure and national expenditure, as well as processes that contribute to productive and inefficient development. Such a disproportionate and barrier to economic development always creates international and national dissatisfaction, periodically causing budget deficits. The production and testing of more modern and more advanced types of military weapons and their general procurement is one of the main factors that make the countries' budget deficit or inclination toward it.

This factor plays an important role in determining the level of military spending. The budget deficit can in itself reflect the budget of both the central and local budgets, that is, local governments. This process is characteristic of almost all developed countries of the world, including industrial ones. For example, the total budget deficit in the United States between 1995 and 2015 was 750 billion dollars, the amount of active balance was 35 billion dollars, accordingly in the Great Britain was 60 billion pound sterling, in Germany there were 300 billion marks, in France - 500 billion francs. The budget surplus of the last three countries has been very low. The experience of these countries and other countries shows that governments often use public debt and other means to cover the budget deficit and to have an active budget surplus. This in turn leads to the debt of the state. The development of new weapons due to the supply of modern military weapons with more perfect military weapons requires more costs, increases military spending, and increases public debt even more. Because public borrowing and the longer term borrowing increases the amount of interest paid. As a result, the financial capital of credit institutions, especially transnational banks, generates a large amount of revenue from government borrowing. The state uses new tax rates and more intensive ways to increase taxes levied on taxpayers to free themselves from large debt. The source of repayment of state debts is considered to be taxes in all cases, which are, of course, the responsibility of the taxpayers, i.e. physical and legal entities, of the country. Such a process has a negative impact on the macroeconomic activity of the country, in particular, on the state of money circulation and the credit sector. One of the factors determining the level of military spending is inflation and its strengthening. We must take into account that the strengthening of inflation through the state budget and credit mechanism will strengthen the process of money depreciation, which will lead to an increase in prices for goods, services and other resources. It is no coincidence that in the modern world, the constant escalation of political and military situations will cause inflation and a longer life of global financial and economic crises. This is because the greater scale of ammunition costs internationally has a negative impact not only on local and regional, but also on international economic development, and undermines its sustainable development. The unprecedented increase in military spending has a negative impact on the economy's steady growth, adversely affecting demographic processes, leading to worsening of the social status of the world's population and the inability to regulate migration. The inflation factor used in determining the level of military spending creates some difficulties. Thus, the information about military spending in many countries with high rates of inflation, changes in the relationship between prices in real terms are not reflected. The current prices and the comparative prices and base prices used in these or other government documents are published at different levels. In most cases, the official documents and the wider press contain estimates of cost estimates, such as the fact that such prices are practically incompatible with actual military expenditures allocated to the budget. It should be borne in mind that the high rate of inflation-related growth is driven by the rapid depreciation of the national currency, which in practice does not compare the nominal value of military expenditures. This also provides that under these circumstances, military expenditure analysis does not give a correct conclusion from the scientific point of view at current prices. To get the right result, it is necessary to recalculate the cost of military expenditure at constant prices. If such a recalculation is quite difficult, it is almost impossible to obtain the statistical data needed to perform the recalculation. Because the price index for military products is not published. However, even if economists use aggregate price index (deflator) of gross domestic product in this case, the necessary results will still be achieved. It should be borne in mind that the volume and structure of military consumption differs from civilian consumption in gross domestic product (GDP). On the basis of price competition in the formation of the non-military products, the country's defense ministry and the private company, forms and agreements signed between the two corporations formed in the prices of manufactured products prices in the formation of the industry is very different from a civilian.



In this sense, as noted above, in determining the level of military spending is necessary to calculate inflation on the basis of the current prices. However, from a scientific point of view, it is also necessary to take into account the fact that calculations at unchanged prices can often accurately represent the level and dynamics of military expenditures. One of the factors affecting that level is the increased cost of maintaining the military, since the increase in military expenditure was made at the expense of the defense budget of the country, with the aim of increasing the combat capability of the armed forces and the construction of new military facilities. Most of the developed countries of the world allocate large sums of money to improve the readiness of military personnel and the use of modern military equipment and technology. To ensure the immunity of servicemen and civilians in the military, the governments of those countries provide many benefits to the entire defense ministry system, which requires more financial resources, which are paid in the defense ministry's budget. According to estimates by international organizations, an average of 3-4 funds is allocated annually from the military budget of any of the industrialized countries. In determining the level of military spends in the world today, one of the main factors that draw attention to the structural changes taking place in military spending. The structure of military expenditures is constantly changing. Till the 70s of the last century the major part in the technical equipment of the army provided tactical weapons of the military days. While there are trainings on using these weapons, structural changes are currently underway. Because, modern science and technology have created new types of weapons, and all previous types of weapons have been substantially improved. Created a nuclear weapon with no destructive power to mass destruction, which is very valuable in science and technology. At the same time, the electronics and digital technology is widely used in military equipment has a special place. All this constantly increases the value of weapons and military equipment. As a result, the cost of maintaining the army's personnel and the logistics of the army has changed. To investigate the aforementioned changes, we need to study the structure of official military expenditure estimates prepared and approved in accordance with the law of the supreme state body to finance specific military training in any particular fiscal year in the modern structure of the military budgets of the developed countries. Each country strives to establish military financing in the process of drafting and approving military budgets in the light of the current state of its economy and its foreign policy to ensure that its military policies are in line with its military capabilities. We also agree with the opinion of foreign economists that while studying the structure of the military budget first, it is necessary to use traditional budget classifications on functional and resource signs, which show themselves to be realistic in the current practice, and budget classifications used in plan programming budget (PPB). The latter budget classification is typical for program-targeted budgets. It should be borne in mind that although the program-targeted military budget differs in different countries, there are common principles and structures for all program-targeted budgets for all countries. In such military budgets, it is possible to form a budget with a program complex called 10 major programs (see Table 1) [2,46]

*Table following on the next page*

*Table 1: budget with a program complex called 10 major programs*

	<b>On purpose destination</b>		<b>On the program complex</b>
1	Scientific research and experimental construction works	1	Strategic forces
		2	General purpose forces
2	Military construction	3	Military intelligence and communication
3	Purchase of weapons and military equipment	4	Forces for the sending troops from the air and sea
4	Maintenance and exploitation of military equipment and property	5	National Guard and reserves
		6	Combat training of personal staff
5	Maintenance of personal staff	7	Central heating supply and technical service
6	Pension provision of the former military servicemen	8	Administrative management and other types of activities
		9	Military aid

*Note: Table 1 designed by the author based on available experimental material.*

In the Table 1 it is shown the classification of tactical and strategic parameters of the formation of modern military budgets. In this classification, most of the funds of the Ministry of Defense of any country are represented by the program complex. The military budget funds in this classification are aimed at strengthening and developing general forces, strengthening the army's supply of military equipment and weapons. If we look at the structure of the military budget of any of the industrialized countries, it is clear that in each of these countries, and the allocations for military personnel of general purpose are increasing rapidly. For example, in Fiscal Year 2015, USA military spending totaled 80.5 billion dollars, in 2010, it was 150 billion dollars. Beyond all these figures, the military-industrial monopoly generates significant profits for long periods of time, which can be obtained by the production or purchase of new types of weapons and military equipment. Expenditure on strategic forces for this period is 2,0 times the amount spent on military research and development activities 2,5 times, and the amount of funds allocated for military intelligence increased by 2,5 times. The complex structure of the USA military budget on programs formed the basis of the amount of funds allocated to combat readiness and health care, covering the period of 2015-2020 increased by 2,5 times in five years. Statistics from recent years show that the USA National Guard, military supplies and military assistance spending are relatively stable. We must take into account that industrialized countries spend more money on the production and purchase of weapons, the formation and testing of weapons in the amount of targeted military expenditure, which is an increase in the total amount of military expenditures and the specific weight of the military budget. Expenditure on military equipment and weapons increased by 37.0% in 2010-2015, this indicates 3,5 times increase in expenditures in 2015 compared to 2010. The main reason for the increased cost is the high-cost military equipment of the army. Increase in military expenditure by the military forces in itself leads to a certain increase in the cost of each of the funds. Each new type of weapon replaces the weapons with a few times more expensive. According to other military programs, the increase in expenditures for military construction increased by 3 times in 2010-2015, while the cost of operating and maintaining military equipment and property increased by 2,0 times [3, No.2]. When we look at the structure of USA military spending that has grown in recent years, we can see that more spending is on arms and military spending is growing more rapidly. This is followed by an increase in the costs of logistics, including a few personnel, which is considered to be the fastest growing item in the defense ministry budget. The modern world's industrialized countries; almost all of the country's armed forces into a joint management system are regulated by the ministry of defense. But after World War II, along with the UK Ministry of Defense several military governance structures, for example: Department of the Army, Air Force and Marine admiralty established as an independent body. Over the years, the UK military management structures have evolved into a single Defense Ministry system, with

all three of the above-mentioned administrative structures united. According to the information of the official Pentagon, the goal is to create a military management structure that can only contribute to protecting the country's national defense interests [4].

### **3. CONCLUSION**

In many developed countries, the ministries of defense budget, military spending on programs aimed at functional resource and in many cases, the classification of certain items are made. The purpose of this classification is to take into account all the costs of logistics of the military. Such an approach can be carried out with the precise classification of the following expenses:

- a) Procurement and purchase costs of military equipment and weapons
- b) Exploitation and maintenance costs of military equipment and weapons
- c) The cost of maintaining military bases and training grounds both inside and outside the country
- d) The costs of fuel and lubricating materials.

The experience of recent years shows that the expenditure on logistics in the structure of military expenditures of countries is particularly demanding by its designation and character. This is clearly illustrated by the experiences of NATO member countries. For example, it is necessary to look at the following information on the level of militarization in many areas of the German economy, primarily on the costs associated with the supply of military material that is not directly related to military production.

### **LITERATURE:**

1. Defense and Economy, World Report and Survey 2018 № 755.
2. V.V. Borisov, The militarization of the capitalist economy and its social and economic consequences m.,1983p.46
3. Y.Chijikov. Where the R. Reagan program leads the American economy 1982
4. Defense Statement. HMSO. London, 1994

## ASSESSING THE ROLE OF CENTRAL BANK IN ENSURING SUSTAINABLE DEVELOPMENT IN AZERBAIJAN

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### ABSTRACT

*In the article, the characteristics of sustainable development, its essence, content and importance have been described. The role of Central Bank in ensuring sustainable development in the country has been substantiated. In this context, the main aspects and factors of the policy implemented by the Central Bank have been analyzed. The impact issues of this organization on the economy through monetary policy, exchange rate and interest rate policy have been focused. In the current situation, the level of consumer price index, product price index, and etc have been analyzed. The impact of these indicators on sustainable development has been explained. Many means and methods which is used to increase the role of Central Bank of the Republic of Azerbaijan in managing the economy and to improve its impact on financial and price stability have been analyzed, and their effects on economic development has been substantiated. In order to strengthen the role of the Central Bank for ensuring stability in the financial system, abolition of the Financial Market Supervision Chamber and giving its powers to the Central Bank has been substantiated by its practical importance, and in this regard, several recommendations have been introduced.*

**Keywords:** *central bank, consumer price index, exchange rate policy, interest rate policy, product price index, prudential norms, sustainable development*

### 1. INTRODUCTION

At the current stage of economic development, one of the main tasks of the Central Banks is to play a key role in ensuring sustainable development in accordance with the economic development strategy of the state. Ensuring sustainable development consists of the level of dynamics of many economic indicators and the implementation of the necessary parameters in a complex case. The implementation of the most necessary measures for the comprehensive development of the economy and for constant increase of the dynamics of macroeconomic indicators is an important condition for ensuring sustainable development. The state of sustainable development is to ensure a situation in the country's economy in which the economy can fully provide itself with the most necessary material and financial resources, can concentrate the available and necessary resources to a certain extent and realize its efficient distribution among the sectors of the economy, provides continuous and regular dynamics of important macroeconomic indicators and creates a reliable basis for its further development. To achieve this, the country must ensure stability and dynamic development in all areas, social, economic and environmental. (2, p. 146). While noting the role of the Central Bank in ensuring sustainable development, its activities in the economic sphere are more prominent. In this regard, the Central Bank also fulfills many tasks that contribute to sustainable development by performing the duties and functions provided by law. These tasks include providing the resilience of the financial banking system to possible shocks, ensuring the implementation of the main functions of the system based on the development of interactions with all segments of the financial system, successfully managing the financial intermediation function through the efficient distribution and placement of financial resources in the market, establishing operative and dynamic interaction between the elements of the financial system and strengthening the

impact on the real economy, implementation of the state's economic policy by maneuvering in accordance with the situation using monetary instruments. (10, p. 12).

## 2. RESEARCH

Ensuring sustainable development in the country is one of the priorities of any country's economic policy. In this respect, both academic research, daily analysis and continuous discussions about the solution of the problem can be found in the press and research. Due to the fact that this problem is multifaceted and formed under the influence of many factors, approaches to it are carried out from different positions and prisms. For this reason, the activities of the Central Bank, which play an important role in ensuring sustainable development, are also important issues to be research. World experience and modern research show that Central Banks, being the main and regulatory part of the banking system, perform the following operations, which are very important in the economy and contribute to both dynamic development and sustainable development: strengthening money circulation in the country; strengthening the national currency; maintaining the national currency and its stability; ensuring the exchange rate of the national currency against other foreign currencies; development and strengthening of the banking system through successful, effective monetary policy; uninterrupted and efficient implementation of settlements, etc. (3, p. 78). Each of these operations has an impact on the dynamics of economic development, ensuring sustainable development and the successful implementation of diversified economic policy in the country. Although, since 2005, a large amount of oil revenue inflows to the country's economy, rising demand for money, and price changes in the world food markets have increased inflationary pressures, average annual inflation remained single digit until 2014. As a result of the measures taken by the Central Bank at that time, the consumer price index in our country was lower than the European Union. (Table 1).

*Table 1: Dynamics of the consumer price index in Azerbaijan and the European Union in 2011-2019 (as a percentage)*

No	Countries	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	The European Union	2,1	1,1	2	0,8	-0,4	0,1	2	2,1	2,0
2	Azerbaijan	7,9	2,7	2,4	1,4	4	14,7	13,4	12,6	12,5

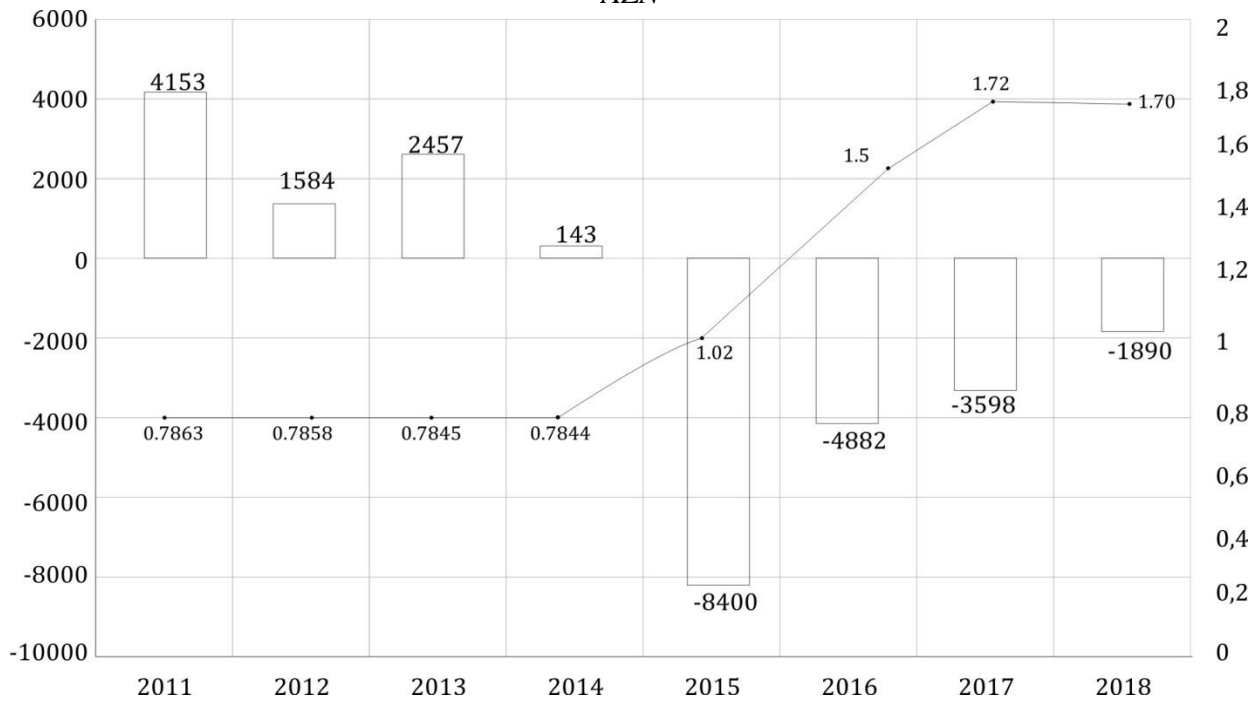
*Source: Prepared by author on the basis of statistical data of the Statistical Committee of the Republic of Azerbaijan and the Organisation for Economic Co-operation and Development*

According to the data on the table, it can be said that although this indicator was 3.72 times higher in Azerbaijan in 2011 than in the European Union, it fell sharply in subsequent years, including 2015. This indicator was 7.9% in Azerbaijan in 2011, 2.7% in 2012, 2.4% in 2013, 1.4% in 2014, and 4% in 2015. In the following years, the opposite process took place. In Azerbaijan, this figure was 14.7% in 2016, 13.4% in 2017, 12.6% in 2018, and 12.5% in 2019. The economic crisis that began in 2014, the devaluation, the dependence of the food market on imports have created such a situation. The high consumer price index in recent years is mainly the result of external impacts, especially rising food prices in the international market. Based on the data of the State Statistics Committee of the Republic of Azerbaijan, it can be said that the consumer price index has also been affected by internal factors since 2011. The most important of these factors was the change in the price index for products. Thus, the average annual inflation rate in 2011 was formed due to the rise in prices for 5.7 percent of food products, 0.7 percent of non-food products, 1.5 percent of services. (11, p. 88). Measures taken to prevent the growth of inflation in the country's economy have minimized the level of internal impact on the formation of inflation. In 2012, the reduction of external influences and the formation of the consumer price index allowed a sharp decline in the level of the index as a

result of the role of only internal influences. According to the data, in 2012, the price index for food products was 0.8%, for services 1%, and for non-food products 1.1%. (11, p. 88). The analysis shows that as a result of the measures taken, product price indices remained low, including 2014. Although, as a result of the devaluation in 2015, the increase in import prices increased the consumer price index, the index was at the level of 4% due to preventive measures taken by the Central Bank. The rise in import prices was mainly reflected in food products. In 2015, food prices rose by 6.1%, non-food prices by 3.8% and services by 1.2%. (11, p. 89). In 2016, as a result of further increase in external pressures, the analyzed level has strengthened. By the end of that year, food prices increased by 12.7%, non-food prices by 15.9% and services by 5.2% compared to the previous year. The trend that emerged in that period continued in subsequent years, that is, in 2017, 2018 and 2019. The analysis shows that over the past 9 years, the share of domestic monetary influences formed as a result of monetary policy in the country has been small in changes in prices. The main impact, that is, the rise in prices, was due to changes in world commodity prices. However, the Central Bank was able to prevent a sharp rise in annual average inflation due to foreign exchange reserves. One of the important indicators to consider when assessing the role of the Central Bank in ensuring sustainable development is the exchange rate policy. Since sustainable development has become one of the priorities of economic policy, the exchange rate policy used by the Central Bank as a monetary instrument has become more important. The inflow of large amounts of oil revenues into our country's economy and the availability of high current account surplus has increased the importance of exchange rate policy. In this regard, the implementation of the bilateral exchange rate targeting of the manat and the US dollar for the effective management of the pressure on the national currency and the negative effects of excess money supply within the defined corridor has been effective and created conditions for increasing economic activity. (1, p. 27). The creation of such a regime creates a favorable and efficient environment for the transition to a floating exchange rate regime in the future. In order to maintain exchange rate stability, the Central Bank conducted intensive foreign exchange trading in the market, and these operations were reflected in the exchange rate. Due to the timely intervention of the Central Bank in the market, the exchange rate remained stable during 2011-2014 years. As a result, confidence in the manat has been ensured, inflation expectations have been reduced, and financial stability has been ensured in general. In this period, the most important issue was that in 2011, the balance of payments reached its highest surplus for the last twenty years, and thereby affecting the volume of currency sterilization operations. As a result, the largest purchase of foreign currency in recent years was in 2011. (Graph 1).

*Graph following on the next page*

*Graph 1: Currency intervention of the Central Bank and the exchange rate of the US dollar to AZN*



*Source: Prepared by author on the basis of data of Central Bank of Azerbaijan Republic*

In this year, the volume of currency purchases amounted to 4.1 billion manat. As a result of this intervention of the Central Bank, the exchange rate of the manat rose by 2.1% against the US dollar in 2011 compared to 2010. Although a high balance of payments surplus has been observed in 2012-2014, the depreciation of the manat has been prevented and the exchange rate of the manat remained almost unchanged due to the successful exchange rate policy. (Graph 1) In 2014, sharp price changes in the world oil market and the economic downturn in partner countries, as well as psychological factors among the population, have led to an increase in demand for the dollar. The Central Bank devalued twice in 2015, considering the situation. In order to prevent a sharp depreciation of the manat, the Central Bank has sold 8.4 billion manats of foreign currency in 2015. As a result of other important measures, maintaining exchange reserves has been achieved. Although the current account had a surplus of 10 billion manats in 2014 and a deficit of 222 million manats in 2015, the effectiveness of the exchange rate policy prevented such a large difference from seriously damaging the financial system. (11 p. 91). In the following years, the exchange rate policy stabilized in 2016 and 2017, 2018 and 2019, and this continues today. One of the indicators to be considered in assessing the role of the Central Bank in ensuring sustainable development is the interest rate policy. The interest policy pursued for the sterilization of excessive money supply is of great importance in the country's economy (4 p. 127). By effectively managing discount rates, the Central Bank constantly affects the economy and makes timely decisions to manage real changes in the context of new challenges. The world experience shows that a successful interest policy in the country is an effective economic and financial tool used to support all sectors of the economy, increase activity in the real sector and diversify the economy (9 p. 317). Moreover, the Central Bank creates conditions to keep interest rates low by maintaining the price increases acceptable in its activities and ensuring low inflation. This, in turn, increases the attractiveness of commercial banks' intermediation operations (8 p. 46). The same processes have been going on in the banking system of Azerbaijan since 2011. In 2011-2015, the Central Bank has managed to keep interest rates low and, as a result, has ensured the sustainable development of the banking system, has expanded the opportunities for entrepreneurs, especially small and medium-sized businesses,

for accessing to capital and has been able to manage economic activity purposefully and effectively. Analysis of the dynamics of interest rates in the banking system of Azerbaijan shows that the gradual reduction of discount rates from 2011 to 2015 was also reflected in lending interest rate. (Table 2).

*Table 2: The dynamics of discount rates and lending rates in the banking system of Azerbaijan in 2011-2019 years (as a percentage)*

No	Indicators	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Discount rates	5,25	5	4,75	3,5	3	15	15	12	7,5
2	Lending rates in manat	16,3	15,2	14,1	13,8	13,6	12,5	13,1	12,0	11,5
3	Lending rates in foreign currency	16,8	15,8	14,4	14,1	12,5	10,8	10,4	10,0	9,7

*Source: Prepared by author on the basis of data of Central Bank of Azerbaijan Republic (12)*

According to the data on the table, it can be said that during 2011-2015 years, the discount rates fell from 5.25% to 3% and decreased by 43%, lending rates in manat fell from 16.3% to 13.6% and decreased by 16.5% and lending rates in foreign currency fell from 16.8% to 12.5% and decreased by 25.6%. Rising import prices as a result of devaluations in 2015 have created conditions for rising inflation. In this case, the Central Bank gradually increased interest rates to prevent prices from rising sharply. As a result of this process, discount rates rose to 7% in the first half of 2016 and to 15% at the end of the year. This level has been maintained throughout 2017 and decreased in 2018-2019. Although high interest rates have had a negative impact on economic activity, it has been an effective step against rising external impacts and high pressure on national currency. According to the data in Table 2, in the 2011-2019 period, discount rates fluctuated in a very different range from 5.25% in 2011 to 3% in 2015, and then rose to the final high of 15% in 2017. In this period, lending rates in manat decreased from 16.3%, the highest level in 2011, to 11.5% in 2019, and lending rates in foreign currency decreased from 16.8% to 9.7%. One of the important indicators to be analyzed in assessing the role of the Central Bank in ensuring sustainable development is the prudential norms. International banking experience shows that Central Banks determine prudential norms in accordance with the nature of the economic environment of each period, considering important economic indicators such as inflation, money supply and activities of economic institutions. (5 p. 96). During the analysis years, the Central Bank of Azerbaijan has pursued the same policy and taken important steps to regulate the money supply and cash flows. Experience indicates that the level of prudential ratios applied by the Central Banks is always adequate to the economic growth rates and meets the economic requirements of that period. An analysis of the relationship between required prudential ratios and the dynamics of inflation proves this. (Table 3).

*Table 3: The dynamics of required prudential norms and inflation in banking system of Azerbaijan during 2011-2019 years (as a percentage)*

No	Indicators	2011	2012	2013	2014	2015	2016	2017	2018	2019
1	Prudential norms in local currency	0,5	3,0	3,0	3,0	2,0	1,3	1,3	1,3	1,3
2	Prudential norms in foreign currency	0,5	3,0	3,0	3,0	2,0	1,5	1,5	1,5	1,5
3	Inflation	8,8	1,1	2,2	2,8	10,8	12,4	13,7	8,7	3,7

*Source: Prepared by author on the basis of data of Central Bank of Azerbaijan Republic (12)*

According to the indicators in Table 3, it should be said that the prudential ratios increased from 0.5% to 3%, and the inflation rate fell from 8.8% to 1.1% during 2011-2012 years.



### 3. CONCLUSION

As we know from world experience and in the classical economic literature, and during the analysis of banking activities, it can be said that the direct relation between the volume of funds in the banking system and the increase in prices allows to ensure financial stability and economic activity through asset management. (6 p. 146). In this respect, the indicators in Table 3 show that due to the inverse relationship between prudential norms and inflation during the analyzed years, the Central Bank effectively managed reserve norms and was able to maintain the economy from the negative effects of excess money supply. As a result of continued financial stability in 2013-2014, both inflation and prudential ratios has remained stable. However, since 2015, when the pressure on the country's economy intensified and inflationary imports increased, the policy pursued by the Central Bank has been aimed at reducing reserve rates, not to reduce inflation by raising reserve rates. As a result, although inflation has been 12.4%, 13.7% and 8.7%, respectively in 2016, 2017, 2018 years, the Central Bank has set the prudential ratio in local currency at 1.3% and in foreign currency at 1.5%. As is known from the classical economy literature, this policy is not compatible with the tradition of managing prudential norms. (7 p. 46). However, the analysis of the economic situation in the country shows that in this situation, maintaining a low level of reserve norms is an effective step. The crisis in the country's economy shows that the reasons for high inflation in those years were mainly lower commodity prices on world markets and inflationary imports from partner countries. Raising reserve ratios in such situation has a negative impact on the economy and the real sector, and leads to a decrease in banks' profits when there is a need to increase capitalization during a crisis. This causes to a sharp decline in the level of economic activity in general. (11 p. 95). In our opinion, in such a situation, setting the reserve ratio at 0.5% is a necessary step to support the economy. Thus, the Central Bank can effectively use this monetary instrument to create positive trends in the economy, even in times of crisis. Assessing the role of the Central Bank in the economy and its efforts in ensuring sustainable development, it can be said that this organization has achieved its goals by fulfilling its legal functions, has maintained financial stability by providing the necessary support to the economic policies pursued by the government and most importantly, has been able to create the necessary financial base for the future development of the economy.

### LITERATURE:

1. Strategic Roadmap for the Development of Financial Services in the Republic of Azerbaijan (approved by the Decree of the President Azerbaijan Republic dated December 6, 2016).
2. Bagirov M.M. General characteristics of the banking system. Baku, 2006, 260 p.
3. Bagirov M.M. Banks and banking operations (textbook for higher schools) Baku, Nurlan Publishing House, 2003, 512 p.
4. Maslennikov V.V. Factors for the development of national banking systems. SPb, SPBGUEF Publishing House, 2012, 206 p.
5. Dichenko M.B. Liquidity of a commercial bank. SPb, SPBGUEF Publishing House, 2016, 177p.
6. Polfreman D., Ford F. Basics of banking. M.: INFRA-M, 2006, 624 p.
7. Panova G.S. Analysis of the financial condition of a commercial bank. M.: Finance and Statistics, 2016, 272 p.
8. Uzhkin E.A. New financial instruments of the market. M.: Journal of "Debit-credit", 2015, 112p.
9. Edwin J. Dolan. Money, banking and monetary policy. Translate from eng V. Lukashevira, SPb, 2014, 496 p.

10. Mammadov Bahruz Natig oghlu. (Dissertation on "Assessment of macro-financial stability of the Azerbaijani economy" for the degree of Doctor of Philosophy in Economics) Baku, 2018, 154 pages.
11. Mirhadi Ismail Surkhay oghlu. "Ways to increase the role of the Central Bank in the sustainable development of the country's economy." Dissertation for the degree of Doctor of Philosophy in Economics, specialty "Domestic fiscal policy and public finance" - 5301.01, Baku, 2018, 148 p.
12. Annual report data of the Central Bank of the Republic of Azerbaijan, Baku, 2019.

# PROSPECTS FOR THE EXPORT OF AGRICULTURAL PRODUCTS IN AZERBAIJAN

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## **ABSTRACT**

*The globalization and integration processes in the international arena have increased the importance of the export of agricultural products, which are always up to date. The export of countries, the volume and nature of foreign trade relations have a significant impact on their economic position in the world, their development, prosperity and maximization of the benefits of economic units. Azerbaijan, in its turn, has always considered the strengthening of foreign trade relations as a major goal. To this end, numerous reforms have been carried out in the country, the legal framework has been expanded, and various cooperation agreements have been signed. In addition to this, Azerbaijan needs to diversify its foreign trade relations, especially to increase the export of non-oil goods. This can only be achieved by producing competitive products that meet international standards in this field, especially environmentally friendly products in agriculture. The article examines the current state of foreign trade in Azerbaijan and makes recommendations for the development of areas with high potential to increase exports.*

**Keywords:** *Foreign trade, Export, Import, "Made in Azerbaijan", Agricultural products*

## **1. INTRODUCTION**

Agriculture is the most important sector of the country's economy due to its contribution to national income and employment, the provision of raw materials and capital for the development of other sectors, and its direct or indirect impact on exports. Agricultural products play an important role in the development and evolution of human civilization. Especially as a result of industrial development, the nature of agricultural production and related activities started to change. Thus, in this area, production has not only sought to obtain goods but has also become the most important means of raising capital (Sodano, 2012: 375). Therefore, agricultural production has contributed not only to the sector required for people to survive but also to the national income. Today, it is strategically important for countries to get rid of import dependence by increasing domestic production, as well as to earn income from the export of "excess" agricultural products. In addition to being an important source of income, this sector plays a significant role in providing employment and foreign currency inflows in the country. In short, as diversification of agriculture is one of the most important sectors for sustainable development of countries and the success of international business, it is important to ensure the development of this sector in Azerbaijan and to examine this issue. The first part of the study discusses the importance of agricultural production and its role in the country's economy, as well as in foreign trade, and also emphasizes the need for its regulation. The second part highlights the current state of agricultural products in Azerbaijan's foreign trade and ways to develop agricultural products with high potential to increase Azerbaijan's export capacity. The results obtained are systematized in the last part.

## **2. RESEARCH METHODOLOGY**

The induction method was used in the research. The article uses quantitative data and secondary sources, taken from the official website of the State Statistical Committee of the Republic of Azerbaijan and the Food and Agriculture Organization of the United Nations.

### **3. AGRICULTURAL GOODS AND THE NECESSITY OF ITS REGULATION IN FOREIGN TRADE**

The agricultural sector has a significant impact on the health and development of society by producing and processing various products and meeting people's needs for these products. Thus, these products create the basis for sustainable development, including the social, economic and environmental progress of society. There are several reasons why agriculture should be regulated today. Food safety is one of the most important reasons. Food security provides all households with access to adequate physical and economic nutrition, as well as the right to consume safe, quality, and healthy food. Food security also covers the food chain from the field to the table. In other words, ensuring food security serves to eliminate all conditions and factors that will adversely affect human health by taking the necessary measures at all stages from production to consumption. Meanwhile, existing risks are another reason for the state regulation of the agricultural sector. The dependence of this sector on climate conditions increases the risk and uncertainty factors in this area. At the same time, the long period of production in agriculture compared to other sectors makes it necessary to regulate and support the agricultural sector. Another reason is related to the "economic development" system. Agriculture, industry or services sectors develops in strong coherence with overall economic development process. For example, while the agricultural sector supplies raw materials to the industrial sector, it also opens up new markets for industrial products. A similar situation applies to the service area. In other words, agriculture, industry and service sector vividly and rigorously interact with each other. In general, foreign trade in agriculture has increased significantly since 2000. The rapid growth of industrial production in developed countries has increased the demand for agricultural raw materials. At the same time, the demand for synthetic goods decreased in these countries due to an increase in consumer income. As a result, there has been a rapid growth in international trade in agricultural products. This trend has allowed developing countries to expand their participation in international markets (FAO, 2018) and to seek the "best" in global markets (OECD, 2009).

*Table following on the next page*

Country	2000	Country	2016
European Union (Member Organization)	46.9	European Union (Member Organization)	41.1
United States of America	14	United States of America	11
Canada	3.9	Brazil	5.7
Australia	3.7	China	4.2
Brazil	3.2	Canada	3.4
China	3.0	Argentina	2.8
Argentina	2.7	Australia	2.5
Mexico	1.9	Indonesia	2.4
New Zealand	1.6	Mexico	2.3
Thailand	1.5	India	2.2
Malaysia	1.4	Thailand	2.0
India	1.2	Malaysia	1.8
Indonesia	1.1	New Zealand	1.6
Turkey	0.9	Viet Nam	1.3
Colombia	0.7	Turkey	1.3
Chile	0.7	Russian Federation	1.1
Singapore	0.7	Chile	0.9
Viet Nam	0.6	Singapore	0.8
South Africa	0.6	Switzerland	0.7
Switzerland	0.6	South Africa	0.7
Total	90.9	Total	89.8

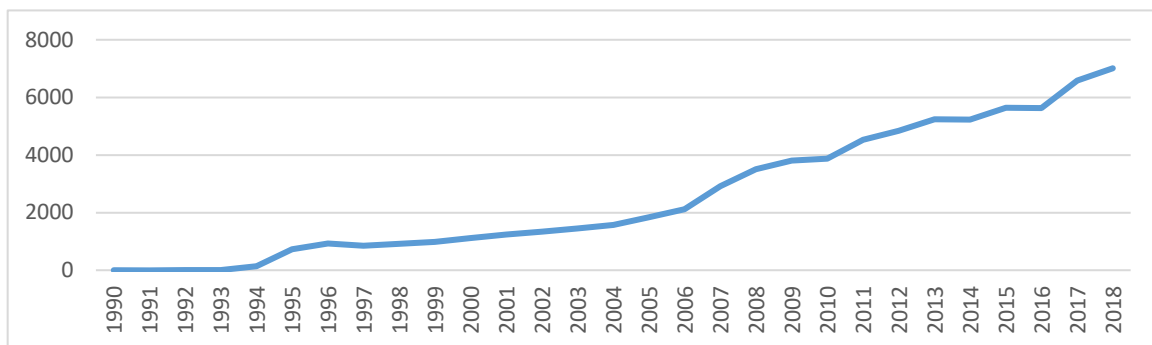
*Table 1: Major exporters of agricultural products, share of total export value, % (Source: FAO's calculations using data from World Integrated Trade Solution (accessed February 2018). Agricultural trade comprises products covered by the Agreement on Agriculture, Annex 1)*

Table 1 shows that the European Union and the United States, as traditional exporters have maintained their high share of agricultural exports. However, the share of developing countries in the world's agricultural markets is also increasing. For example, Brazil increased its share from 3.2 percent in 2000 to 5.7 percent in 2016. India rose from 1.2% to 2.2%, while Indonesia grew from 1.1% to 2.4%. Although the Russian Federation was not in the top twenty in 2000, it ranked 16th in the international market among agricultural exporters, with 1.1% in 2016. The export volume of countries and the relations in this area have a significant impact on their economic status in the world, development, welfare and the maximization of the benefits of economic entities. Special attention should be given to two factors in order to develop exports in the economy and gain advantage in the international competition. These are price and quality factors. Thus, a cheaper product is produced using the price factor compared to its competitors. The quality factor, on the other hand, provides another advantage by producing higher quality products than its competitors. The quality products that consumers prefer to buy in today's developed markets are mainly "environmentally friendly" products (Prakash and Pathak, 2017; Chen and Chai, 2010). One of the most important problems today is the increasing number of products with genetic modification. The use of technologies and chemicals that pose a threat to human health in this area and the use of genetically modified varieties endanger the reliable food supply of people. Therefore, the production of ecologically clean agricultural products is currently controlled all over the world and is regulated in a variety of ways, including ecological taxes, ecological standards, ecological education, ecological subsidies (Zeynalova, 2017). At the same time, control over the use of chemicals in the agricultural sector is strengthened, the use of technologies that affect soil pollution to protect the environment is not allowed (Melece, 2010; Sadik-Zada, 2019). Even in the packaging process, when organic agricultural products are prepared for sale, the use of environmentally friendly tools is of great importance (Seo et al., 2016).

In other words, attention is paid to the control of products at all stages from production to consumption and the establishment of certified agricultural production. In general, when formulating the foreign trade policy of the country, these two factors should be taken into consideration, the economic potential of the country should be developed and a competitive environment should be created in line with international business.

#### 4. FOREIGN TRADE RELATIONS OF AZERBAIJAN IN AGRICULTURE

Agriculture is one of the most important and significant sectors of our economy. Historically, the vast majority of the population of Azerbaijan was engaged in agriculture and livestock. According to the State Statistical Committee of the Republic of Azerbaijan, the production in the agricultural sector is currently growing in Azerbaijan.



Graph 1: Gross value of agricultural production, million manats  
(Source: <https://www.stat.gov.az/source/agriculture/>)

According to Graph 1, the value of gross agricultural production in Azerbaijan amounted to 0.102 mln. manats in 1990, 1112.4 mln. manats in 2000, 3877.7 mln. manats in 2010 and 7010 mln. in 2018. However, the increase in the value of gross agricultural production had no significant effect on its share in GDP.

	GDP, million manats	GDP, %		GDP, million manats	GDP, %
2000	758.9	16.1	2010	2344.6	5.5
2001	788.7	14.8	2011	2643.5	5.1
2002	846.0	14.0	2012	2813.7	5.1
2003	888.0	12.4	2013	3122.2	5.4
2004	937.3	11.0	2014	3139.2	5.3
2005	1137.9	9.1	2015	3359.4	6.2
2006	1329.4	7.1	2016	3386.8	5.6
2007	1901.0	6.7	2017	3944.1	5.6
2008	2246.0	5.6	2018	4190.1	5.3
2009	2179.5	6.1			

Table 2: Gross domestic product in agriculture, forestry and fisheries  
(Source: <https://www.stat.gov.az/source/agriculture/>)

As it is seen from Table 2, although the cost of final agricultural products produced in the country has increased over the years, its share in GDP has not been satisfactory and has decreased. This, of course, is due to the large share of other sectors in GDP, especially the oil sector. To increase the production of agricultural products at a satisfactory level and raise its share in GDP, Azerbaijan needs to grow high potential products in this field.

These areas are as follows: fruits, nuts, vegetables, citrus fruits, as well as tea, mate and spices. It should be noted that hazelnuts are one of the main sectors in the non-oil sector. Azerbaijan is currently the third largest producer of hazelnuts in the world. Most of the hazelnut production in our country falls in the Zagatala region. The Shaki-Zagatala economic-geographical region also has a significant share in the production of walnuts and chestnuts in the country (24% and 98.7%) (<https://www.agro.gov.az/index.php/az/bitkicilik/coxillik-ekmeler/sabalid>). The production volume in this group is given in Table 3.

	Walnuts, with shell	Hazelnuts, with shell	Chestnut	Nuts, nes
2000	9983	13334	991	3000
2005	12529	27986	1937	3400
2010	8470	29454	816	3000
2015	10723	32260	785	4000
2016	9319	33941	728	4177
2017	9765	43000	609	4270

*Table 3: Production of walnuts, hazelnuts and chestnuts in Azerbaijan, tons  
(Source: <http://www.fao.org/faostat/en/#data/QC>)*

According to the Food and Agriculture Organization of the United Nations, the volume of walnuts, hazelnuts and chestnuts produced in Azerbaijan has been unstable since 2000. Thus, while the production of hazelnuts in our country was 13,334 tons in 2000, it increased 3.2 times in 2017 and reached 43,000 tons. Walnut production fell from 12,529 tons in 2005 to 9,765 tons in 2017. Compared to 2000, chestnut production decreased by 38.5% in 2017. The production of other nuts has generally increased over the years. To determine whether the production of the products shown in Table 3 is satisfactory, it is necessary to look at the foreign trade turnover of these products. For this purpose, first of all, let's look at the data of the State Statistical Committee of the Republic of Azerbaijan on the volume of foreign trade in plant products, including these goods (Table 4).

*Table following on the next page*

		2000	2005	2010	2015	2016	2017	2018
Plant products	Export	28.457,8	193.574,4	190.337,2	335.892,0	386.559,7	518.273,9	585.473,9
	Import	119.488,2	171.933,0	437.424,0	457.386,9	592.002,1	559.519,1	560.263,5
Vegetables, roots and tubers	Export	201,9	26.224,4	42.344,5	91.679,7	129.022,1	210.089,9	233.313,9
	Import	6.700,3	7.085,8	22.777,9	22.633,4	62.006,9	57.130,4	56.168,9
Edible fruits and nuts, citrus plants	Export	21.980,3	146.432,4	112.484,3	220.247,8	243.755,4	292.653,9	326.313,9
	Import	3.639,9	6.593,8	48.978,6	35.413,5	72.995,8	75.251,6	108.423,1
Coffee, tea, mate and spices	Export	2.628,5	14.129,5	33.360,8	19.505,5	6.197,7	10.291,0	9.383,6
	Import	6.697,7	14.965,4	19.093,0	17.414,8	48.917,6	59.861,4	55.758,5
Others	Export	3.647,10	6.788,10	2.147,60	4.459,00	7.584,50	5.239,10	16.462,50
	Import	102.450,3	143.288,0	346.574,5	381.925,2	408.081,8	367.275,7	339.913,0

Table 4: Foreign trade volume of plant products, thousand US dollars  
(Source: <https://www.stat.gov.az/source/trade/>)

As it is seen from Table 4, the foreign trade turnover on nuts is given together with other goods, on "edible fruits and nuts, citrus plants". According to the State Statistics Committee, in recent years, the export of these products has always exceeded imports, and a positive balance has been achieved. Thus, in 2018, exports were 66.8% higher than imports. However, due to the lack of separate information on the import and export of walnuts, hazelnuts and chestnuts in the database of the State Statistical Committee of the Republic of Azerbaijan, the data of the Food and Agriculture Organization of the United Nations were used and systematized in Table 5.

	Chestnut		Walnuts, with shell+shelled		Hazelnuts, with shell and shelled		Nuts, nes + Nuts, prepared (exc. groundnuts)	
	Export	Import	Export	Import	Export	Import	Export	Import
2000	0	-	-	-	15000	0	-	-
2005	1	-	32	231	84214	823	4277	3
2010	0	-	0	2761	35172	3	2046	446
2015	-	459	-	8363	80322	1	1454	5791
2016	-	245	-	3762	83840	186	945	2630
2017	-	845	2	13005	85643	430	566	3240

Table 5: Production of walnuts, hazelnuts and chestnuts in Azerbaijan, thousand US dollars  
(Source: <http://www.fao.org/faostat/en/#data/TP>)

From this point of view, according to the Food and Agriculture Organization of the United Nations, Azerbaijan is the only the country with positive position on international market. Income from the export of hazelnuts has increased over the years and reached 85,643 thousand dollars in 2017. The situation with the walnuts was quite the opposite. Thus, although imports increased sharply over the years, exports were either very low or uninformed.



Exports of other nuts fell from 4,277 thousand dollars in 2005 to 566 thousand dollars in 2017. On the contrary, imports have increased. chestnut imports were also increased. Thus, the tables given above show that Azerbaijan was not been able to fully realize itself in this high-potentially agricultural sector. At present, measures for the development of the non-oil sector in Azerbaijan and diversification of exports are seen as the main source of economic growth. For this purpose, the state has taken various measures to increase the export potential by ensuring the development of the non-oil sector in Azerbaijan. Examples of these measures are as follows (<http://www.azpromo.az/export/export-promotion>):

- improvement of the business and investment climate in the country (reduction of licenses and permits, simplification of procedures, etc.);
- partial suspension of inspections in the field of entrepreneurship until 2021;
- investment promotion (for example, implementation of the "investment incentive certificate" and the provision of tax expenditures for 7 years to those who receive this document, as well as exemption from VAT and customs duties on equipment and technology imported under the project);
- creation of industrial parks (tax exemptions are applied to the residents of the parks for a period of 7 years, and the equipment and technologies they import for production are not subject to VAT and customs duty);
- protection of local production and domestic market, and stimulation of non-oil exports (application of export promotion, organization of export missions to foreign countries and opening of trading houses, etc.);
- application of advanced mechanisms (green corridor, electronic declaration, etc.) in the field of import and export operations;
- subsidizing the production of a number of agricultural products, etc.

“Made in Azerbaijan” branding measures are among of the important incentives. Over the past period, more than 30 export missions have been carried out to promote the Made in Azerbaijan brand to foreign countries. Azerbaijan products were presented at 24 international exhibitions. As part of these measures, based on relevant agreements signed additional export destinations were explored and launched. (<http://xalqqazeti.com/az/news/28672>). In addition, one of the effective measures taken to promote the “Made in Azerbaijan” brand in foreign markets was the establishment of Azerbaijani trade and wine houses abroad. Azerbaijan trade houses were opened in Belarus in 2017, Ukraine, Latvia, Poland and China in 2018 and the United Arab Emirates in 2019. Each of these trading houses has a permanent exhibition of various products from Azerbaijan. At the same time, trade representatives of Azerbaijan had been appointed in the Russian Federation, the People’s Republic of China, the United Arab Emirates and the countries of Central Europe, which represent a new institutional approach in terms of expanding non-oil exports, promoting the "Made in Azerbaijan" brand, creating a favorable business environment and investment climate, as well as attracting investment (<http://xalqqazeti.com/az/news/28672>).

## **5. FINDINGS AND DISCUSSION**

Despite the country's achievements in the field of exports, definite sectors are still in need to be developed. This situation is especially seen in the trade turnover of plant products. There are several main reasons for the insufficient share of plant products in total exports to Azerbaijan. organic nature of these products make them extremely valuable and demanded on international markets. As mentioned earlier, one of the most pressing issues in the world today is the genetic modification of agricultural products. To prevent this, it necessary to increase production of environmentally friendly agricultural products. In recent years, special attention has been paid to the production of ecologically clean agricultural products in Azerbaijan.

The production of such products is indicated as the most important task in the "Strategic Roadmap on production and processing of agricultural products in the Republic of Azerbaijan" (<https://president.az/articles/22110>). Although Law of the Azerbaijan Republic "on the ecologically clean agriculture" was adopted in 2008 (<http://www.e-qanun.az/framework/15321>), in order to ensure production in accordance with the requirements of the market the "Rules on the labeling of ecologically clean food and agriculture products" were approved in 2018 (<http://www.e-qanun.az/framework/40551>). According to this rule, ecologically clean agricultural products are packaged by producers in accordance with the requirements of technical regulations, as well as technical normative legal acts in the field of food safety. Such products are being marked with labels "ECO-transition" or "ECO". According to the "Rules on the labeling of ecologically clean food and agriculture products", the label of organic agricultural products sold in the country should contain information that genetically modified organisms and their derivatives are not used in the production of these products. It should be emphasized that fertilizers used in the process of ecologically clean agriculture and food production must also be organic. Currently, organic fertilizers in our country is produced only by individual entrepreneurs in Baku. However, the production of such fertilizers should also be encouraged and promoted throughout the regions. On the other hand, in the manufacture of these products, biological control (through insects) and physical methods (ultrasound, light, traps, etc.) are used to control pests. Many agro-cultural works are done manually, so as not to damage the plants and the soil. Environmentally friendly components are used during processing. They are obtained only from natural raw materials. It should be noted, however, that the use of environmentally friendly components makes the production process very expensive compared to other types of production. Due to the high production cost, these products are sold in markets at a higher price. This provides higher income. The cultivation and export of ecologically clean agricultural products in Azerbaijan is possible for all agricultural products, including vegetables, edible fruits, nuts, citrus, tea, mate and spices. It should be noted that in order to achieve this result, it is necessary to first examine the standards that determine the production of environmentally friendly products and to produce within this framework. Besides, promotion of advances high technologies also important. These products must then be properly certified in order to receive shares from the international market. Certification is one of the objective requirements of today's market economy and helps to determine the compliance of products and services offered to consumers with relevant regulations. The purpose of certification is to provide customer satisfaction by providing accurate information about the consumed products and helping consumers choose a product. For this reason, international standardization rules should be examined in the country and implemented properly. In particular, it is necessary to cooperate with foreign experts on the standardization of products that will be exported to the world market and to ensure that the products are manufactured in accordance with international standards. Cooperation with foreign experts will also contribute to the training of personnel and the establishment of certified agricultural production. One of the main challenges we face in the agricultural sector is that the crop does not bear its fruits quickly. This feature makes it difficult to attract large investors to certain agricultural areas. If it is impossible to attract large investors in this area, cooperatives can be established between various entrepreneurs who can invest in this area. The establishment of cooperatives will allow expanding the sown areas of these products and the application of intensive cultivation technologies. At the same time, the supply of these products with modern cultivation equipment will be improved, and the activities of processing enterprises will be modernized. In other words, since the created cooperatives will voluntarily combine the resources of individual business entities, the production, supply, processing, storage and delivery of the necessary technologies in this area will be most optimal.

Cooperatives will also encourage the cultivation of agricultural products in accordance with the specifics of each region, in other words, its climate and soil. At the first stage, of course, state support and subsidies this sector will provide great contribution to agricultural production. For example, production growth will lead to an increase in the share of these goods in the domestic market, as well as their share in exports.

## 6. CONCLUSION

Azerbaijan has great potential in the non-oil industry, especially in vegetables, edible fruits, nuts, citrus fruits, tea and spices. In order to develop these industries, increase their competitiveness and export to the international market, these products must be produced in accordance with international standards. Taking into account that, the demand for environmentally friendly products is high in many countries of the world, and this trend will continue in the future, Azerbaijan should give priority to the production of organic products. To do this, the following reforms should be carried out in these areas:

- Study of international standardization rules;
- Organization of cooperation with international experts;
- Development of human resources to adapt to new economic, social and environmental trends;
- Establishment of cooperatives;
- Establishment of state supply companies;
- Establishment of a joint center of the Ministry of Economy of the Republic of Azerbaijan, The State Customs Committee and agricultural cooperatives to facilitate exports.

Thus, the production of high potential goods in accordance with international standards and norms will allow recognition of Azerbaijani products as a brand in the world market and increase the positive balance of foreign trade.

## LITERATURE:

1. Azərbaycanın xarici ticarət əlaqələri genişlənilir, Retrieved 04.01.2020 from <http://xalqqazeti.com/az/news/28672>
2. Chen, T.B., Chai, L.T. (2010). Attitude towards the Environment and Green Products: Consumers' Perspective. *Manag. Sci. Eng.* 4, 27–39
3. FAO (2018). *The State of Agricultural Commodity Markets 2018. Agricultural trade, climate change and food security*, Rome.
4. İxrac. Retrieved 07.01.2020 from <http://www.azpromo.az/export/export-promotion>
5. Law of the Azerbaijan Republic on the ecologically clean agriculture. (13.06.2008). Retrieved 02.01.2020 from <http://www.e-qanun.az/framework/15321>
6. Melece, L. (2010). *Environmentally Friendly Agriculture: Development Issues in Latvia*, Socialiniai tyrimai/Social Research. 2 (19), 37-46.
7. OECD Insights. (2009). *International Trade: Free, Fair and Open?* ISBN 978-92-64-060265, OECD.
8. Prakash, G., Pathak, P. (2017). *Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation*. *J. Clean. Prod.* 141, 385–393.
9. Rules on the labeling of ecologically clean food and agriculture products (06.11.2018). Retrieved 02.01.2020 from <http://www.e-qanun.az/framework/40551>
10. Sadik-Zada, E.R., Loewenstein, W. and Hasanli, Y. (2019). Commodity Revenues, Agricultural Sector and the Magnitude of Deindustrialization: A Novel Multisector Perspective, *Economies*, 7, 113.
11. Seo, S., Ahn, H.K., Jeong, J., Moon, J. (2016). Consumers' attitude toward sustainable food products: Ingredients vs. Packaging. *Sustainability*, 8, 1073.

12. Sodano, V. (2012). Food Policy Beyond Neo-Liberalism. D. Erasga (Ed.). in *Sociological Landscape-Theories, Realities and Trends*, Rijeka: InTech, 375-402.
13. Strategic Roadmap on production and processing of agricultural products in the Republic of Azerbaijan. (06.12.2016). Retrieved 02.01.2020 from <https://president.az/articles/22110>
14. Zeynalova, Z. (2017). The role of economic and social instruments of environmental policy, *International Journal of Development and Sustainability*, 6 (11), 1757-1767.

# INTEGRATED ROLE OF THE MARKETING IN MANAGEMENT OF PRODUCTION AND SALE ACTIVITY

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## ABSTRACT

*The role of marketing in adaptive management of enterprise and questions such as marketing as a manner of integrated activity in management of production and sale activity is clarified in the article. As we know, a product meeting the requirements of consumer in the condition of modern market shall be produced and availability of that product for consumer shall be provided. For this reason, distribution and sale function of marketing products shall be executed. The competitiveness of enterprises producing a product conforming to the requirements of consumer and achieving to effective distribution and sale of those products is higher. The channel of distribution and sale of products means the whole of natural and legal entities which take part in delivery of those products from manufacturers to consumers and rendering assistance in transfer of right to hold the products. The distribution of products is a type of activity prior to sale and this kind of activity is executed, the reserves of products are created in necessary points or its existence is provided. The sale of products from those points or trade “points” is provided. From this point of view, the distribution and sale of products such as separate types of activity are activities completing each other. The whole of enterprises and organization taking part in delivery of products from manufacturer to consumer forms the channel of distribution. The channel of distribution consists of two parts: physical distribution channels and sale channels. The feature of market, feature of product, factors in regard to feature of enterprise and amount of transport and purveyance costs affects to selection of sales channel. The delivery of products from manufacturer to the last consumer or intermediary enterprises is realized by means of their physical distribution. The operations such as rendering of services to buyers in the process of physical replacement of products, receipt and processing of orders, transportation of products, loading and unloading, keeping and use, creation of reserves and management are conducting.*

**Keywords:** *Product, Sales, Marketing management, Adaptive management, Integration*

## 1. INTRODUCTION

The transmission to development on the basis of market relations changed fundamentally the views to management of production and sale activities of enterprises acting in Azerbaijan. At present, the majority of markets try to meet the market and to provide the management of production and sale activity. In several circumstances, they don't succeed it and the level of indicators characterized their market activities is lower than expected. As it is known, the marketing acts as an intermediary which connects the enterprise with foreign environment in the condition of market relations. The marketing connects the enterprise with foreign environment and plays an intermediary role in realization of production and sale activity on the basis of requirements of that environment. The intermediary role of marketing as a conception of management of production and sale activity manifests itself in connection of activities of separate departments of enterprise and strengthening of market activity of enterprise. In fact, the specialist of marketing service of enterprise in the condition of market relations coordinates the activities of all departments of that enterprise and achieves to integration of management

decisions made by those departments. From this point of view, marketing plays a great integrated role in management of production and sale activity.

## **2. THE PLACE AND ROLE OF MARKETING IN ADAPTIVE MANAGEMENT OF ENTERPRISE**

The activity of enterprises in the condition of market relations occurs in the condition of changeable market environment, therefore the necessity for coordination of their production and sale activities with requirements of market periodically occurs. The enterprise which doesn't produce a product on the basis of market's requirements can't preserve its market positions for a long period, also provision of efficiency of production and sale activity of that enterprise becomes to a problem. The solution of this problem requests the adaptive management of enterprise and the market is used as business philosophy for provision of the said management. It is a long period that, marketing acts as means giving an opportunity for provision of market success of enterprise in the countries where market relations develop and for increase of efficiency of their production and sale activities. The competition struggle among enterprise occurs on marketing factors in the modern period, therefore the provision of competitiveness of this or other enterprise in the long-term period makes necessary the marketing approach to management of production and sale process within that enterprise. The comprehensive provision of requirements of manufacturers in the period when market requirement changed rapidly, expansion of their selection opportunities and provision of loyal relations to enterprise is impossible without marketing approach. As it seems, the role of marketing in adaptive management of enterprise in the condition of market relations as a tool is unparalleled. In general, the role of marketing is great in adaptive management of enterprise and marketing-oriented enterprises have greater market chances in comparison with production-oriented enterprises and also opportunities to use of those chances.

## **3. MARKETING AS INTEGRATED ACTIVITY IN MANAGEMENT OF PRODUCTION AND SALE ACTIVITY**

The integrated role of marketing in management of production and sale activity manifests itself in recommendations of specialists on marketing about organization of the activities of separate departments of that enterprise. For example, the specialists on marketing recommend the production manufacture to production department by meeting the market and inform the production department about products meeting the requirements of the market. The considering the opinions and offers of marketing specialists by the said department gives an opportunity to them to produce not the products able by production forces, but products conforming to the needs and requirements of consumers. The recommendations given by specialists on marketing to financial department of enterprise are regard to allocation of enough financial means by the said department for marketing innovations of enterprise. So, marketing managers try to convince the employees of financial department justly of the truth of direct dependence of enterprise on costs spent to marketing innovations of efficient market condition desired to possess in future. As a dynamic system, the market situation changes from time to time, and the demand for products and services that have previously been accepted by consumers is either reduced or disappeared. Therefore, enterprises that perform the production and sales activities on the basis of marketing principles face the need to accept the allocation of funds to marketing innovations on the basis of initiative of the marketing department employees. Recommendations given to the logistics department of the enterprise by marketing department employees are related to technical and technological upgrading of production lines of the enterprise. Achievement of the strategic objectives of the enterprise is directly related to the application of technical and technological innovations at the same enterprise. Therefore, it is very important to take into account the suggestions and recommendations given by marketing

specialists. Marketing specialists regularly take the initiatives on the activities of other departments of the enterprise. As a whole, taking into account the opinions and suggestions of marketing specialists by the departments of the enterprise conforms the enterprise's potential opportunities to the consumer's needs. The basis of this conformation organizes the integration of decisions made to manage production and sales activities at the enterprise. Surveys and researches conducted by the specialists show that buyers purchase its ability to meet its demand, its ability to solve problems, not a product. They consider a product as a set of features that allow them to meet their needs and solve their problems. Moreover, consumers strictly differ from each other for their purchase motives, behaviors and other factors and adopt their purchasing decisions under the impact of these factors. Therefore, manufacturers must try to segment a market, to study the purchase motives and behaviors of buyers and consumers and to make products that conform to them. Those aforementioned were the main reason for the emergence of the marketing concept called consumer marketing. Unlike the sales concept, the marketing concept focuses on making of products that conform to the purchase motives, behaviors and needs of consumers, not making of products that the production forces allow. In other words, marketing is focused on making of self-sellable products, instead of "to palm on" the consumer with aggressive marketing techniques. The competitiveness of enterprises producing a product conforming to the requirements of consumer and achieving to effective distribution and sale of those products is higher. The channel of distribution and sale of products means the whole of natural and legal entities which take part in delivery of those products from manufacturers to consumers and rendering assistance in transfer of right to hold the products. The distribution of products is a type of activity prior to sale and this kind of activity is executed, the reserves of products are created in necessary points or its existence is provided. The sale of products from those points or trade "points" is provided. From this point of view, the distribution and sale of products such as separate types of activity are activities completing each other. The whole of enterprises and organization taking part in delivery of products from manufacturer to consumer forms the channel of distribution. The channel of distribution consists of two parts: physical distribution channels and sale channels. The feature of market, feature of product, factors in regard to feature of enterprise and amount of transport and purveyance costs affects to selection of sales channel. The delivery of products from manufacturer to the last consumer or intermediary enterprises is realized by means of their physical distribution. The operations such as rendering of services to buyers in the process of physical replacement of products, receipt and processing of orders, transportation of products, loading and unloading, keeping and use, creation of reserves and management are conducting.

#### **4. CONCLUSION**

The purpose of the distribution and sale of the products is to ensure that the required products are delivered to consumers at the right time and place and at a suitable price and exchange process are performed. The production and sale of products, as a rule, do not coincide with the location, time, volume and assortment. The fact that enterprises do not have a stable market activity and a low level of indicators characterizing their activities is due to the fact that these enterprises do not pay enough attention to marketing management. Marketing management is an advisable feasible activity through the implementation of analysis, planning, organization and marketing programs aimed at creating, maintaining and expanding of favorable relationships with existing buyers in the target market to achieve enterprise goals. As the production and sales activities of any enterprise occur in uncertainty, the enterprise must analyze these conditions to achieve its goals, and then develop marketing programs, organize the implementation of programs, and control over the course of works. The implementation of the listed functions provides marketing management within the enterprise and it leads to an increase in the market orientation of the enterprise.

**LITERATURE:**

1. Bagiev G., Tarasevich V. M., Ann X., Marketing, SPb., Piter, 2006.
2. Guliyev F.V. Marketing management. Baku 2018.
3. Daft, R.L., & Marcic, D. (2011). Understanding Management. *Mason, OH: South-Western, Cengage Learning.*
4. Lamben Jan-Jak, Market-Driven Management. Strategic and Operational Marketing, SPb., Piter, 2004.
5. Mammadov A.T. Principles of Marketing. Baku 2007.
6. Mammadova S.S. Chapter X. “Theoretical and methodological foundations of marketing management” In the book: Fundamentals of commercial science: history, theory and methodology. Volume 1. Baku: Mars - Print. Art. 335-389, 2016.
7. Mammadova S.S. The conceptual basis of marketing management. Modern trends in science and education: a collection of scientific papers based on the materials of the International Correspondence Scientific and Practical Conference. St.135-136. Lipetsk, October 8, 2012.
8. <http://lib.bbu.edu.az/files/book>



# EUROPEAN UNION AND CIS COUNTRIES ON THE WAY TO A NEW STRATEGY: NEW APPROACHES AND OPPORTUNITIES FOR COOPERATION

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## **ABSTRACT**

*The economic, social, political processes taking place in the world radically transformed the system of relations between countries in the post-Soviet space. The readiness of the CIS countries for global changes was clearly insufficient. The development of complex processes related to the transformation of all relations in society has highlighted the problems of stability and social integration. The problem of studying the content of these processes is becoming increasingly important. First of all, it is necessary to realize that change cannot be limited to a narrow economic field. In our understanding, this approach allows us to analyze relations in a transitional society, where politics, economics and the social sphere are closely intertwined. The transition to the stage of sustainable economic growth is possible only on the basis of the formation of the technological potential of production, the development of entrepreneurship, and social mobility of workers. After the collapse of the Soviet Union, Russia and the new independent states remained with a very unusual configuration of the economy and the infrastructure and technological base. The traditional business in the CIS - trade in raw materials and industrial cooperation - is in crisis. Especially the economies of the oil-exporting countries of the region have undergone significant changes under the influence of falling oil prices in world markets. In 2015, a sharp drop in world prices for raw materials, devaluation of national currencies, economic sanctions against Russia had negative consequences in trade relations within the region, as well as with the EU countries. But now, political, financial and technical obstacles tied to the spread of the Coronavirus may disrupt this relations and making it logistically and politically complicated.*

**Keywords:** *Bilateral cooperation, Economic diversification, New Silk Road, Regional economic projects, Regional integration*

## **1. INTRODUCTION**

The purpose of this paper is to examine economic aspects of the EU - CIS relations, i.e. the new strategy of bilateral relations between the enlarged EU and CIS countries in the spheres of trade, investment, technical cooperation. Also influence of the Union's economic projects and new approaches and opportunities on the course of CIS economic diversifications and perspectives of EU-CIS economic relations. We use the name of the Commonwealth of the Independent States and its abbreviation CIS for analytical convenience – to define a group of nine successor countries of the former USSR. These CIS states are: Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, and Uzbekistan. This group of countries is also called sometimes as the New Independent States (NIS). Conceptually, the integration of the New Independent States (NIS) into the international division of labor and its meaning is changing somewhat. As international experience shows, a strategy based on the export of raw materials in the long term leads to lower rates of economic growth. At the end of the 20th century, the scientific literature introduced the terms “social transformation”, “transformational economy”, which determine the content of socio-economic processes taking place in the new independent states.

And in the period of modern global economic instability, there has been progress in macroeconomic theoretical research, in an analysis of the causes of economic stagnation and social degradation and in the search for ways out of the country from the crisis. Modern experience strongly warns the countries of the post-Soviet space with a one-sided orientation toward the West and East. Large investors use their investments as a way to strengthen their status in the region and increase their influence. Usually, large investors from China, the USA and Europe use this opportunity in regional markets in the CIS. However, the accumulated empirical material is very heterogeneous and cannot be more comparable, since it was obtained by researchers working in different directions with different goals. In connection with the object of our study, the EU programs in the Central Asian countries of the CIS, taking into account aspects of sustainable development, economic diversification, stability and social values, were of great interest to us. The provision of Western assistance is associated with certain requirements, for example, the implementation of transparent government. China, while implementing programs to help developing countries along the New Silk Road, is not aiming at all to fight poverty. At the 2020 Munich Security Conference, it is emphasized that The World is becoming less Western ("Westlessness"). The organizers of the Munich Conference called on Beijing to responsibly approach its role as the new non-Western center of power, stressing that, China will also accept liberal values over time and become an interested party in the liberal world led by the West (Munich Security Report 2020). Therefore, the EU and Germany are developing regional economic projects in order to counter Chinese influence in the states of Eastern Europe and the Central Asian region and promote modern standards, business models and technologies there. Based on the relevance and practical importance of the problems of economic integration, it is necessary to develop approaches to managing business processes in a direction adequate to economic interests and modern patterns of development. In a multipolar world, it is very important to develop relationships with a wide range of partners and markets. In other words, countries should not lose sight of an alternative development model and the creation of a new dynamic in the region. To effectively solve this problem, it is necessary to discuss the main unsolved problems that these countries face in the transition process.

## **2. POST-SOVIET GEOSPACE: PROBLEMS OF COOPERATION AND INTERCONNECTEDNESS**

The changes that have taken place in the world require the development of new approaches to the formation of integration interactions, and for the implementation of an economic strategy that reflects national interests and regional ties in the cross-border post-Soviet space. The Caspian direction of foreign policy has always been historically vital for Russia and influential Western multinationals. It is here that the historical matrix of geopolitical and ethno-political laws is peculiarly manifested. The geopolitical position of the region to the greatest extent determines the nature of foreign policy factors, ensuring stable and safe development of the region. Another characteristic of the region is ethno-political and ethno-confessional specificity. It was here that the most serious conflicts in the interethnic sphere occurred (Landa 2010,p.3). Today, the Caspian region is under pressure from a whole complex of unresolved complex problems related to the legal status of the Caspian Sea, energy, environmental risks and local conflicts. Since the collapse of the USSR, the Caspian region has become the most important resource base for the global economy. The emergence of new independent states has significantly changed the geopolitical picture in the region. As a result of this, and in the post-Soviet space adjacent to the Caspian Sea, the system of socio-economic relations, the naturally historically developed transport infrastructure, the system of trade relations and the division of labor were destroyed. The Caucasus-Caspian region and the Central Asian region have always played a key role: because of their history, culture, as well as their role in communication between East and West.

Today, the economic and spatial potential of the post-Soviet region is acquiring ever newer actual strategic importance. Although agreement on the creation of a free trade zone (FTA) in the CIS was reached in 1994, in fact, only 17 years later, a free trade agreement was signed. The most successful attempt at integration with the participation of the countries of the former USSR was the creation within the framework of the Eurasian Economic Community of the Customs Union, as well as new supranational institutions, including the Eurasian Economic Commission. CIS countries need to develop key areas of cooperation with the EAEU and the EU in the future. Today in world scientific circles, the range of key discussions reflects the goals of achieving the most advantageous positioning to ensure national interests, bringing regional agreements in line with the standards of the 21st century. As a result, a new regionalism emerged as a new subject field of research. In this regard, the views on the correlations of the concepts of “region” and “space” have also changed (Figure 1).

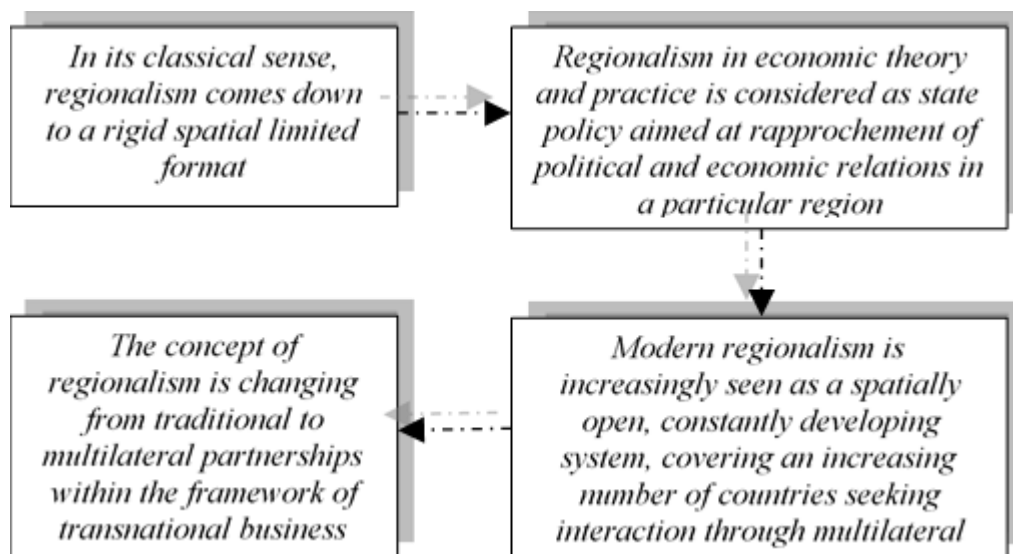


Figure 1: Post-Soviet space in the context of the phenomenon of new regionalism (Author's Point of View)

The attention in this article is given to the factors of enhancing cooperation to reduce obstacles in the further integration of the CIS countries into the world economy and to ensure economic growth and development in the future, in particular the study of the impact of cooperation with the EU on social development in the EAEU and the CIS.

### 3. DIVERSIFICATION OF THE ECONOMY AND THE SEARCH FOR A NEW MODEL OF ECONOMIC COOPERATION IN THE REGION

Economic diversification is a key element of economic development in which a country moves to a more diverse production structure. CIS countries have become vulnerable to external economic factors. The economies of the region are primarily threatened by the volatility of energy prices, the instability of exchange rates and the ineffective functioning of the integration mechanisms of business processes. New Independent States need new models of economic growth and the diversification of their economies. Predictable business regulation that provides a level playing field among investors - domestic and foreign - is essential for economic diversification. The World Bank Group's experience in advising governments on economic diversification suggests that there are three key areas of economic incentives that intersect to affect the framework for diversification. These are: i) business regulation and investment policy; ii) trade policy design; and iii) competition policy (WTO 2019). Given these challenges, we are talking primarily about the development of the private sector, improving the investment

climate, reducing the raw material dependence of the economy and accelerating the transition to a green and non-waste economy. The EU intends to take relations with Central Asian countries to a new level, as part of a new strategy for relations with the region, approved by the EU Council in 2019. The previous EU relations strategy with the Central Asian region was adopted in 2007. The European Union is a leading partner of Central Asia in the development of the region. Positive trends in the development of dialogue in the Central Asian region open up new prospects for interaction between the EU and the countries of the Central Asian region. The processes of updating the EU Central Asia Strategy are discussed. The Government of Kazakhstan contributes to the implementation of the new strategy, which will become an effective and multifunctional basis for even deeper cooperation, and will also further strengthen partnerships within the region (Kazakhstan MFA 2019). EU investments in the region play a decisive role. The European Union is a leading development partner for Central Asia, supporting the region with over €1 billion between 2014-2020 in areas such as the rule of law, environment, water, trade and border management (EC 2019). The EU emphasizes that these agreements do not exclude countries from participating in other initiatives such as the EAEU or free trade area agreements. The new EU partnership and cooperation agreements with Central Asian countries are also compatible with other integration initiatives, such as the Eurasian Economic Union (EAEU), which includes Kazakhstan and Kyrgyzstan. There are potentials for the development of cooperation for Azerbaijan and Uzbekistan in industrial production with the EAEU and CIS member states to establish output with high added value (Evdokimov Alexander, Guliyev Mushfig 2019, p.65). Azerbaijan considers its cooperation with the EAEU, CIS and EU as an integration of the global economy. The framework of EU relations with the post-Soviet countries of the Caspian region and Central Asia depends on the willingness of individual countries to carry out reforms, as well as to modernize and diversify the economy. Azerbaijan, unlike some countries of the Eastern Partnership, does not set a goal of joining the EU. The EU and Azerbaijan are primarily linked by economic relations. Azerbaijan is also a key participant of the five Caspian littoral states, along with Kazakhstan, with large maritime and air components of the Silk Road (the availability of port and transport infrastructure). Bilateral relations of Azerbaijan with Belarus, Kazakhstan and Russia are an independent vector of the country's foreign policy and trade and investment relations. Thus, developing relations with the EAEU, Azerbaijan not only builds relations with the economies of its neighbors, whom operate in a pairing mode, but in fact is a participant in the Eurasian economic space. The backbone of Azerbaijan's interaction with Russia is the export of raw materials, trade, economic, industrial, transport and other investment projects ranging from state corporations to small businesses (Russia-Azerbaijan: Horizon 2025 (2019)). The Eurasian region is also experiencing a turning point in its development. Thanks to the opening of new transport routes, China is becoming closer to Europe and Russia's influence is declining. The European Bank for Reconstruction and Development (EBRD) has become the main investor in the region - the total amount of its investments in more than 750 projects in the private sector reaches \$ 14 billion (Dilshat Zhussupova 2018). The EU does not claim to be an exclusive partnership, and the new strategy in no way excludes for the countries of the region membership in the Eurasian Economic Union (EAEU). The EBRD seeks to stimulate a transition to an open economy and to develop an entrepreneurial initiative in Eastern Europe and the CIS. Currently, the Central Asian countries are seeking to deepen cooperation with the EU in order to meet new challenges and implementing new capabilities to cyber security. EU countries are also interested in increasing trade, including energy, exported by countries of the Central Asian region. The European direction is traditionally the main for Azerbaijan, Kazakhstan and Russia in the field of foreign trade. Today, the EU countries are the largest importer of products from Azerbaijan, Kazakhstan and Russia. The post-Soviet space is also an equally important area of economic cooperation for Azerbaijan and Kazakhstan.

This is due to many factors, production and technological ties and the similarity of the legal framework and maritime territories (Dodonov Vyacheslav 2017). Moreover, Russia has never lost the status of an important foreign trade partner and the North-South transport corridor in the region, occupying the leading positions of the post-Soviet states. Azerbaijan has access to the oceans along the Caspian Sea-Volga-Volga-Don Canal, and the Don-Sea of Azov. Azerbaijan and Kazakhstan are Russia's closest neighbour. Russia is the EU's biggest neighbour – and one of its most important. Despite this close relationship, Azerbaijan prefers to stick to bilateral agreements. The European Union is extremely interested in making interconnectedness the main principles for developing relations with the countries of the Central Asian region. The new strategy emphasizes that the countries of the region themselves will choose the forms of regional cooperation, and the EU will support these processes. According to UNCTAD, for many developing countries, intra-regional orientation to partners with a similar level of development may become a more viable option than focusing exclusively on the world market. This can facilitate their competition with foreign companies within the region and increase the chances of creating an “equal playing field” (UNCTAD 2007). The countries of the region today urgently need qualified specialists, new technologies, and high-quality training of personnel who successfully compete in the labor market. In this regard, the cooperation strategy should contain specific initiatives to assist SMEs (Small and Medium Businesses) in the region. It should be noted that the European Commission plans such assistance, contributing to the creation of European chambers of commerce in the countries of the region and the know-how necessary for the modernization of modern statistical methods. The GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) Sustainable Economic Development Program, funded by the German Federal Ministry for Economic Cooperation and Development (BMZ), supports the Kyrgyz government in promoting a green economy. Integration into regional and global value chains can only be achieved with high-quality products. Membership of the Eurasian Economic Union (EAEU) and inclusion in the EU's Generalised System of Preference Scheme, GSP+, provide new opportunities for promoting Kyrgyzstan's exports. To take advantage of these opportunities, Kyrgyzstan needs to adapt its legal frameworks and reduce environmental risks. The socially and environmentally sustainable results achieved by the project facilitate the transition to a green economy ( GIZ 2017). Speaking about specific projects, it should be noted that it is necessary to develop renewable energy in the countries of the region in close collaboration with the whole world. The delivery of uranium to the European Union countries from Kazakhstan takes about 21 percent of the total. Kazakhstan wants renewable energy (RE) to reach 50% of its energy mix by 2050. EU plan to develop renewable energy sources in Kazakhstan. European Union is the largest foreign investor of Kazakhstan. Of course, there are many already implemented as well as ongoing projects (Aliyeva Kamila 24.07.2017). Energy efficiency strategies may be applied in any field, be it the development of agriculture, small and medium-sized businesses or civil society. An important moment of interaction in the post-Soviet region remains the issues of entry into the WTO of the countries of the post-Soviet region leading the negotiation processes of membership. Currently, Azerbaijan, Belarus, Uzbekistan and Turkmenistan are not included in the WTO. The EU pursue supportive policies in this.

#### **4. CONCLUSION**

Spatial Policies can play an important role when certain areas within CIS countries lag behind. Spatial Policies involve policy interventions which aim to stimulate the economic development of specific locations within a country by attracting the emergence of investment and innovate projects. The key characteristics of policy are that they: target a specific area of economy; are tailored to the specific context of reform; and aim to overcome coordination failures between countries in region.

Based on the new strategy, the EU will mainly focus on two important aspects: 1) Partnership to ensure sustainability by enhancing the ability of the Central Asian states to overcome internal and external challenges; 2) And increase their ability to reform for prosperity by supporting economic modernization. Today, logistics remains an important barrier in bilateral trade, namely, the costs associated with delivering goods over such long distances. Azerbaijan has large energy resources, special attention should be paid to projects for the development of international logistics infrastructures. The main objective of this study is to examine the international instruments of EU available within the CIS area for realization projects of cross-border transport and logistics infrastructure and to increase the successful implementation of the projects. The EU provides capacity-building support, for instance to the Port of Baku and its free-trade zone. For this reason, the EU provides technical know-how for the transport project of the port of Baku and the associated Free Trade Zone. From this point of view of the EU, it is especially important to note the attractiveness of Azerbaijan and Kazakhstan in the region, including as countries with significant spaces that could be used, for example, for alternative energy and the cultivation of environmentally friendly agricultural products. It is necessary to emphasize the importance of the green economy for the development of the country's regions. In an era of climate change and environmental pollution, it is necessary to find new technological methods of doing business. The biggest environmental challenges facing The Caucasus-Caspian region and the Central Asian region today, relate to water. Efficient private sector is an important precondition for the green economy. Partnerships and networking are basic steps in that direction. The competitive advantages of Azerbaijan and Kazakhstan include their strategically advantageous geographical location. Using this arrangement, potential business structures can have access to regional markets. Therefore, Azerbaijan and Kazakhstan can be considered as convenient industrial and logistics links for organizing the production of intermediate products and their further export to adjacent countries, especially to Russia and China. The new Silk Road has become a reality. The One Belt and One Way Initiative, launched by the PRC in 2013, takes on more specific outlines every year. China's One Belt, One Road (New Silk Road) is a growing influence on other developing economies through trade, investment, and ideas. Since 2013, the volume of Chinese investment in approximately 60 countries and according to various statistics has exceeded \$ 300 billion. Furthermore, considering the fact that this is a mega scale project, with more than 65 countries partnering China, the potential impact that could be caused by this mega project cannot be simply ignored. Results are highly heterogeneous across countries. As it could be seen from above, the impact of the One Belt, One Road initiative is a concern for many countries not because of the great benefits but because of the possible negative impacts. Would be better infrastructure projects were coupled with policy reforms. The Chine's megaproject can improve welfare for participating countries, but they are costly undertakings with potentially asymmetric effects on trade and income of individual countries. Some countries have a negative welfare effect because of the high cost of the infrastructure. Western TNCs, European business circles, in particular German business, have recently shown a growing interest in Kazakhstan, and currently consider it particularly successful for expanding their presence in its market. A significant stage of the New Silk Road passes through Kazakhstan; the country is a key partner in the implementation of the One Belt, One Road initiative. Transport corridors through Azerbaijan and Kazakhstan allow logistics companies to deliver goods from Asia to Europe or vice versa in 10-12 days, which is three times faster than by sea. Further development of transit and logistics are one of the priorities of the government of Azerbaijan and Kazakhstan. Along the New Silk Road, new industries appear, and business needs to take part in transforming the transport corridors into an economic corridors. The current situation leads to the understanding that in the modern world with increasing competition for integration projects, the coordination of regional trade agreements of the New Generation is not going so smoothly.

It should concentrate on practical investment and technological solutions, on creating a coordinated system of innovative technology platforms. Geographical closeness provides important advantages in the era of economic globalization. Regional cooperation between post-Soviet countries can contribute to the implementation of national development plans and compensate for some gaps in the mechanisms of global economic cooperation. The pattern of the contemporary economic relations in the globalized world calls for a project-oriented approach to economic integration rather than just limiting cooperation to some narrow fields. In the midst of trade tensions, increased meddling by one country in the internal politics of other organizations such as the EU are increasingly caught in the middle. States compete with one another rather than cooperate, ignoring the inherently transnational nature of the Coronavirus threat. EU is the world's largest economy, with a relatively advanced scientific base and uniquely system of governance that gives it unusual ability to monitor its economic projects in and a country or region that is poor, weakly governed and with weak infrastructure. The Coronavirus scenario one of major designed to investigate the vital rapidly changing role for government at the intersection of security and emerging technology. Across all the projects we examined, information sharing, and harnessing innovation in the private sector were vital to effective risk reduction. Regional partnerships EU-EAEC-CIS and foresight work can be powerful tools to imagine a possible future.

#### LITERATURE:

1. Aliyeva Kamila (24.07.2017) EU invests in Kazakhstan's green energy. AzerNews. Retrieved 18.03.20 from <https://www.azernews.az/region/116641.html>
2. Chapter 5. Economic diversification: lessons from practice (2019). Retrieved 28.02.20 from [https://www.wto.org/english/res\\_e/booksp\\_e/aid4trade19\\_chap5\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/aid4trade19_chap5_e.pdf)
3. Dilshat Zhussupova (2018) EBRD, EU and China commit to investment cooperation and connectivity in Central Asia <https://astanatimes.com/2018/11/ebd-eu-and-china-commit-to-investment-cooperation-and-connectivity-in-central-asia>
4. Dodonov Vyacheslav (2017) Economic cooperation of Kazakhstan with the EU and the EAEU and socio-economic effects. Retrieved 20.02.20 from <https://library.fes.de/pdf-files/bueros/kasachstan/13623.pdf>. Almaty: Friedrich Ebert Foundation
5. Evdokimov Alexander Ivanovich, Guliyev Mushfig Yelmar (2019) International trade indeterminacy: tendencies, problems and positions, Problems of modern economics, Eurasian International Scientific-analytical edition #2 (70) p.59-66, St.Petersburg
6. Kazakhstan and the EU work to strengthen political and expand trade and economic cooperation (2019). Retrieved 15.02.20 from <http://www.mfa.kz/ru/content-view/kazakhstan-men-europalyk-odak-saasi-zne-sauda-ekonomikalyk-yntymaktastykty-ksejtu-bagytynda-kyzmet-atkaruda>
7. Landa Kamil Gazimagomedovich (2010) Caspian model of regional cooperation, dissertation abstract for a Doctor of Political Science. Retrieved 17.03.2020 from <http://www.dissers.ru/avtoreferati-doktorskih-dissertatsii/politika/43>, Moscow
8. Munich Security Report 2020. Retrieved 24.02.20 from [https://securityconference.org/assets/user\\_upload/MunichSecurityReport2020.pdf](https://securityconference.org/assets/user_upload/MunichSecurityReport2020.pdf)
9. Promoting Sustainable Economic Development (2017). Retrieved 28.02.20 from <https://www.giz.de/en/worldwide/15310.html>
10. Regional cooperation among developing countries can help accelerate industrialization and structural change (2007). Retrieved 18.03.20 from [https://unctad.org/sections/press/docs/pr07026\\_ru.pdf](https://unctad.org/sections/press/docs/pr07026_ru.pdf)
11. Russia-Azerbaijan: Horizon 2025 (2019). Retrieved 16.02.20 from <http://press-unity.com/analitika-stati/11375.html>

12. The European Union and Central Asia: New opportunities for a stronger partnership (2019). Retrieved 15.02.20 from [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_2494](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_2494)



## REGULATION PROBLEMS OF REGIONAL ECONOMIC DEVELOPMENT

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### **ABSTRACT**

*The investigation of financial basis of regional development, utilization of the approaches in the practice are the application for the estimation of real Level of regions' financial and tax potential. The theories in the sphere of regional socio-economic policy of the classics of economic sciences and modern economic scientists, scientific-research works in the sphere of regional economy organize the methodology and practical basis of the research. The efficient approach is suggested for the estimation of regional financial basis, tax potential of the regions of Azerbaijan is determined. Difficulties in obtaining of statistical materials. Due to the incompleteness of state program on socio-economic development the full results couldn't be gained. Utilization of analysis' methods of regional socio-economic development in evaluation of tax potential parameters, evaluation of the role of financial base for applying of the complex program on the regional socio-economic development. Utilization of scientific conclusions and clauses arising from the research in the formation of regional tax system impacting balanced development of the national economy.*

**Keywords:** *Region, district, Socio-economic policy, State regulation, Regional policy, Task potential*

### **1. INTRODUCTION**

The socio-economic development policy of the regions determines the priorities for the future development of the Azerbaijan economy in the modern condition. This policy determines the main directions of socio-economic development of separate economic regions, and then ensures the selection of possible measures for the implementation of the stages, timelines and most importantly, the implementation of these directions. The selection of strategic goals and the determination of tactical measures for their implementation, especially in the estimation of the real situation, or in identifying ways for defining and eliminating the lack of infrastructure, organizational and resource gaps are of great importance.

### **2. THEORETICAL BASES OF REGIONAL POLICY**

The State Program for the Socio-Economic Development of the regions of the Republic of Azerbaijan is very important stage in the implementation of the strategy of "Transformation into an economically powerful state of Azerbaijan and ensuring comprehensive economic development". The main purpose of the state programs and strategic roadmap is to develop separate sectors of the economy, effective utilization of the existing potential in the regions of the Republic of Azerbaijan, further increase of the activity of production enterprises, stimulation of the exportable production, improvement of the living standard of the population by the development of local entrepreneurship and employment level, especially increasing the useful labor employment of youth and achieving the dynamic development of the country's economy. For the successful implementation of regional socio-economic programs, their sectorial-territorial structure, socio-economic situation and generally the essence of the notion of region should be clarified. World experience shows that while investigating the methodological aspects of the market, it is important to clarify the notion of "region".

In the economic literatures, the notion of region is used in two meanings, often the concept of “region” and “region” is identified. Thus some of the authors, while saying “region”, understand the area of the national economy complex, which is distinguished by its natural resources and geographical features. Other authors present the word of the region as an administrative unit of the country, for example: as a zone, province, city. Foreign scientists on regional study specifically define the concept of the region. Confirming the divergence in the definition of “regional” and “district” the American professors P. James and John Marthin write in their research work “All Possible Worlds”. Usually, the word “region” is understood to mean a single area of land that has no clear boundaries and is distinct. But geographers use the words “region” and “district” to refer to areas that have different areas and are characterized by any identifiable basis. "We also find different meanings of the term "region" in the works of American scientists. The professor of Harvard University Gray wrote: “We can define a state. It has a border and a name. Of course, this is neither a political nor an administrative unit. But we can say that the district is the area having quite different character from the others”. The following responses were received from various scientific centers dealing with regional and economic zoning issues of the survey of US Congressional National Resources Committee. Professor of Chicago University, W. Jones of the: “District- is the area where there is one or more existing identities. Professor of North Carolina University, Wufer: “The region is an area in which a combination of harmony of natural and economic factors have created the same economic and social structure” Professor of Minnesota University, R. Harschoru: “The region -is an area that has at least some identities in general (natural and cultural) landscape”. Based on the obtained results, as well as from my own conclusions, we explained the regionalization of socio-economic areas as: “One or more alike areas should be understood under the word of the region”. It is should be pointed out that the interest in regional studies, the regionalization of socio-economic areas is characteristic not only for the United States, but also for Canada, France, Great Britain, Germany and China. Regional ideas have reanimated, especially in Europe. On December 4, 1996, 300 European regions representing different territories and political administrations, representing the interests of 400 million citizens, adopted the “Declaration on Regionalization”. The Declaration states that “the concept of a region is a politically formed system of perception that it prefers. The region itself chooses its own leadership and defines the distinctive conditions of its government”. The great importance has been given to the cosept of region in modern economic, geographical and town building literature. The most commonly used criteria for the formation of regional consept are as follows:

- Geography (location, area of the territory, population number);
- Production- activity (feature of existing activity types);
- Urban planning (productional, residential and building characteristics of service facilities);
- Social (communication norms, behavior).

Region -is a single system with its own structure, functions, relationships with the environment, history, culture and living conditions of the population. The population and labor collectives play a key role in the activity of the region [Aghion and Bolton, 1997]. Effective management of a region or a city is impossible without the social factor. Thus, based on the above mentioned, the definition of region can be described as following. A region- is an area characterized by complexity, completeness, qualifications, managerial, ie. the presence of a political-administrative body. There are several methods of dividing the regions according to the level of socio-economic development [Airey et al., 2015]. Due to the differences in the social environment and economic situation, the regions can be divided into three groups:

- developed regions where the living standard of the population and production is quite high;
- regions with medium economic potential;
- struggling regions with poor socio-economic level.

The complexity of the regional economy means combined, proportionally balanced development of the regional productive forces [Borts, 1960]. As an indicator of the complexity of the regional economy, the following can be stated:

- percent of regional products used in regional production;
- specific weight of intersectorial products;
- utilization degree of regional resources.

According to the opinion of experts on regional studies, the following are the key indicators for determining regional specialization:

- index of degree on regional specialization (comparison of the specific weight of the region's production in each field of the country, the specific weight of the region by industry and agriculture);
- specialization efficiency index (ratio of production volume per region to the same indicator in the country);
- general index of specialization (generalized form of special indicators).

Regional policy of the state is the management of the economic, social and political development of the country in the regional aspect, ie. the sphere of activities related to relations between the government and the regions, and between the regions [Alexiadis, 2013]. Regional policy forms an integral part of the country's national socio-economic development strategy. Thus, the priorities of regional policy have shifted from the assimilation of new regions to the stabilization and elimination of the depressive state of the existing regions and the revival of small towns and villages by limiting growth in the big cities.

### **3. MANAGEMENT OF REGIONAL ECONOMY**

The regional economic systems cannot be developed by acting solely on the basis of market self-regulation in condition of regional policy of the state in Azerbaijan. Non-interference policy of the regional development inevitably leads to aggravation of social, economic and environmental problems, and therefore, management of regional development is one of the essential functions of the state in many countries of the world. Today, the government of Azerbaijan is also faced with the necessity of searching new and more effective mechanisms for managing regional development. However, it is impossible to develop scientifically grounded recommendations for the management of regional development without taking into consideration the specifics of the country and separate regions, and to ensure effective regional development management in condition of market economy. To carry out the regional development management strategies, technologies and mechanisms has become a key factor in enhancing the regional economy's competitiveness in modern period. In order to ensure the effectiveness of regional development management and achieving economic growth, a whole set of opportunities must be analyzed and used to determine the dynamics of socio-economic development in the region. [Boschma and Frenken, 2011 ] Methodological approaches must be developed to facilitate the effective management of regional development. As a result of recently implemented reforms, the rights, powers and responsibilities of central, regional and local governments have been significantly changed and increased, necessitating the use of new approaches to the management of regional systems. In modern conditions, the practice of centralized management of regional development is no longer justified and it is necessary to promote the activities of democratic institutions of government and governance - municipalities, private sector, public organizations, funds and other self-government structures, which have the potential to influence regional development [Capello, 2011]. One of the actual issues of scientific research is the study of the ways in which coordination and formation of regional policies and their involvement in the process of managing regional development are

being developed and applied. The purpose of regional development theories is to develop complex mechanisms for solving regional development problems, especially methodological assistance in addressing development issues of individual regions, creation of efficient production complexes, rational placement of production and population, efficient use of regional resources [Dawkins, 2003]. Regional development management forms are related to the different activities of the state and can be divided into three groups:

- general transfers and subsidies. The purpose of these transfers is the balancing of the objective difference between the tax bases of the regions in some extent. This type of policy forms part of the system of inter-budgetary relations in the country;
- field policy (education, health, social services, infrastructure, etc.). Programs in this area cover the country as a whole. Such a policy, in addition to investment costs (for the creation of infrastructure facilities), often involves financing of current costs;
- regional economic policy. Such policies are limited to small and specially designated areas and are defined based on criteria indicating that they are in crisis. The main purpose of such a policy is to promote the development of the economic base of the backward regions.

One of the key forms of regional development management is the formation of a regional economic space. Regional economic space is the area that combines residential areas, industrial facilities, economic areas, numerous facilities, such as transport and engineering networks and links between them. In the case of modern regional researches, the priority is to study the issues of regional policy. Priority tasks of regional policy are defined as follows:

- assisting in the development and deepening of economic reforms, the formation and development of commodity, labor and capital markets, institutional and market infrastructure in the region and in the country;
- Reduction of deep differences in the socio-economic development of the regions, creation of conditions for strengthening the economic base, improvement of the welfare of the population, rationalization of the settlement system;
- achieving the right economic and social complexity and rationality of the economic structure of the regions;
- development of inter-regional infrastructural systems (transport, communications, informatics, etc.);
- provision of state assistance to the regions of ecological disaster, regions where unemployment, demography and migration problems are acute;
- expanding access of the regions to foreign markets, formation of export activity in a new direction;
- Expanding the production of high-quality and competitive products, thus increasing the demand for the region's population.

In order to achieve rapid and sustainable regional development in the modern period, to solve regional development problems and to ensure the effectiveness of regional development management, each state is required to develop a regional policy that has become a permanent factor in the development of the country and its regions [Fujita et al., 2014]. This policy should allow the use of favorable factors to achieve the strategic goals and objectives of both the country and the region, and to limit the negative regional factors impeding this development.

#### **4. THE CURRENT STATE OF REGIONAL ECONOMIC DEVELOPMENT**

An important and general condition for successful regional development management is the development and use of regional policies meeting the requirements of local conditions and international practice. Extensive experience in the development and implementation of regional policies and the management of regional development has been accumulated in democratic

states and significant progress has been achieved. The economic policy, recently implemented in Azerbaijan has contributed to the comprehensive development of the country and regions as a whole, increasing the share of the regions in macroeconomic indicators, and ultimately caused to poverty reduction and improvement of population living standards. Over the next two years, the government of Azerbaijan has significantly improved its economic growth forecasts. If the government expected GDP growth at 1.5% in 2018, now the forecast has been increased up to 2%. The forecast for 2019 was revised from 1.4% to 3.1%.

*Table 1: The forecasts of the Government of Azerbaijan for GDP growth in 2018-2021*

<b>Years</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Current forecast				
Nominal GDP (mln. manats)	74646,9	75389,2	81245	84973,1
Real GDP growth rate (%)	2	3,1	3,5	2,4
Previous forecast				
Nominal GDP (mln. manats)	69396	72727	77403	81053
Real GDP growth rate (%)	1,5	1,4	3,7	2,9

It is expected that the positive dynamics of economic growth will be maintained in 2018 and in the medium term. Thus, along with local forecasts, a number of respected international financial institutions, including the World Bank and the International Monetary Fund, are forecasting growth in the Azerbaijani economy. It should be noted that the economy of Azerbaijan has been lately showing steady growth. It has been listed by international rating agencies such as Fitch ratings, Standard & Poor's, and Moody's. Specifically, "S&P Azerbaijan forecasts the average growth of GDP in 3% level by 2022. At the same time, Moody's has increased its forecast for the country's economy. "Fitch" notes that the country will maintain broad political and social stability.

*Table 2: Key Indicators of the Socio-Economic Development of the Republic of Azerbaijan (2006-2018)*

<b>Years</b>	<b>Gross Domestic Product (GDP), mln. manat</b>	<b>Non-oil GDP, million manat</b>	<b>Fixed capital investment, mln. manat</b>	<b>Population nominal cash income, mln. manat</b>	<b>Nominal average monthly salary, manat</b>
<b>2006</b>	18746,2	7079,1	6234.5	10198.5	149.0
<b>2007</b>	28360.5	9533,9	7471.2	14558.2	215.8
<b>2008</b>	40137.2	14750,7	9944.2	20058.2	274.4
<b>2009</b>	35601.5	16732.7	7724.9	22601.1	298.0
<b>2010</b>	41574.7	18442.7	9715.2	25605.6	325
<b>2011</b>	50069.0	24164.7	12776.4	30633.5	356.6
<b>2012</b>	53 995.0	28 474.9	15 338.5	34 723.9	391.4
<b>2013</b>	57 708.2	32 637.9	17 872.1	37 555.5	419.0
<b>2014</b>	58 977,8	35 968,6	17 615,8	39 360,7	442,1
<b>2015</b>	54 352,1	37 670,0	15 957,0	41 738,6	462,0
<b>2016</b>	60425,2	39403,1	16772,8	45395,1	494,3
<b>2017</b>	70337,8	40328,0	17430,3	49187,9	528,5
<b>2018</b>	79797,3	41810,5	17244,9	53688,6	544,6

*Source: Compiled on the data of the Statistical Committee of the Republic of Azerbaijan*

*Table 3: Production output on the main sectors of economy in the regions of the country, in thousand manats (2014-2018)*

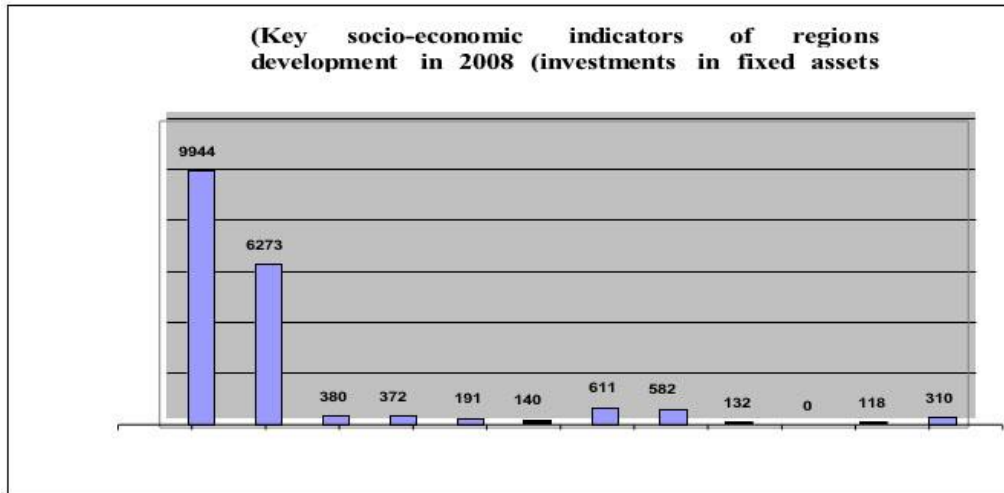
Economic regions	2014	2015	2016	2017	2018
On the Republic	66892800.0	61430700.0	69620100.0		
Baku city	45022566.4	40316074.8	47329386.9	55790659,3	62949794,8
Absheron Economic region	1533094.1	1556457.1	1909314.6	2300401,9	3062549,6
Ganja-Gazakh economic region	2690163.3	2744284.0	2986823.9	3699753,8	3724210,3
Sheki-Zagatala economic region	1025421.7	1131377.3	1222386.7	1541089,5	1639436,7
Lankaran economic region	1343654.2	1456310.7	1635210.0	1872584,0	1887207,7
Guba-Khachmaz economic region	1246662.8	1214383.5	1345348.5	1611383,7	1723679,5
Aran economic region	4848126.8	4890535.9	5063702.1	6459199,0	6926286,5
Upper Karabakh economic region	416402.2	377133.7	475522.5	598990.2	541686,7
Kalbajar-Lachin economic region	69343.4	70122.6	66573.7	73761,1	78134,5
Mountainous-Shirvan economic region	549889.9	589198.5	652342.0	798775,0	883300,6
Nakhchivan Economic region	2851359.5	3024635.9	3293591.8	3438966,7	3527384,5

*Source: compiled on the data of the Statistical Committee of the Republic of Azerbaijan*

As can be seen from the table, the highest production output indicators falls to the share of Aran economic region. Ganja-Gazakh economic region is in the second place. Successful results have been achieved in the development of infrastructure in the regions, including electricity, gas and water supply, transport and communication and social infrastructure. Significant changes in the development of the regions have also been noticed in the transport and communications infrastructure, and large-scale measures implemented in these sectors have had an impact on the overall economic and social dynamics. During these years, social infrastructure facilities in the regions have expanded extensively by the scale and geography of the regions, and hundreds of educational, health, cultural, tourism, sports and health facilities have been built and commissioned. During these years, the mechanism of state financial support for entrepreneurship in the country has been improved, state-entrepreneurial relations have been developed, and significant steps towards improving the state regulation of entrepreneurial activity have been increased. Significant differences between the regions still remain in many areas of Azerbaijan and the balanced development between the regions has not yet been fully achieved. There are still unresolved problems in the socio-economic life of the country, especially in the areas of regional development and population employment. The differences between regions related to social and economic conditions are of quantitative and qualitative character. If the quantitative asymmetry should be easily observed even in the official statistical data, its qualitative side requires more accurate expert evaluation. Inter-regional differences are more clearly evident in the diagrams of socio-economic indicators of regions. For example:

*Figure following on the next page*

Figure 1: Fixed capital investments on regions



The state is trying to reduce interregional differences through various ways, including the allocation of budgetary resources. The solution of the elimination of inter-regional differences is largely depend on the development of the regional economy. It should be noted that the economy of the regions of Azerbaijan is developing in difficult conditions. Structural changes in regional economies are constantly happen under the influence of market factors and are adapted to modern conditions. The current situation, observed in the regional development requires effective utilisation of the existing potential by increasing the socio-economic level of the regions and minimizing the differences between them. The level of GDP indicator for per capita varies considerably between capital and regions. In 2014, the GDP indicator for per capita in Baku was 20,374.8 manat, and the average for the remaining regions of the country was 3,000 manat. In 2015, GDP per capita was 27804.1 manat in Baku and 1,800 manat in other regions of the country. According to official statistical data, 2012 was considered a base year, but for the last 3 years there has been no significant decrease in the differences between the economic regions in terms of per capita production output. This difference is even more pronounced in the administrative regions of the country. The table presented in the appendix details these differences. Production per capita by economic regions of the country, at current prices, in manats.

*Table 4: Output production per capita by economic regions of the country, at current prices, manats*

	2010	2014	2015	2016	2017	2018
Baku city	16981,6	20374,8	18218,7	21224,4	24747,9	27804,1
Absheron economic region	1331,6	2797,7	2845,6	3428,8	4067,9	5271,8
Ganja-Gazakh economic region	1547,9	2179,0	2211,1	2386,3	2913,2	2874,8
Sheki-Zagatala economic region	1373,1	1718,9	1876,3	2019,5	2508,5	2557,3
Lankaran economic region	998,8	1515,1	1619,5	1805,1	2029,3	2000,1
Guba-Khachmaz economic region	2229,2	2388,1	2294,9	2525,6	2976,0	3130,3
Aran economic region	1631,5	2520,8	2509,6	2581,1	3236,7	3392,6
Mountainous Shirvan economic region	1505,6	1821,9	1925,0	2117,8	2547,2	2742,2
Nakhchivan AR. economic region	3607,6	6517,4	6842,6	7371,8	7625,4	7761,7

The lowest level of gross output per capita in 2014 was recorded in Lankaran economic region - 998.8 manat. At that time, the highest production per capita was recorded in Nakhchivan Autonomous Republic - 3607.6 manat. In 2018, the lowest and the highest rates were still recorded in these two economic regions. Although the difference has been slightly reduced over the past period, the amount of gross output per capita in Nakhchivan economic region is 4 times higher than the same for Lankaran economic region. One of the most important tools for achieving the objectives of the regional policy of the state is the development and implementation of targeted programs for regional development. One of the biggest difficulties in implementing regional policy is the financial security problem. The issue of regional budgets can also be considered here. This could make regional authorities more interested in expanding and developing the economy and entrepreneurship activity in the area.

## 5. CONCLUSION

One of the most important issues is the formation of a strategic regional social partnership system which should be solved within the framework of regional policy in Azerbaijan. All social entities and institutions located in its territory are interested in the strategic development of the region. The concept of common regional development must take into account at least five groups of interests: state, region, municipality, entrepreneur and citizen. Today, along with government, new entities of regional development have emerged, including local self-government bodies and business structures that have the right to formulate their own policies. One of the main tasks here is the coordination of the interests of these entities. Development of the regions of the Republic of Azerbaijan is an important component of the strategy of socio-economic development in the country. The adopted and successfully implemented tasks envisaged in the state development programs, as well as additional orders on socio-economic development of the regions, contributes to sustainable development of the non-oil sector in the country, improving the quality of public services and social infrastructure in the regions and entrepreneurship environment, increasing of capital investment, the creation of new businesses and jobs and consequently to the employment and poverty reduction. During 10 years of implementation of the State Program the Gross Domestic Product has been increased 3.2 times, including the non-oil sector 2.6 times, industry 2.7 times, agriculture 1.5 times, investments 6.5 times, population incomes 6.5 times and the average monthly salary by 5.5 times. In recent years, dozens of different social development programs have been adopted in Azerbaijan, including regional and national programs aimed at the development of education, addressing to the solution of social problems of refugees and IDPs, and various institutional programs aimed at reducing poverty.

## LITERATURE:

1. Central Bank of the Republic of Azerbaijan. Annual report, Baku: 2015, 204 p.
2. Laws and other legal normative acts adopted in the Republic of Azerbaijan for 2002-2013.
3. The State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan (2004-2008) was approved by the Decree of the President of the Republic of Azerbaijan dated February 11, 2004.
4. The "State Program of socio-economic development of the regions of the Republic of Azerbaijan for 2009-2013" was approved by the Decree of the President of the Republic of Azerbaijan dated April 14, 2009.
5. "State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan (2014-2018)", Azerbaijan, February 27, 2014
6. Decree of the President of the Republic of Azerbaijan dated December 6, 2016
7. Strategic roadmap on the perspectives of the national economy of the Republic of Azerbaijan.



8. "Azerbaijan 2020: "Look into the Future" development conception. Approved by the Decree of December 29, 2012
9. Regions of Azerbaijan, 2013. State Statistics Committee of the Republic of Azerbaijan. Baku, Sada, 2013. 654 pp.
10. "Socio-economic development of regions has become a priority of state policy." "People's newspaper" Newspaper March 10, 2012
11. Nuriyev A. "Fundamentals of Regional management" Baku.Elm.2007.427s.
12. Ibrahimov I."Entrepreneurial development in the regions" Baku. Sada. 2007. 285pp.
13. Gurbanova T.H. "Regulation of Regional Policy and Improvement directions of the Efficiency of the Agrarian Sector" Azerbaijan Tax News 7/2011. pp 85.100
14. Aghion, P, Bolton, P (1997) A theory of trickle-down growth and development. *The Review of Economic Studies* 64(2): 151–172.
15. Airey, D, Tribe, J, Benckendorff, P, et al. (2015) The managerial gaze: the long tail of tourism education and research. *Journal of Travel Research* 54(2): 139–151.
16. Borts, GH (1960) The equalization of returns and regional economic growth. *American Economic Review* 50(3): 319–347.
17. Alexiadis, S (2013) Neoclassical and post-Keynesian theories of regional growth and convergence/divergence. In: Alexiadis, S (ed) *Convergence Clubs and Spatial Externalities: Models and Applications of Regional Convergence in Europe*. Berlin: Springer, pp. 9–38, DOI: 10.1007/978-3-642-31626-5\_2. Available at: [https://link.springer.com/content/pdf/10.1007%2F978-3-642-31626-5\\_2.pdf](https://link.springer.com/content/pdf/10.1007%2F978-3-642-31626-5_2.pdf).
18. Boschma, R, Frenken, K (2011) The emerging empirics of evolutionary economic geography. *Journal of Economic Geography* 11(2): 295–307.
19. Capello, R (2011) Location, regional growth and local development theories. *AESTIMUM* 58: 1–25
20. Dawkins, CJ (2003) Regional development theory: conceptual foundations, classic works, and recent developments. *Journal of Planning Literature* 18(2): 131–172.
21. Fujita, M, Krugman, P, Venables, AJ, et al. (2014) *The Spatial Economy: Cities, Regions and International Trade*. Cambridge: MIT Press. Available at: <http://ebookcentral.proquest.com/lib/vu/detail.action?docID=3338845>.
22. Islam, N (2003) What have we learnt from the convergence debate? *Journal of Economic Surveys* 17(3): 309–362.
23. Lo, FC, Salih, K (2013) *Growth Pole Strategy and Regional Development Policy: Asian Experience and Alternative Approaches*. Amsterdam: Elsevier.

## THE MODERN CONDITION OF THE IMPROVEMENT OF MACROECONOMIC SUSTAINABILITY IN AZERBAIJAN

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### **ABSTRACT**

*The main goal of the market reforms in Azerbaijan consists of the transition to a new national economy model that will enable the economic growth trajectory. The choice of such a model is implemented within the historically established economic structures and existing reserve potential frame and is usually located between domestic and foreign market trends. In spite of significant reserve potential of the national economy and sufficient domestic market, provision of macroeconomic stability and sustainable development in Azerbaijan is of special importance. From this point of view, the modern condition of macroeconomic stability in Azerbaijan have been carried out in the article. The positive trends in the economic sphere of the Republic of Azerbaijan, macroeconomic stability, business activity, provision of sustainable economic growth, specific weight of private sector in GDP, effective realization of non-oil reserves potential, investment climate and key features of socio-economic development have been investigated in the article. GDP and per capita GDP in manats, dollars and euros, including GDP by sectors of the economy, retail trade turnover, investments in the retail trade of food and nonfood products, investments in fixed capital by sectors of the economy, oil and capital investments in the non-oil sectors, fixed assets by sectors of the economy, gross agricultural output, total industrial output, industrial output by region, price indices and many other macroeconomic indicators have been analysed in the article. Moreover, in addition to the internal factors in maintaining the high rate of growth of the national economy of Azerbaijan, the issues of revival of the world economy compared to previous years, foreign economic conditions for sustainable development of the country's economy, especially oil prices, and further decline in 2014-2015 have been confirmed in details in the article. The exceptional role of the budget-tax and monetary systems in sustainable development and diversification of the economy, improving the welfare of the population and reducing poverty have been generally substantiated.*

**Keywords:** *GDP, Macroeconomic stability, Sustainable development, Investment, Price indices, Monetary and fiscal policy of the state*

### **1. INTRODUCTION**

After the collapse of the USSR, the problem of ensuring macroeconomic stability in new independent states has become a major issue that has to be solved. Such difficult, painful processes as the establishment of an open economy, integration into the global economy, and the formation of a new economic system in these countries deepen the impact of most of the problems in the economic sphere (in the direction of hidden economy, import-export, banking operations, etc.). As a result, illegal misappropriation, serious differences in the distribution of income among the population, and a significant increase in the number of foreign economic entities make it necessary to ensure macroeconomic stability. On the other hand, the success of fundamental reforms carried out in the market economy is largely determined by the level of economic independence and macroeconomic stability of the country in the course of radical system changes and the ability to compete in the global market. Therefore, all the socio-economic changes that are being implemented should be aimed at realizing national economic interests and benefits, consequently, ensuring macroeconomic stability.

The most important criterion for maintaining socio-economic development is the establishment of a system for ensuring macroeconomic stability in the country and its continuous improvement in terms of existing realities. The formation of a macroeconomic sustainability system is considered to be one of the most important functions of the state. The problem of ensuring macroeconomic stability has never existed spontaneously, and has emerged from the task of economic growth at any stage of society's development. The specific content of this problem varies depending on the current domestic and foreign economic conditions. The peculiarities of the current socio-economic situation in Azerbaijan dictate the specific content of the problem of ensuring macroeconomic stability. It is particularly important for Azerbaijan to maintain macroeconomic stability in the context of domestic and foreign economic liberalism, including the importance of balancing the socio-economic development of different nations and peoples, including the development of the former Soviet Union and the practice of self-disintegration. In addition, economic, legal and organizational mechanisms of self-defense are also required. The lesson of the collapse of the USSR is that it is not sufficient to have a strong economic potential for macroeconomic stability. In addition, it is also necessary to have a highly developed economy of consumer goods and services, a well-balanced alternative resource potential with a strong social basis for internal socio-political stability and reform, a common economic potential. From the above mentioned point of view, one of the most important prerequisites meeting the requirements of the national economy is to develop a conceptual framework for maintaining the macroeconomic stability of our country. For any country, this concept is considered to be estimated one of the most important challenges of the present century, in terms of existing realities, with specific historical significance at different stages of economic development. According to the world experience, even the political stability is ensured within a sovereign state, the provision of the macroeconomic stability for the economic development condition is remained as matter of problem. Thus, no foreign state, international organization, foreign investor does not contribute to another country without interest or benefit, and interests are behind it. In addition, any foreign aid should assess the macroeconomics from a sustainability perspective. On these grounds, any foreign aid should be assessed from the macroeconomic sustainability point of view.

## **2. MODERN CONDITION OF MACROECONOMIC INDICATORS IN AZERBAIJAN**

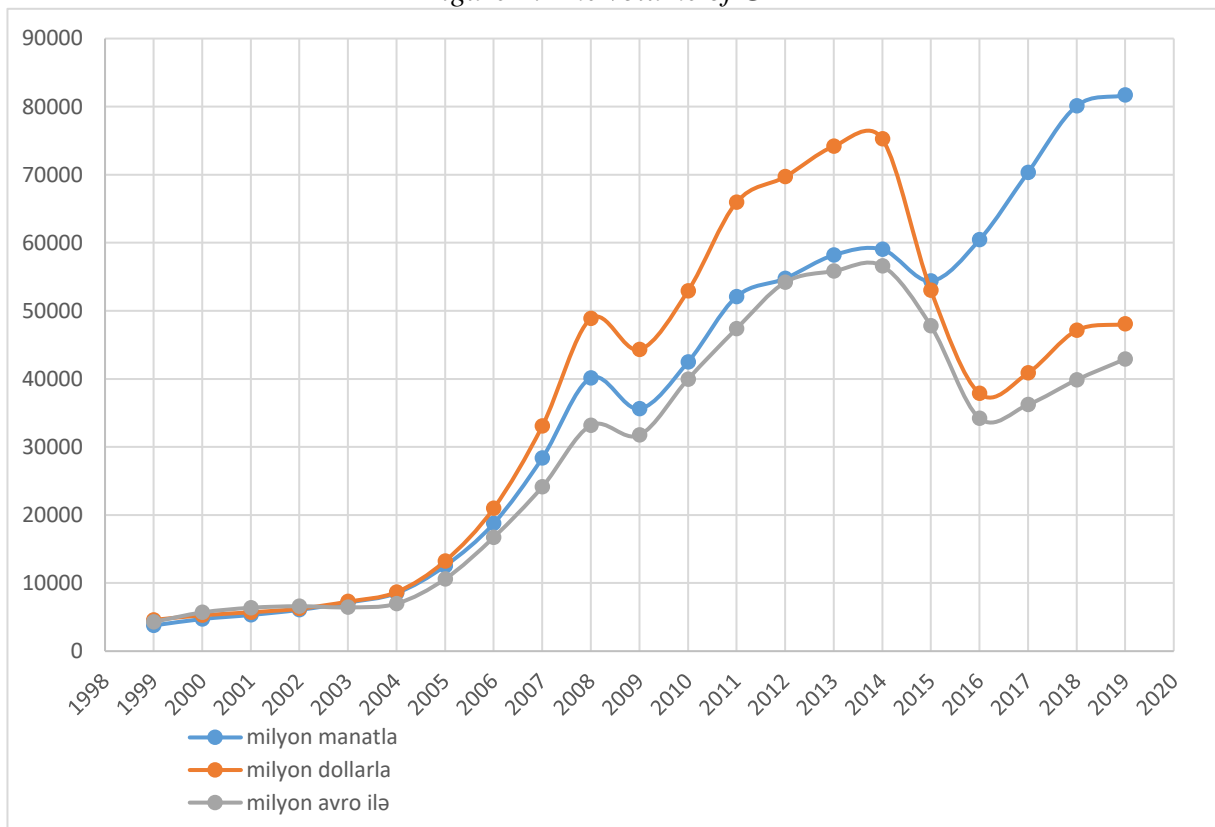
In order to reveal and evaluate the features of establishing a macroeconomic sustainability system in modern conditions, the level of macroeconomic sustainability should be studied from the moment when Azerbaijan first regained its national sovereignty. The factors affecting this level should be identified and evaluated, and in particular, the indicators of socio-economic development of the country should be compared with internationally accepted threshold values. In ensuring macroeconomic stability, the main macroeconomic indicators have been recommended as follows (Shakaraliyev and Shakaraliyeva 2006):

- indicators characterizing the sustainable growth of the country's economy;
- indicators characterizing the volume of investments in fixed assets through all funding sources;
- indicators of financial - banking system;
- indicators characterizing the social sphere;
- indicators remarking the effectiveness of foreign trade structure of the country.

The investigations show that in recent years the positive trends in the economy of Azerbaijan have significantly increased and the rate of economic growth has reached its peak. As a result, macroeconomic stability has been considerably strengthened and high socio-economic growth has been achieved. The implementation of structural reforms in the country's economy, the successful realization of privatization and land - agrarian reforms, and the development of the

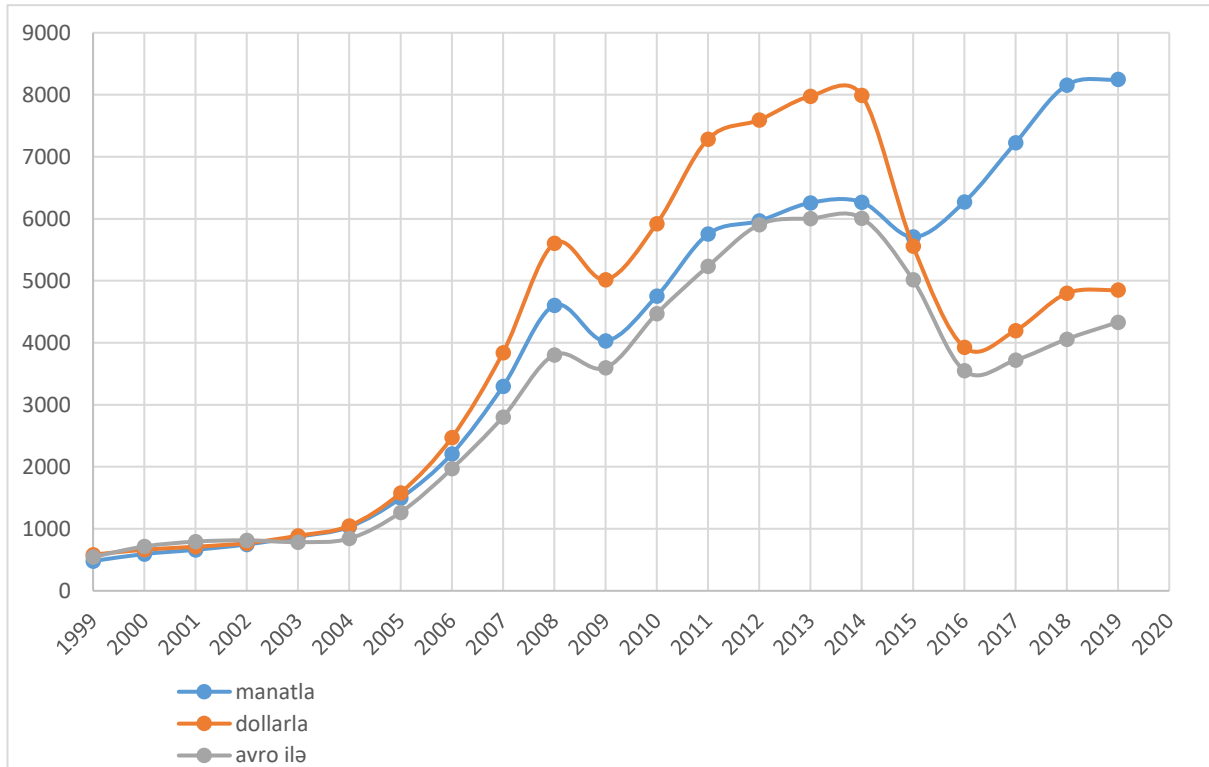
non-oil sector for balanced economic growth have resulted in considerable strengthening of the country's economic independence. Entrepreneurial activity has been significantly revived in the country as an important domestic factor in ensuring sustainable economic growth, and the state's comprehensive support for entrepreneurship has been strengthened slightly (Afontsev, 2002). As a result of all the above mentioned, the share of the private sector, which is the main driver of market relations, has increased significantly and amounted to 81.0%. The fertile ground has been created for effective realization of reserve potential of non-oil sector and investment climate improved slightly in this area. The increase of domestic demand has also played an important role in business activity of the Republic, including the production output expansion. At the same time, it is important to note that the increase in domestic demand on all the elements contributed to the revitalization of economic activity in all sectors of the economy. In addition to the internal factors in maintaining the high growth rate of the national economy, foreign economic conditions, especially the world oil prices are important for the revival of the world economy and sustainable development of the country in comparison with the previous years (Abbasov, 2002).

Figure 1: The volume of GDP

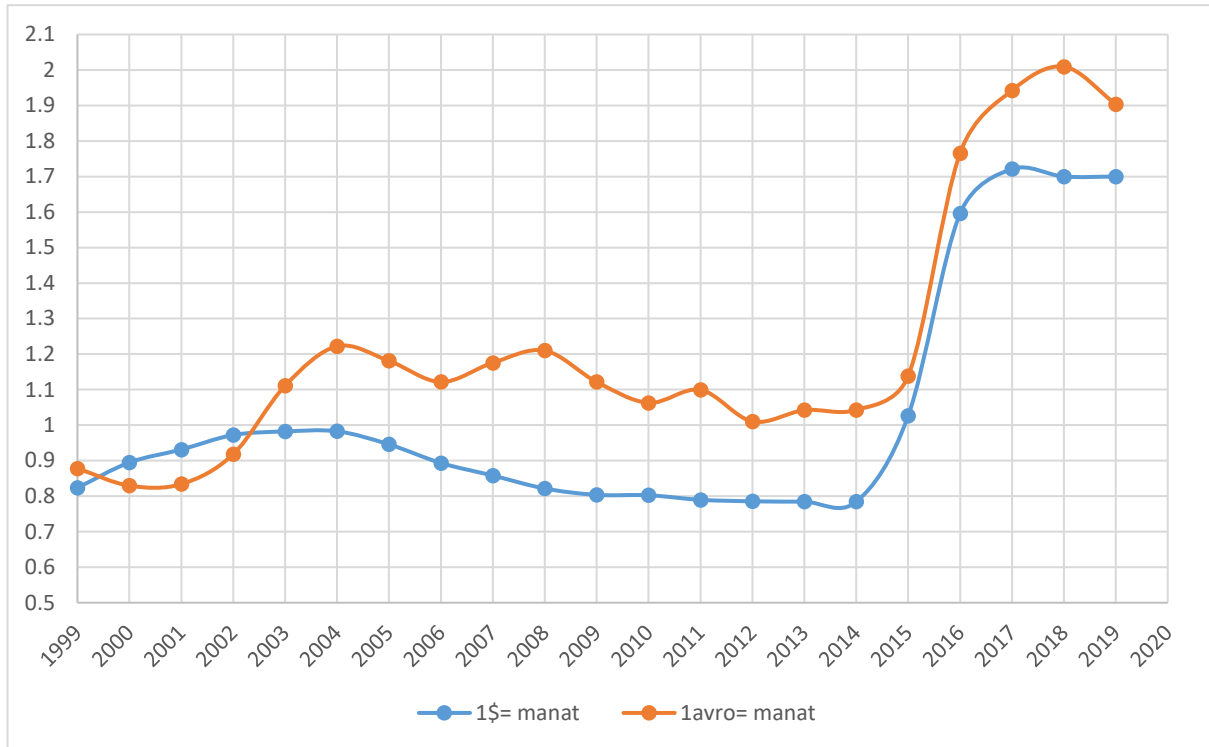


As a result of the appropriate and balanced macroeconomics, i.e. balancing and stimulating policy of aggregate demand with aggregate supply in Azerbaijan, the volume of GDP in manats was 38.27 times in 2019 in comparison with 1995 and 17.31 compared to 2000. Compared to 2005, it increased 6.52 times, 1.92 times compared to 2010, and 1.50 times compared to 2015. GDP volume in dollars increased by 19.89 times in 2019 in comparison with 1995, by 9.11 times compared to 2000, in comparison with 2005 it increased 3.62 times, in comparison with 2010 decreased by 10%, and in comparison with 2015 decreased by 10%. GDP in euros increased by 7.54 times in 2019 compared to 2000, by 4.04 times as compared to 2005, by 7% compared to 2010, and by 11% compared to 2015.

Figure 2: GDP per capita



GDP per capita increased in manats in 2019 by 29.23 times compared to 1995, 13.90 times compared to 2000, 5.51 times as compared to 2005, 1.73 times as compared to 2010, and 1.45 times as compared to 2015. GDP per capita in US dollar increased by 15.63 times in 2019 as compared to 1995, 7.31 times as compared to 2000, 3.07 times compared to 2005, 9% compared to 2010 and decreased by 12% as compared to 2015. GDP per capita in Euro in 2019 increased 6.05 times compared to 2000, 6.05 times as compared to 2005, 3% in comparison with 2010 and 13% lower than in 2015. It must be pointed out that produced GDP volume was 81.6 billion US dollars in 2019, which is more than 1.6 billion manat compared to the previous year. But the volume of GDP per capita was \$ 4851.2 in 2019 in comparison with 2014, the amount decreased by -3139.6 USD, and by - 710.3 US dollars in 2015. According to the calculations, differences in macroeconomic stability of the actual indicators of sustainable economic growth of the country in 1995-2018 with the corresponding values of macroeconomic stability indicate that the volume of GDP on Azerbaijan grew by 40.2% of the world average rate in 2005; and if it was equal to 47.9% for population per capita in the threshold value, while in 2010, these indicators exceeded the corresponding international standards by 57.3% and 73.6% respectively. In 2018, GDP increased by 16.91 times compared to 2000, 16.91 times compared to 2005, 1.87 times compared to 2010, and 1.46 times compared to 2015. GDP in industry increased by 20.78 times in 2018 compared to 2000, by 5.69 times compared to 2005, by 1.60 times compared to 2010, and by 1.60 times compared to 2015. The volume of GDP in agriculture, forestry and fishing is 5.52 times higher in 2018 compared to 2000, 3.68 times compared to 2005, 1.78 times as compared to 2010, and 1.24 times compared to 2015. The volume of GDP in construction in 2018 increased by 20.62 times compared to 2000, by 5.63 times compared to 2005, and by 1.84 times compared to 2010, and decreased by 2% percent compared to 2015. GDP in transport and communication in 2018 increased by 11.06 times compared to 2000, 6.84 times compared to 2005, 1.98 times compared to 2010, 1.44 compared to 2015 times.

*Figure 3: The volume of GDP in net tax*

In 2018, the volume of GDP in net tax increased by 21.38 times compared to 2000, by 6.58 times compared to 2005, by 2.16 times as compared to 2010, and by 1.28 by 2015. In other areas, GDP increased by 19.60 times in 2018 compared to 2000, 9.78 times compared to 2005, 2.49 times as compared to 2010, and 1.23 compared to 2015. According to the calculations, the differences in actual indicators of sustainable economic growth of the country in 2000-2018 with the corresponding economic security threshold values show that the GDP of Azerbaijan is 40.2% of the world average in 2005; and 47.9% of the threshold values population per capita, while in 2010 these figures exceeded the corresponding international standards by 57.3% and 73.6% respectively.

*Table following on the next page*

*Table 1: Gross domestic product by economic sectors, in actual prices*

Years	Total	including					
		industry	agriculture, forestry and fishing	construction	transport and communication	net taxes	other fields
million manats(AZN)							
2000	4718,1	1699,0	758,9	308,0	567,1	291,2	1093,9
2001	5315,6	1999,6	788,7	310,7	538,9	418,3	1259,4
2002	6062,5	2270,1	846,0	528,0	597,1	486,2	1335,1
2003	7146,5	2666,9	888,0	802,0	713,8	549,8	1526,0
2004	8530,2	3268,6	937,3	1062,1	812,4	615,7	1834,1
2005	12522,5	6201,9	1137,9	1126,8	917,2	946,5	2192,2
2006	18746,2	10768,3	1329,4	1445,5	1242,9	1024,4	2935,7
2007	28360,5	16926,9	1901,0	1825,4	2074,9	1870,2	3762,1
2008	40137,2	23574,0	2246,0	2800,3	2681,7	2688,6	6146,6
2009	35601,5	17510,2	2179,5	2554,3	3072,0	2810,0	7475,5
2010	42465,0	21942,2	2344,6	3439,7	3160,3	2876,5	8701,7
2011	52082,0	28010,7	2643,5	4141,0	3487,7	3056,0	10743,1
2012	54743,7	27040,4	2813,7	5507,9	3638,7	3392,0	12351,0
2013	58182,0	26441,7	3122,2	6753,7	3580,8	3878,0	14405,6
2014	59014,1	24169,4	3139,2	7454,4	3726,8	4413,0	16111,3
2015	54380,0	17912,4	3359,4	6499,5	4329,6	4859,0	17420,1
2016	60425,2	22398,0	3386,8	6338,9	5133,8	4921,5	18246,2
2017	70337,8	28208,5	3944,1	6750,6	5862,6	5004,4	20567,6
2018	79797,3	35307,4	4190,1	6353,8	6275,3	6228,2	21442,5

Source: [www.stat.gov.az](http://www.stat.gov.az)

According to data of the State Statistical Committee of the Republic of Azerbaijan, the average annual investment in capital investments in 1995-2018 was 5.5 billion manats, but in 1995 it was 228.0 million manats, in 2000 it was - 967.8 million manats, in 2005 - 5.8 billion manats per year and 9.7 billion manats in 2010, in 2015 - 15.9 billion manats and in 2018 – it was 17.2 billion manats.

*Table 2: Investment in fixed assets by economic sectors, million manats*

		industry	agriculture, forestry and fishing	construction	transportation and warehousing	information and communication	other fields
2000	967,8	670,1	6,5	3,4	44,1	45,3	198,4
2001	1170,8	827,6	8,3	13,0	58,8	72,8	190,3
2002	2107,0	1632,1	18,5	40,0	89,6	49,1	277,7
2003	3786,4	3008,0	37,4	12,2	337,8	56,2	334,8
2004	4922,8	3917,2	35,0	20,7	325,4	102,6	521,9
2005	5769,9	4176,0	40,7	46,1	517,2	158,0	831,9
2006	6234,5	4296,7	58,3	10,1	631,5	210,7	1027,2
2007	7471,2	4591,2	243,3	4,2	745,4	177,5	1709,6
2008	9944,2	4249,3	336,5	66,2	1993,9	173,4	3124,9
2009	7724,9	3224,9	266,6	30,5	1715,2	140,6	2347,1
2010	9905,7	4276,2	431,0	113,8	2449,1	212,0	2423,6
2011	12799,1	5369,8	437,3	225,9	2515,7	310,8	3939,6
2012	15407,3	6039,9	648,8	499,0	2621,1	329,5	5269,0
2013	17850,8	7499,6	574,3	707,8	3570,0	200,7	5298,4
2014	17618,6	7639,5	363,9	2 221,7	2440,6	157,5	4795,4
2015	15957,0	8499,9	355,4	2 123,5	2199,9	335,3	2443,0
2016	16772,8	9949,8	325,1	2831,8	1392,3	199,4	1074,4
2017	17430,3	10610,1	617,8	2746,0	1777,7	171,9	1506,8
2018	17244,9	8497,2	764,4	3721,4	1926,6	441,5	1893,8

Source: [www.stat.gov.az](http://www.stat.gov.az)

Regarding fixed capital investments by sectors of the economy during the analyzed period, it is possible to note that the total investment in fixed assets in the economy was 17.81 times in 2018 compared to 2000, 2.98 times in comparison with 2005. In comparison with 2010 it increased by 1.77 times and in comparison with 2015 it increased by 8%. The volume of investment in fixed assets in the industry increased by 12.68 times in 2018 compared to 2000, by 2.03 times in comparison with 2005, and by 1.98 times compared to 2010, and decreased by 1% compared to 2015. The volume of investments in fixed assets in agriculture, forestry and fishing in 2018 was 117.6 times compared to 2000, 18.78 times as compared to 2005, 1.77 times as compared to 2010 and in comparison with 2015 it increased by 2.15times. The volume of investment in fixed assets in construction in 2018 is 1094.5 times compared to 2000, 80.72 times as compared to 2005, 32.70 times as compared to 2010, and increased by 1.77 times as compared to 2015. The volume of investments in fixed assets in transport and communications increased by 43.68 times in 2018 compared to 2000, by 3.77 times compared to 2005, by 21% compared to 2010 and decreased by 12.5% compared to 2015. Investments in fixed assets in the information and communication sector increased by 9.77 times in 2018 compared to 2000, 2.80 times compared to 2005, 2.08 times as compared to 2010, and 1.31 times compared to 2015. The volume of investments in fixed assets in transport and communication increased 9.54 times in 2018 compared to 2000, 2.27 times compared to 2005, 21% compared to 2010 and decreased 22.5% compared to 2015. While being a member of the former Soviet Union, the economic security of our republic was largely funded from the union budget and at present the problem is based on the principles of the effective utilization of existing resources, the creation of a healthy national economy. For this reason, taking into consideration all of the above mentioned, it is of particular importance to develop the concept of formation of a national economic security system that meets the existing realities of Azerbaijan (Samedzade, 2001). The legal basis for ensuring economic security is reflected in the Law of the Republic of Azerbaijan “On National Security” adopted in June 2004. As stated in the law, the main national interests and benefits of Azerbaijan in the economic sphere consists of the increase of economic potential, development of the market economy and improvement of its legal basis, provision of economic stability, creation of favorable conditions for domestic and foreign investments for the development of economy, and ensuring free and equal development in regional and world markets. At the same time, the formation of any national economy that meets the rigid requirements of the globalized economy in the modern world depends to some extent on the optimal level of socio-economic development indicators of the country (Balayeva, 2006). For this reason, it is important to compare the indicators of socio-economic development of the country with the corresponding standards of economic security in the world practice in the formation of the national economic security system of the Republic. For this purpose it is necessary to evaluate the sustainable growth of the country’s economy, the volume of investments in fixed assets through all sources of financing and depending on the characteristic of financial, banking and foreign economic activity, economic security indicators should be compared with the corresponding threshold quantities.

### **3. CONCLUSION**

It is not right to describe economic security in the economic sphere as a collection of state institutions that are robust and full of necessary means to protect the national interests and benefits of the state against internal and external threats, economic and direct material damage. Thus, economic security is not only about the protection of national interests and benefits, it is also the formation of a flexible economic mechanism for the realization and protection of national interests and benefits, the creation of favorable conditions for the development of the national economy and the socio- political stability of the society. In this regard, it is important to compare the indicators of socio-economic development of the country with the



corresponding threshold values in the world practice in the formation of the national economic safety system of Azerbaijan. For this purpose, the stable growth potential of the Republic's economy should be evaluated in comparison with the corresponding threshold volume of investments in fixed assets through all sources of financing, including economic security indicators characterizing financial, banking and foreign economic activity.

**LITERATURE:**

1. Law of the Republic of Azerbaijan “On National Security” Legislative Collection of the Republic of Azerbaijan. N 8, August 31,2004.
2. Abbasov A.F. Realization of economic interests of the state in foreign economic relations // Journal of Economics and Life, N 10-12, 2002.
3. Balayeva E. Economic development and development economics: problems of sustainability and security. “Economy” Newspaper, 3-9 February 2006, p.8.
4. Joseph E. Stiglitz. Globalization and its dissatisfaction. Baku: 2004, 317 p.
5. Aliyev Sh.T. Problems of organization of special economic zones and development prospects. Baku, "Science", 252 p.
6. Shakaraliyev A.S, Shakaraliyeva Z.A. Customs and tariff regulation of foreign economic activity. Monograph, Baku 2006.
7. S. Afontsev National economic safety: on theoretical consensus // World Economy and International Relations, 2002, No. 10, pp. 30-39.
8. Barabin V.V. Economical safety of the state. M. 2001, 182 S. Ct.
9. Samedzade Z.A. The economic security of the state is the most important achievement of independent Azerbaijan. “Economy” Newspaper, 18 October-01 November 2001, p.7-8
10. Senchagov V.K Economic safety: geopolitics, globalization, self-protection and development (volume IV). Institute of Economics RAS Moscow. 2002.
11. Stepashin S.V. Economic safety of the Russian Federation. Manual. M., Spb., 2001. volume.1, p.608.

## STATE OF INNOVATIVE ACTIVITY IN THE AGRICULTURE OF AZERBAIJAN

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### **ABSTRACT**

*This article represents the state of innovative activity in the agriculture of Azerbaijan. Factors stimulating the innovative development of the agro-industrial complex include the existence of natural resources, significant scientific and educational potential, large domestic food market, the ability to produce environmentally friendly, natural food products and the transition to a market-based way of managing. An analysis of innovative activity in Azerbaijan and developed foreign countries revealed the main organizational and economic factors that impede its development. In this article is shown comparisons of the features of innovation in Azerbaijan and developed foreign countries, as well as, conditions and factors affecting the innovative development of agro-industrial complex of Azerbaijan. Agriculture itself, by virtue of its position in the country's economy, is not in a position to dictate the conditions for achieving the necessary profitability for other sectors and fields of activity. The risks of financing scientific and production results and the time gap between costs and results, the uncertainty of demand for innovative products do not interest private investors to invest in agricultural development. The difficulty of conducting a detailed analysis of the current state of innovative activity in the agricultural sector of the agro-industrial complex is associated for this type of activity in such volumes and indicators as is done in industry. Currently, in Azerbaijan, the flow of foreign technologies suppresses the development of national innovation policy and creates a real danger of dependence on foreign developments. Currently, these services are expressed in passive forms: in consulting and information services and are designed on the initiative of agricultural workers. The main point of the state innovation policy in this period should be to, on the one hand, maintain the maximum accumulated scientific and technical potential, on the other, develop the necessary infrastructure and develop mechanisms that stimulate the development of innovative processes. The continued inequality of the exchange of agriculture with other sectors of the economy leads to the degradation of its material and technical base. The main direction of increasing the sustainability of agriculture is the creation of conditions for ensuring profitability in farms necessary for expanded reproduction.*

**Keywords:** *Agriculture, Agro-industrial complex, Financing, Innovative activity, Analysis, Sustainability*

### **1. INTRODUCTION**

Factors stimulating the innovative development of the agro-industrial complex include the existence of natural resources, significant scientific and educational potential, large domestic food market, the ability to produce environmentally friendly, natural food products and the transition to a market-based way of managing. The factors hindering the development of innovations in the agro-industrial complex include the contraction of domestic demand for food, reduction of state support for the agricultural sector and financing of scientific and technical programs, research institutes and universities, high loan rates, the lack of innovative infrastructure, the difficult financial condition of agricultural producers, the insufficient level of scientific-technical development and training of personnel of the agro-industrial complex organizations in the field of innovation management, increasing competition with foreign innovations.

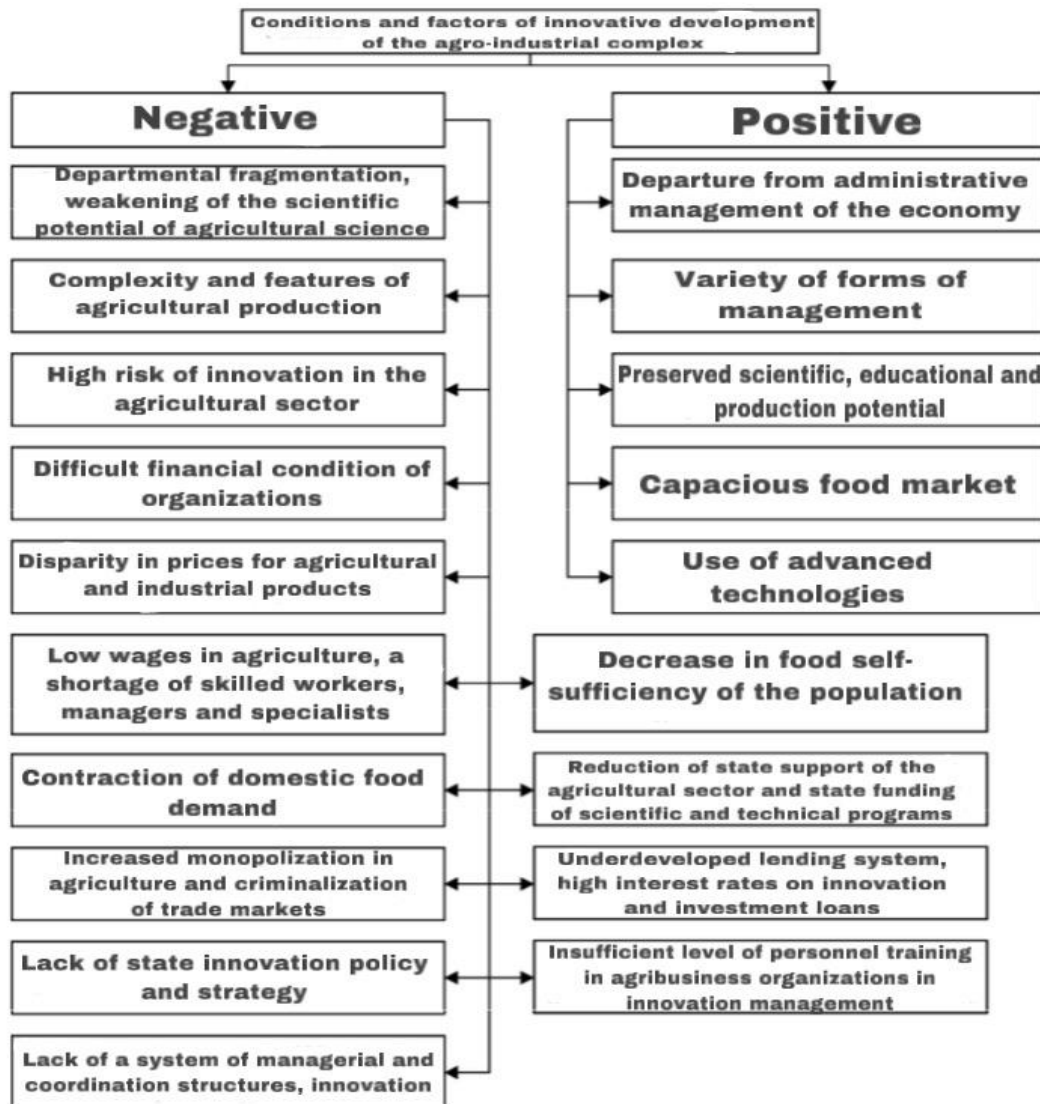
Domestic agricultural science is characterized by a high degree of complexity of the organizational structure and departmental fragmentation, a variety of forms of scientific technical and innovative activity, a significant share in scientific research of problems of a regional, sectoral, intersectoral nature, a long study of some problems of the agro-industrial complex in the field of innovation management [1]. An analysis of innovative activity in Azerbaijan and developed foreign countries revealed the main organizational and economic factors that impede its development. Comparisons given in table 3.1, indicate that the market mechanisms of innovative activity in Azerbaijan are in the process of formation. An effective mechanism of state-private partnership in the development and implementation of innovations has not yet been created [2,3,4,5,6,7].

Azerbaijan	Developed foreign countries
The state has a leading role in the field of innovative activity; private business is not actively connected to it and very rarely resorts to innovation as a means of competitions	The state encourages and stimulates innovative activity in every way, but the main engine of innovation is private business, especially medium-sized and small, which actively uses them in competition
The lack of holistic innovative activity system, which is still being formed, the lack of regulation of a number of its most important components, including the relationship between the state and private business	A flexible and comprehensively streamlined system of relations between the state and business in the development and implementation of innovations. Small and medium-sized businesses has the active role in this process
The recognition in the regulatory documents of the state of the right to compensatory payments from the assignment and use of the rights to the results of scientific and technical activities. Lack of a practical mechanism for monitoring the implementation and distribution of such results	Lack of practice of state participation in the distribution of income from the use of the results of scientific and technical activities created at the expense of budgetary funds. At the same time, the state seeks to control responsibility for the dissemination of the results of the innovative activity, including its commercialization
Lack of regulation in the legislation of the fair distribution of income from commercialization between a researcher, a research organization and an intermediary, financing the development and implementation of innovations	The use of various systems in the distribution of income from commercialization. In a market environment - contracts between research organization or individual researcher and a private company. In the relationship between state research organizations and the state – legislative regulation of incoming income, depending on whether the intellectual property belongs to a research organization or an individual researcher
Lack of legal status of infrastructure organizations using state support (business incubators, commercialization centers, etc.), as well as budget financing at various levels of infrastructure development projects of small innovative enterprises	Consolidation in the legislation of technology commercialization centers and transfer technology and industrial services center. The most detailed legal rules governing such activities are enshrined in US law
Lack of effective tax incentives and preferences for small and medium-sized businesses for the innovative activity, in particular, the lack of incentives for R&D costs and increase in these costs	Active use of tax benefits depending on the real costs of R&D. In a number of countries, for example, Great Britain, these benefits are provided with an increasing coefficient, which enables enterprises actively introducing innovations to receive such benefits in form of cash payments
Constant changes in legislation and the prevailing "rules of the game", which does not provide the necessary stability of business innovative activity, especially medium-sized and small	Stability of legal rules regulating state-private partnerships and innovative activity, which increases investment attractiveness
The lack of a monitoring mechanism and the practical effectiveness of the adopted legal acts	Using the monitoring mechanism to assess the effectiveness of innovation and research, as well as the interaction of the state and private business in the publishing house. In a number of countries (USA, UK), parliaments have special services involved in evaluating the effectiveness of scientific and technical projects and preparing legislative initiatives related to the use of results

*Table 1: Comparisons of the features of innovation in Azerbaijan and developed foreign countries*

As a consequence of the existing shortcomings in the innovative activity, there are low rates of economic development, poor development in the practical activities of business entities of the latest technologies and scientific and technical developments, progressive methods of

organizing production and methods of managing them. At present, the unfavorable investment situation for agriculture and the low profitability of most agricultural producers remain. Despite the fact that in recent years the investment process in agriculture has noticeably intensified, and since 2018 agricultural loans have become available on preferential terms, the share of the agricultural sector in the expenditure side of the budget does not exceed 1% with a share of 4.4 %.



*Figure 1: Conditions and factors affecting the innovative development of agro-industrial complex*

The degree of use of innovations by producers remains unacceptably low: of the total number of completed, accepted, paid by the Ministry of Agriculture of Azerbaijan and recommended for the implementation of applied scientific and technical developments, only 2-3% are implemented in small volumes and on limited land areas, 4-5% - in one or two farms. Annually, up to 40-50% of completed scientific and technical developments remain unclaimed by agricultural production. This is largely due to the unsatisfactory financial and economic state of agricultural producers, the insufficient quality of development, the increasing import of food, agricultural machinery, equipment, protective equipment, etc.

## 2. AGRICULTURE AND COUNTRY'S ECONOMY

Agricultural national research university create intellectual property in the form of inventions, utility models, and selection achievements. Some of them are patented, but only a few patents are reflected in the balance sheets as intangible assets and are actually used, that is, they are sold or give returns in the form of payments under license agreements (royalties). Despite the growth of state support for the agricultural sector, in recent years its level is 3-9 times lower than in the EU countries.

	Gross output	Gross value added	Budget subsidies	GVA and budget subsidies
Azerbaijan	291	160	5	165
10 new EU member states	907	308	236	544
15 old EU member states	2159	969	538	1507
Germany	2320	744	706	1550
France	1876	794	625	1419

*Table 2: Economic indicators of agriculture in Azerbaijan and the EU countries per 1 ha of farmland*

The continued inequality of the exchange of agriculture with other sectors of the economy leads to the degradation of its material and technical base. The main direction of increasing the sustainability of agriculture is the creation of conditions for ensuring profitability in farms necessary for expanded reproduction. Agriculture itself, by virtue of its position in the country's economy, is not in a position to dictate the conditions for achieving the necessary profitability for other sectors and fields of activity. Therefore, the level of profitability in relation to funds in agriculture is currently about 4 times less than in other sectors of the economy, wages in the agricultural sector remain the lowest and over the past few years do not exceed 40-45% of its average value in the economy generally. Low wages are the main reason preventing the attraction of highly qualified personnel capable of introducing innovations in production. Elements of the financial mechanism, such as prices, subsidies, taxes, credit do not allow agricultural enterprises to function normally, do not allow for elementary compensation of costs and simple reproduction resources and that's without mentioning the implementation of innovative activity. A significant limiting factor in the innovative development of agriculture is the pricing system. The regulation of prices for agricultural products should be a matter of concern to the state. The practice of recent years has shown that both in the period of development and the crisis, agriculture is a worse situation. In the first case, it gets a small share of the growth in total profit, in the second – it suffers the most from lower selling prices. An important problem remains the lack of an effective mechanism for transferring the achievements of science into production and, as a result, a significant lag in agriculture in mastering innovations in comparison with other sectors of the economy. Therefore, after a long period of destruction of the agricultural production potential, it is necessary to solve urgent problems of technical modernization, restoration of soil fertility, livestock and providing the industry with qualified personnel. If these tasks are not solved then providing the country with its own food, creating competitive agriculture will be extremely difficult at the existing pace of its development, which has amounted 2.3% in recent years [8,9]. Specific innovations are inherent in agricultural production. 4 types of innovations are distinguished in the subject and scope of the agricultural industry: genetic-selective; technological and industrial; organizational, managerial and economic; social and environmental. The first type of innovation is unique to agriculture. These are varieties and hybrids of agricultural plants, which

are resistant to diseases, pests, adverse environmental factors, new breeds and types of animals [1]. The risks of financing scientific and production results and the time gap between costs and results, the uncertainty of demand for innovative products do not interest private investors to invest in agricultural development. The situation is aggravated by such agricultural-specific factors as increased capital intensity of updating the material and technical base, limited own sources of accumulation to achieve a qualitatively new level of organization and technology, and traditional backwardness of agriculture. Nevertheless, the course of the innovation process in the agricultural sector of Azerbaijan can be characterized as extensive, sluggish, although in the pre-reform period there was a certain tendency to increase the efficiency of land use and increase agricultural production. A clear effective indicator of the progress of the innovation process are productivity indicators (technological efficiency of agricultural production) – crop yields and animal productivity. Gross agricultural output in comparable prices as a cumulative indicator of technological efficiency over pre-reform years in the dynamics naturally increased. This was the result of intensification of production based on scientific and technical progress. Agricultural reform stimulated the search for new organizational structures that provide accelerated development and development of innovations. Currently, in Azerbaijan, the flow of foreign technologies suppresses the development of national innovation policy and creates a real danger of dependence on foreign developments. In the agricultural sector of the Azerbaijan economy, an unfavorable situation still exists, including in the scientific and technical sphere, which is explained by the low investment potential of the agro-industrial complex for the activation of information security. The development of innovations is hindered by low profitability of production, reduction and aging of the machine and tractor fleet, technology simplification, low prices for agricultural products, limited sales of products, unavailability of bank loans, high payables, poor adaptation of agricultural enterprises to market conditions, demographic and staffing problems, high bank rates on loans for agriculture, breaking ties with scientific agricultural organizations, undeveloped information infrastructure.

## **2.1. Agriculture and gdp**

For many years, in Azerbaijan, financing of science as the main generator of innovations has remained at the level of 1.12% of GDP, the EU spends almost 2, the USA – more than 2.5, Japan – more than 3, Finland – 3.5% (in 2018, accordance with the innovation the strategy was 4%). In 2018 in Azerbaijan, it was planned to spend 2.8 billion dollars to support companies at the “sowing” and “pre-sowing” stages in the EU in 2007 alone, 10.5 billion was spent on these purposes, in the USA – 62 billion dollars. As a result, in Azerbaijan 1.2% of small enterprises are working in the field of innovation, 40-50% in developed countries. State expenditures on research and development in agriculture as a percentage of value added in Azerbaijan amounted to 0.37%, while in Australia – 3.4, Japan – 3.6, in the USA – 2.7%. if these rations do not change, then it will be very difficult to solve the tasks that are set for the agro-industrial complex.

### *2.1.1. Modern day problems*

The most adverse effect on the development of individual entrepreneurs in the agro-industrial complex has a low level of solvent demand for scientific and technical products. The absence of own funds for the majority of agricultural producers, accompanied by limited budget sources of financing and the practical impossibility of borrowing funds for innovation, does not allow them to engage in the development of new technologies. The weak link in the formation of the agricultural innovation market is the study of demand for innovation. When selecting innovative projects, their economic expertise is not carried out, development efficiency indicators are not calculated, and schemes for promoting the results in production are not worked out. Annually, 40-50% (according to some sources, 90%) of completed scientific and

technical developments remain unclaimed by agricultural production, which is a consequence of the lack of an effective organizational and economic mechanism for managing innovative activity in the market conditions, prompting the developer to create innovative projects and the consumer to use them. The difficulty of conducting a detailed analysis of the current state of innovative activity in the agricultural sector of the agro-industrial complex is associated for this type of activity in such volumes and indicators as is done in industry. In particular, agricultural and processing enterprises do not keep records of mastered innovations. There is also no similar accounting in the scientific and technical sphere [10].

### 3. INNOVATIVE ACTIVITY

It has been established that the decrease in agricultural production is directly related to the decline in the technical equipment of agricultural producers. This affects a sharp reduction in the area of arable land in circulation. Compared to 1990, it decreased by 35 million ha. ICC in agricultural organizations has decreased, the load on machines operating in the agro-industrial complex has increased by 2-3 times over past ten years, up to 80% of the machines have developed their service life and require increased costs (30-50%) for maintaining them in working order condition. A high degree of wear of the equipment leads to the fact that 20% of its availability do not participate in field work, therefore, simplified technologies are applied, the optimal time for the work is violated, 25-30% of the grain is missed and lost, 40-45% of potatoes and vegetables, up to 30% sugar in harvested beets. A sharp decrease in the purchasing power of agricultural producers led to a crisis in domestic agricultural engineering, which has significantly reduced the production of all types of machinery and equipment. The reliability of the new agricultural technology over the past decade has decreased by 1.5-2 times. The repair and maintenance base of the agro-industrial complex is losing its technological level and moving away from agriculture. More than 50% of its capacities have changed the profile of their specialization. In industrialized and agriculturally developed countries, up to 85% of GDP growth, including in agriculture, is formed due to new knowledge, implemented and high technology, growth of labor productivity. Added value per agricultural worker averaged 2037 dollars for 2018, and in Azerbaijan this figure is 7-10 times less than in developed countries. The dependence of agriculture of Azerbaijan on foreign is growing in scientific and technological terms. For example, the share of foreign varieties in the total crop of vegetable crops is 90%, sugar beets -82, corn – 60%. About half of the purchases of breeding livestock are foreign. For agricultural machinery, this figure is about 70%. And in order not to turn our enterprises into assembly workshops of agricultural machinery from imported components, it is necessary to pay close attention to education and science, the introduction of the result of their activities in production [11]. Domestic experience in using R&D results by agricultural producers shows that the current trend in the development of innovative processes in agriculture is assessed as very contradictory. Despite serious economic difficulties, agricultural science in recent years, has been successfully operating, producing a significant amount of high-quality scientific products, and advanced farms, overcoming a negative situation (usually of an external nature), organize the development of innovations, at the same time, on the whole, in agriculture, this, unfortunately, does not happen. All the problems associated with the practical use of achievements, the agro-industrial complex are forced to solve mainly independently in the absence of effective assistance from the state. Therefore, the innovative potential of the agricultural sector is used in the range of 4-5% (for comparison: this indicator in the United States exceeds 50%). The main point of the state innovation policy in this period should be to, on the one hand, maintain the maximum accumulated scientific and technical potential, on the other, develop the necessary infrastructure and develop mechanisms that stimulate the development of innovative processes. Innovative development adequate to the upcoming scale and objectives of the scientific and technical transformation of agricultural production, possibly

in the presence of a properly organized and efficiently functioning innovative agricultural system [12,13,14]. Its backbone beginning is the reproduction of agricultural innovations and the development in mass practice of more advanced methods of agricultural production, which together determine the innovative development of agriculture. The latter, in turn, presupposes the existence of a set of interrelated supportive measures whose task is to create favorable conditions for passing through all stages of the scientific and technical renewal of production. Ensuring the innovative development of agro-industrial complex consists of 2 blocks – resource and institutional [15].

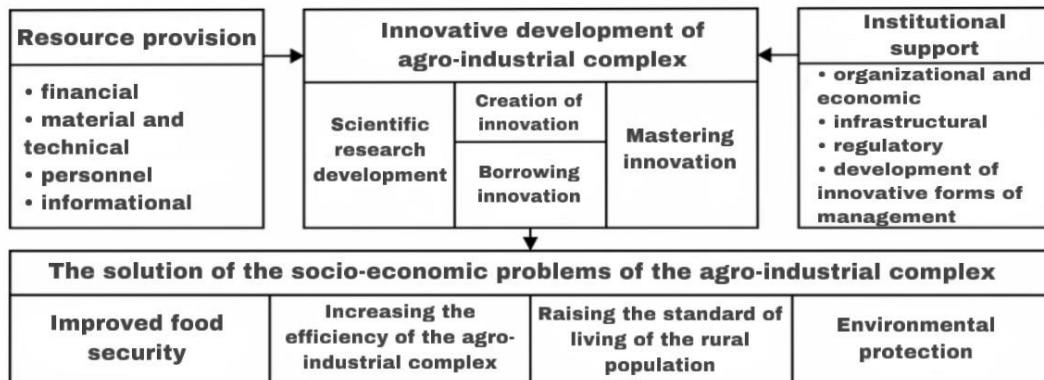


Figure 2: Ensuring of the innovative development of agro-industrial complex

Particularly noteworthy are the problems of financing scientific and innovative activities. In order to turn the country's scientific and technological potential into an effective factor in economic development, we must move on to a policy of comprehensive support for innovation processes. In this case, the primary task is to create favorable financial, economic and legal conditions for the formation of the domestic innovation system. Otherwise, the scientific, technical and innovative potential may be practically lost. The requirements for strengthening the innovative nature of the development of the agro-industrial complex and the measures being developed in administrative structures that are being formulated by state and federal authorities at the federal level are poorly penetrating into the production sphere. Managers and specialists of farms remain aloof from the innovative development strategy proclaimed by leaders of various ranks. Often they do not know what is being done by the governments of the country and regions. The strategic course is poorly supported at the farm level by financial, material and technical resources and measures of organizational and economic support.

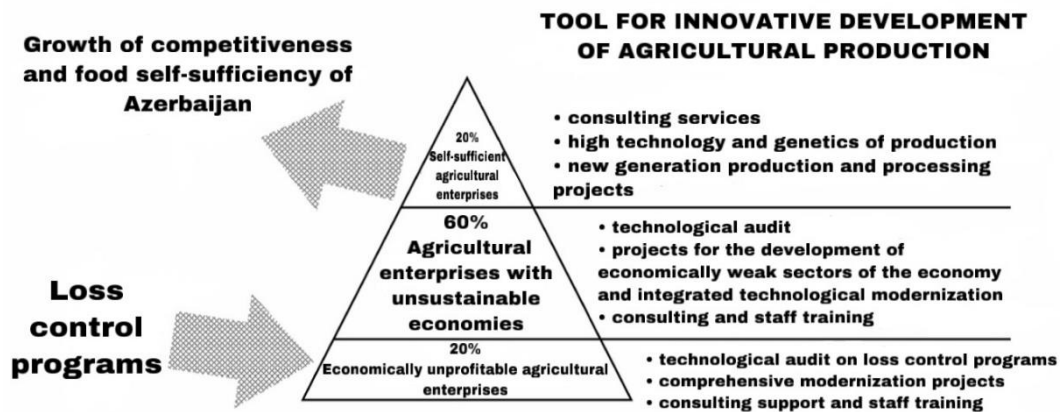


Figure 3: Innovative impacts on agricultural enterprises of different economic levels



#### 4. CONCLUSION

Currently, these services are expressed in passive forms: in consulting and information services and are designed on the initiative of agricultural workers. In farms where managers and specialists think about improving production and have financial resources, they are looking for the varieties, breeds, technologies and equipment necessary for the development, their development gives the production high economic benefits. Such farms, being a model of the industry, are few in number and cannot increase the competitiveness of the industry as a whole. Analysis of the structure and production and financial condition of enterprises and organizations working in the field of agriculture, regardless of their legal status and form of ownership, from the point of view of their relevance and susceptibility to innovative agricultural technologies and scientific and information support shows that they can be divided into three categories. The first category is efficiently operating enterprises (about 2-5% of the total number in the field of agriculture), actively introducing innovative agricultural technologies, resource-saving technologies, having human and resource potential and in need of obtaining targeted information, analytical assessments of industry development trends taking into account zonal features. The second category - enterprises operate steadily (25-35% of the total), are ready to use innovative agricultural technologies, but need scientific and information support for the development of production, preparation of innovative projects and business plans. The third category is the rest (about 60-70%) of enterprises operating inefficiently, requiring external influence to promote, introduce innovations, including all types of services and assistance. The basic principle of agricultural technologies (for the production of crop production) and zootechnologies (for the production of livestock production) introduced into the economy is that the basic rule of technological modernization of the industry is adopted - the mandatory inclusion of production process control operations in production technologies [16]. Technical and technological modernization is the basis for increasing productivity in crop production and animal husbandry, achieving global average parameters for these indicators with a corresponding outstripping growth in labor productivity. This requires the formation of an innovative infrastructure - providing access to original technologies, potential and the results of research and development.

#### LITERATURE:

1. Grishaeva L.V. – “Features of innovative processes in the agricultural sector”. 2008, p.21-24.
2. Agricultural Science on the Threshold of the 21st Century: State and Problems: Collective Monograph. 1999, p.400.
3. Agricultural science of Russia. Information and analytical collection. - Scientific publication. 2006, p.110
4. Agribusiness of Russia: priorities for the development of innovative processes in a market economy (theory, methodology, practice). 1994
5. Glazyev, Lvov, Denizsov - The evolution of technical and economic systems: the possibilities and boundaries of centralized regulation. 1992.
6. Prospects for the development of scientific and technological progress in the agricultural sector of Russia. 2001.
7. Ushachev I. - Economic growth and agricultural competitiveness of the Russian Federation. p.17-30.
8. Altukhov A.I. – “National Food Security: Problems and Solutions.” 2006, p.159.
9. Orlova L., Parvitsky S. – Effectiveness of introducing innovative technologies in grip production.
10. Innovative development of agribusiness in the constituent entities of the Russian Federation: experience and problems. 2008, p.152.

11. Petrikov A. – “ On the situation in the system of higher professional education in the agro-industrial complex of the Russian Federation”. 2009, p. 2-8.
12. Bunin M.S., Kostin V.D. – “About control over the transfer and mastering of results scientific and technical activities in agricultural production”. 2004, p.2-7
13. Demina N., Bulgina S.A. – “Innovation and investment activities in the agricultural sector”. 2009, 400p.
14. Development of innovative activity in the agro-industrial complex (Based on materials of the International scientific-practical conference, Moscow, November 10-12, 2002). 2003, 401p.
15. Kurtsev I.V. – “The main directions of development of the innovative system of agribusiness in Siberia”. 2008, 60p.
16. Lachuga U.F. – “ Strategy of machine-technological modernization of agriculture until 2020”. 2009, p.24-48.

# THE TRANSFORMATION OF THE EDUCATION SYSTEM INTO THE DIGITAL AGE IN THE TEACHING PROCESS

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## **ABSTRACT**

*The purpose, objectives, content, and methods of education are reflected in the organization training system. Optimization of the educational process, its scientific organization, increase of its effectiveness will result in an intensification of student activity and, consequently, lead to quality education. Under the traditional teaching methods the courses are designed as a sequence of schematically organization of the auditorium, continuity checking, homework and past lesson inquiry, new knowledge and its reinforcement, assessment, tasks, etc. The topics of such subjects are not revealed to the students comprehensively. The training design based on the diligence of a few students has led to the passivity of the others. Loading the students with unwanted unnecessary information can cause the worsening of their memories prematurely. Furthermore, the experience of many years indicates that an individual with a high intellectual capability, willing to conduct reasoning, free judgment or problem identification, demonstrates a passive attitude for the reason of fear and insecurity. When analysing the term of new teaching methods, the main focus falls on the teacher's ability to demonstrate professionalism in fostering the knowledge, skills, and habits of the learners. New teaching methods can be realized with the help of critical thinking. The ability of critical thinking and overall the effectiveness of the use of new methods can be achieved primarily, on the organization of teacher training and professional development. From the training on new teaching methods, the teachers can obtain some practical skills by utilizing the method of critical thinking during the teaching process. Improvement of education quality has influenced the comprehension of the subject and object, and has brought the interaction to the new meaning. The incorporation of active learning is one of the goals of educational reform. In the course of active learning, the teachers become guides while learners become researchers.*

**Keywords:** *Education, Goal, News, Thinking, Training*

## **1. INTRODUCTION**

It is known that one of the main goals of education is to bring up a comprehensively enhanced person with a high level, scientific potentiality and competitiveness. In modernity, the policy of personality-oriented education highlights aforementioned factor. The science of education in the literal sense is a pedagogical science, as well as training and a new method. Education and development fall into certain categories. The teaching process, which is a mutually focused activity of a teacher and a learner, is brought up through education and is the main tool for psychological development. Didactics determines the essence, content, principles, methods and forms of organization of the teaching process. "Didactics" is a Greek word meaning "I teach". This word was first introduced to science by the German pedagogue V. Ryashke (1571-1635) and the Czech pedagogue J.A. Comenius (1592-1670). Training highly intellectual personalities in the field of an independent state building is one of the most important tasks facing pedagogues in the field of education. To this end, gravely serious reforms are being implemented at the level of the state program in education, which is a part of a strategic policy. The successful solution of a problem of national importance depends on the effective use of training opportunities. The degree of implementation of the quality of training, which is a broad concept, is determined by the formation of knowledge, skills and habits in learners.

Knowledge is the main criterion of the mind, whereas skills and habits are its main indicators. Since the training is carried out in stages, teachers should focus on the sequence of teaching any subject. For almost all subjects taught, the stages of mastering the subjects are basically the same.

## **2. THE REGULARITIES OF TEACHING**

In the pedagogical literature, there are different opinions about the laws and regularities of teaching. It characterizes the regularities of teaching in terms of the relationship between the elements of education (pedagogical and student activities, the content of instruction, tasks, material-technical and spiritual-psychological environment), formed on the basis of dependence. For example, depending on the nature of the subject, as the degree of diversity of teaching methods increases, the increase in the level of mastery is called regularity in learning. In the form of a law, it is expressed as follows: the law of dependence of mastery on the variety of teaching methods. The acquirement of knowledge, skills and habits by learners without knowing the regularities of teaching, it will be quite difficult to ensure their psychological development. On the other hand, it is important to know that the principles of teaching are based on these regularities. The “principle” is a Latin word and is used in the sense of the main requirement. The quality of training depends on the correct application of its principles. Concisely, didactic ideas that allow a teacher and a learner to work together effectively are called teaching principles. Pedagogues have different views on what specific requirements to call the principles of learning and how to determine the amount. Analysing the problem in terms of characterizing the principles of teaching resonates with the reality of the day. These include: linking training to life, creating a conducive environment for learning, taking into account individual characteristics in training, collaboration, awareness and activism in training, science in training, educativeness of training, upbringing of training, visibility in training, use of different methods, strengthening knowledge and skills, etc. (6,144). According to the stages of teaching, the methods of teaching are the ways in which students acquire certain sciences, knowledge, skills and habits, getting educated in the spirit of national patriotism, instil and develop high human qualities (compassion and mercy) under the guidance of a teacher.

### **2.1. Monitoring of teaching and evaluation**

One of the functions of managing the pedagogical process is the organization of surveillance over the educational and cognitive activities of the learners in the teaching process. During the supervision of the training, the teacher demonstrates his humanistic attitude and democratic approach by determining the correctness of any concept answered by the learner. The teacher's reaction to the mistakes made by students in the teaching process, should be extremely sincere. Furthermore, the teacher should be kind and regularly guide the learners to think about the topic, inform them about comprehension, thinking, independent reasoning and identifying shortcomings. Supervision in training reveals the learner's inner world, while the teacher must pay special attention to their ability to speak, judge, analyse, compare, logically speak, and many other qualities. Controls are in the form of current, thematic, periodic, final and a quiz. Evaluation of success in training is a criterion that determines the extent to which the essence of the pedagogical process meets the interests and needs of the consumer. In our view, the widespread use of electronic computers, test programs in the learning process, the establishment of education on new technology will largely eliminate such negative situation. The course, which is the main organizational form of training, is characterized by important features. Interaction in the classroom is conditioned by each other. Thus, students' behaviour changes under the guidance of the teacher during the lesson. The essence of the internal mechanism of the lesson structure should be sought here. When the pedagogical requirements determined for any course are met, it produces positive results.

Along with defining the didactic structure of the lesson, the educational, pedagogical and developmental effects should be carried out in unison. The establishment of a modern education system in Azerbaijan in compliance with our independence and national ideology and based on universal values, democratic and secular principles, depends on the improvement of its management, harmonization with democratic rules and strengthening the state and public character, the implementation of the principles of self-government. Regulating our activities on the basis of democratic principles - the nature of the step taken, should make us think. Therefore, every student, regardless of their specialty, must know the essence of the forms and methods of educational work, the rules of work organization, and act independently in accordance with it (2, p.7). There are different opinions in the pedagogical literature about the laws and regularities of teaching. This problem was correctly solved by prof. N.Kazimov. He characterizes the regularities of teaching in terms of the relationship between the elements of education (pedagogical and student activities, the content of instruction, tasks, material-technical and spiritual-psychological environment), formed on the basis of dependence. (5,38) For example, depending on the nature of the subject, as the degree of diversity of teaching methods increases, the increase in the level of mastery is called regularity in learning. In the form of a law, it is expressed as follows: the law of dependence of mastery on the variety of teaching methods. The acquirement of knowledge, skills and habits by learners without knowing the regularities of teaching, it will be quite difficult to ensure their psychological development. On the other hand, it is important to know that the principles of teaching are based on these regularities. The “principle” is a Latin word and is used in the sense of the main requirement. The quality of training depends on the correct application of its principles. Concisely, didactic ideas that allow a teacher and a learner to work together effectively are called teaching principles. Pedagogues have different views on what specific requirements to call the principles of learning and how to determine the amount. Analysing the problem in terms of characterizing the principles of teaching resonates with the reality of the day. These include: linking training to life, creating a conducive environment for learning, taking into account individual characteristics in training, collaboration, awareness and activism in training, science in training, educativeness of training, upbringing of training, visibility in training, use of different methods, strengthening knowledge and skills, etc. (6,144) Professor N.Kazimov described the teaching methods as follows. According to the stages of teaching, the methods of teaching are the ways in which students acquire certain sciences, knowledge, skills and habits, getting educated in the spirit of national patriotism, instil and develop high human qualities (compassion and mercy) under the guidance of a teacher (5, p.45). The on-going reform in education requires the effective use of the national and moral characteristics, traditions of our people, the progressive ideas formed in this field in Azerbaijan for many years. In order to implement abovementioned case, priority areas should be identified through an in-depth study of existing problems. According to the aforementioned provisions, education reforms, improvement of the educational process and comprehensiveness are solved in stages. In the first stage, organizational work was done to create a normative legal, economic and information base of the new education system in accordance with modern requirements, ensuring the right of citizens to education. A person gains the experience of mankind through training, which is one of the main activities. Teaching activities are regulated by interaction with psychological processes. In general, learning activities play a key role in the development of psychological processes (attention, perception, memory, imagination, thinking, feelings, and expression). As a deduction of psychological and pedagogical research, it has been proved that thinking has many advantages over other psychological processes in the conscious mastery of learning materials and understanding of the essence. The gained achievements through effective teaching activities in the on-going reforms and the convergence in terms of integration into the world education system are undeniable.

## **2.2. New teaching methods**

Personality is formed in one's self educating and upbringing in the specific conditions of social life, in which case the main goal and task of training is to cultivate a personality that meets the needs and requirements of the independent Azerbaijani state. Optimization of the educational process, its scientific organization, increase of its effectiveness will result in an intensification of student activity and, consequently, lead to quality education. It is possible to create a civilized state by reducing the gap between the process of development in the world and the moral, psychological and intellectual level of people living in society. The strategic impact of education depends on aforementioned factor. The teachers who have passed the relevant training sessions under the new teaching methods may gain some practical skills by applying the critical thinking methods in education. It is important to extend these achievements as a pioneer step across the Azerbaijani Republic. The goals, principles, stages, legal framework and expected outcomes of the state program must be reflected in the process of implementation of educational reform. When analysing the term of new teaching methods, the main focus falls on the teacher's ability to demonstrate pedagogic professionalism in fostering the knowledge, skills, and habits of the learners. While preserving its value in terms of meaning and essence, the concept of teaching aids the selection and the implementation rules of new methods. It is crucial for instructors to recognize the student as a person with equal rights; however, it is problematic to do so without acknowledging the learner as an individual. The authoritarian attitude makes hinders the evaluation of the merits of the teaching methods, consequently, the quality of education. In the second stage that covers short-term perspectives, creation of a new management model, organization of information, organizational, legal, normative, personnel, financial, logistical, scientific, educational-methodical provision is intended to solve the problems ensuring the socio-economic stability of education and to carry out large-scale reforms. In the third stage, the implementation mechanism of all other measures is reflected in the program. At the level of the requirements of the program, it is planned to implement certain measures during the completion of the reform process as a whole. It is commendable that teachers, who have a special place in the organization of scientific and methodological work, ensure the interactivity of training, in the direction of innovations in education. It is commendable that teachers, who have a special place in the organization of scientific and methodological work and ensuring the interactivity of training, are taking essential steps in the direction of innovations in education. The effectiveness of the use of new methods in training depends primarily on the organization of teacher training and professional development. The increase in education quality has influenced the comprehension of the subject and objects in the teaching process and has brought the interaction to the new meaning. The experience of many years indicates that an individual with a high intellectual capability, willing to conduct reasoning, free judgment or to problem identification demonstrates a passive attitude for the reason of fear and insecurity. Only active training methods can eliminate this. The incorporation of active learning into the pedagogic process is one of the goals of education reform. These methods, which contribute to improving the quality of teaching, should be mastered primarily by teachers. In the course of active learning, the teachers become guides while learners become researchers. The quality of this technology is backed by the intensification of the thinking activity.

## **3. MANIFESTATIONS OF THINKING**

Logical thinking is the ability to compare, summarize, classify and systematize. Comparison is to identify similar and distinct features between the objects and the events. Generalization is the idea of combining objects and events with their common and important characteristics. Classification is the division of information into thought classes according to certain characteristics.

Systematization is to sort objects by a certain rule and to determine the sequence between them. Creative thinking is the ability to create innovation. Creative thinking is mainly the flexibility and quickness of the mind, the originality, the desire to know everything. The quickness of the mind is determined by the number of ideas generated within a unit of time. The desire to know everything is to accept the novelty and express interest. Critical thinking is the ability to clearly and precisely evaluate the information presented. Motivation is often used as a new pedagogical concept in teaching. Motivation is a driving force on being active in learning. The role of motivation in the learning process is to interest the learner and to attract his attention. In the implementation of active learning methods, problem-solving, hypothesis making, research organization (individual, group information exchange, data organization, drawing conclusions, application, etc.) should be given priority. There are a number of features of the creation of active learning that the teacher must implement in the pedagogical process. This includes problem solving, research activities, motivation, and the creation of conditions for independent acquisition of knowledge. Intelligence of a teacher is an active and complex cognitive process of the ability to understand the connections and relationships between objects and events. It is systematic and determined only by the direction of human activity, the nature of motivations and provocations. The person leading the management of the pedagogical process must know how to regulate brain activity. So far, this important aspect has been overlooked. When assessing knowledge, skills and habits, the teacher must take into account many pedagogical and psychological requirements in a complex, integrated manner. The learner's behaviour, the content of knowledge, the activity during the school year is conditioned by the objective and fair definition of assessment. The quality of a teacher's work can be determined depending on the level of success.

#### 4. CONCLUSION

The purpose, tasks, content and methods of education are gathered in the system of teaching organization. In this system, a long-term developed course takes a leading place. The type and structure of the course are interrelated. There are external and internal aspects in the structure of the course. Generally in higher education institutions, experience and physical fitness are considered to be one of the important factors in the effective organization of the practical activity of the teacher and the learner in the pedagogical process. As we integrate into the world education system, there is an urge to use new technologies in education. Teacher-student relations, democratic opportunities given to students in the learning process expand their opportunities to operate freely. However, since new technology is a requirement of the time, it cannot be avoided. On the other hand, we must be careful and properly regulate when replacing the achievements of national values and historical experience with new ones. Monitoring the work of an educational institution is a complex and multifaceted process. Therefore, there are different opinions in the pedagogical literature about its content. Each of the areas included in the structure of monitoring over the educational institution, has its own specific content, which requires its own forms and methods.

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#### LITERATURE:

1. Constitution of the Azerbaijan Republic. (1995). *AZƏRBAYCAN RESPUBLİKASININ KONSTITUSİYASI*, № 00. Retrieved 06.04.2020 from <http://www.e-qanun.az/framework/897>

2. Education Law of the Republic of Azerbaijan (draft). (1999). *Azərbaycan Respublikasının Təhsil Qanunu (layihə)*, № 324. Retrieved 06.04.2020 from <http://www.e-qanun.az/framework/7956>
3. Aliyev, H. (2001). *Final speech at Conference of the State Commission on Education Reforms*. Baku: Conference of the State Commission on Education Reforms.
4. Hasanov, M. (1983). *Təlim prosesinin optimallaşdırılması*. Baku: “Mütərcim” Publishing and Printing Center.
5. Kazimov, N. (1999). *Ali məktəb pedaqogikası*. Baku: Azerbaijan State Telegraph Agency.
6. Kazimov, N. (1996). *Pedaqoqika*. Baku: Maarif.



## **SOLID INDUSTRIAL AND DOMESTIC WASTES, THEIR USE ENVIRONMENTAL AND ECONOMIC ASPECTS**

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### **ABSTRACT**

*The article describes the proper and effective regulation of the use of natural resources, the provision of today's people with the abundance of resources and the consideration of future generations. Reforms carried out in our country and increased attention to the development of the non-oil sector have contributed to the revival of industrial facilities. However, the expansion of industrial facilities, increased output and improved quality have created many problems. Thus, large amounts of various types of wastes are emitted at the enterprises during production, which results in environmental pollution. From this point of view, it is the waste that pollutes the environment and seizes land, which are further expanded by industrial development.*

**Keywords:** *Ecology, Environment, Natural Resources, Economy, Solid waste, Reforms, Non-oil sector*

### **1. INTRODUCTION**

Reforms carried out in our country today, increased attention to the development of the non-oil sector, investment in these areas, and the revitalization of industrial facilities. However, the expansion of the activities of industrial facilities, increased output and improved quality have led to a second problem. Thus, large amounts of various types of wastes are emitted at the enterprises during production, which results in environmental pollution. From this point of view, it is the solid waste that pollutes the environment and seizes land, which are further expanded by industrial development. As a result of human activity, not only material benefits, but also a large number of wastes are generated, and the scale of the damage to human health and to the environment is endless. It should be noted that the amount of solid waste emitted in the world reaches 50-70 billion tons per year. Due to the use of old technology, the volume of solid waste emitted in the CIS area is estimated to be 80 million. tons.

### **2. PROPER AND EFFICIENT USE OF NATURAL RESOURCES**

One of the important issues facing the modern world is the recycling of solid waste. Effective use of economic potential of the Republic of Azerbaijan, the development of the capital on the basis of modern urban planning principles, as well as the reconstruction of public utilities, rehabilitation of public utilities, and rehabilitation of the population. Favorable conditions are created for the collection, transportation, disposal and disposal of waste in a manner that meets modern standards [5]. Therefore, the issue of waste utilization as the second raw material in the industry and thus reducing the anthropogenic impact on the environment has become an important issue of the day. In this regard, many industrial and domestic wastes: - Recycling of metal, rubber, glass, plastic and waste products is of great importance for our Republic, both in environmental and economic terms. Therefore, instead of creating a "mountain" of solid industrial wastes and products resulting from exploitation, one of the most important is to

organize their efficient recycling. The Balakhani Solid Waste Recycling Plant with the capacity of 200,000 tonnes per year was commissioned using advanced German-made technologies for recycling solid waste, paper, glass, plastic, ferrous and non-ferrous metals. Separation of other raw materials has allowed to reduce the total volume of waste, to form additional raw materials market and recycling in the country and, most importantly, to minimize the negative impact of waste on the environment. According to the International Organization for Standardization (ISO) classification, the E-waste group includes electrical appliances (electrical) equipment, including electronic equipment, devices and equipment, including computer equipment, and briefly in international terminology WEEE (Waste Electrical and Electronic Equipment, Electrical and Electronic). Equipment is treated as Waste).

### **3. CAUSES OF ENVIRONMENTAL POLLUTION**

In recent years, scientists and experts from major research centers in the world, both individually and within the UNIDO program, have worked together with organizations such as ISO and UNEP to average E-waste utilization and recycling. -15% improvement. Currently, a number of technological processes have been developed in the US and some European countries. In recent years, as well as with the development of the economy, plastic waste as a type of polymeric material is growing rapidly. Tons of polymeric materials are now recycled. The Japanese company Fuci Recycling industry, together with the specialists of the state industrial laboratory, has acquired the technology of production of gasoline, kerosene and diesel fuel from plastic waste. Recycling is made using zeolite as a catalyst (reverse technology for oil refining). According to the new technology, it was possible to produce 0.5 liters of gasoline and 0.5 liters of kerosene or diesel fuel without 1 kg of plastic. If this technology is applied in Azerbaijan, then it is possible to save enough oil products. Waste recycling and recycling is an important part of the German economy, with more than 240,000 people working in the field today, and the proceeds from recycling make up about 80 billion German brands of economic turnover. In Germany, municipal enterprises were busy collecting solid domestic waste. In the early 1990s, the processing industry enterprises grew rapidly and now this industry has become a real competition in biogas production in Germany. Waste, which was previously useless, is now a valuable commodity. It is no coincidence that today Germany is one of the leading countries in the world on recycling and use of secondary resources. 50% of waste production is derived from domestic waste, which means that 15 million trees are not cut off. Recycling of so-called waste products contributes to a significant reduction in atmospheric emissions. Thus, when using paper and cardboard, waste water is reduced to 85% and water pollution is reduced by 40%. Thus, 1 ton of waste paper can save 4 m<sup>3</sup> of wood products. In Britain, special boxes for collecting newspapers and magazines have been placed so that the British, after reading the newspapers and magazines, are thrown into them. Therefore, these wastes are sorted and then recycled. In Sweden, new methods of waste paper collection have been developed, with 70-77% of the used paper products, or 1.9 million tonnes, used for recycling during the year. As mentioned above, glass recycling is used for the production of tile and tile floors. The bulk of this raw material is liquid bottles (alcohol and non-alcohol), window glasses, kinoscopes, etc. Recycling 2 bottles of champagne is enough to cover 1 m<sup>2</sup> area. Germany imports about 20,000 tons of such materials annually. These raw materials are sold to many companies through the International Exchanges. Also, in some countries, car parts waste is recycled as a valuable raw material and the useful parts are re-sold. Waste parts are pressed, cut and shredded in special workshops and sent for recycling. In order to separate the metals during the process, they are passed through a special magnetic separator and dispersed after processing the black and non-ferrous metal parts. Plastic and rubber materials inside the car parts are separated and disposed of as special waste. In developed Western countries, such as Switzerland, 15% of the country's metal demand is met by utilizing old cars.

In the European Union, 15% of used tires and about 50% of truck tires are recycled. The useless tires are cut into small pieces in special workshops and are used for bridges construction, drainage collectors, erosion protection of coastal and reservoirs, creation of silencers (for screens on highways), flooring for sports grounds, and installation of engineering facilities [6]. The number of tires that have fallen out of operation as a result of the increasing number of cars in our country is increasing rapidly. Thus, the total weight of tires that have been exploited but left unused in Baku every year is over 50,000 tons. Waste tires are the most harmful environmental pollution because they are not biodegradable, and when burned, black smoke and harmful gas are released into the environment. That is, there are undetectable pollutants in such smoke and gases. At the same time, when the tires are burned, the odor spreads around and becomes very difficult to extinguish. In general, disintegrated rubber-technical products create a major environmental hazard when burned, contributing to the emergence and development of infectious diseases. Therefore, in order to prevent this, many waste is currently being used to: - recycle waste plastic bottles, paper and paperboard products, waste plastic materials, including engine oils and sponge waste, to dispose of these wastes in Baku. Baku Solid Waste Plant with a capacity of 500,000 tons was built. This plant is considered one of the largest plants of this type in Eastern Europe and the CIS and is built in accordance with the EU's toughest environmental standards with the use of fourth-generation technologies (4G). The plant generates 231.5 million kWh of electricity annually, part of which is transferred to the state grid to meet domestic demand. Currently, new technologies are being developed for recycling used tires in different countries. The use of old tires in our country is not sufficiently developed, and appropriate work is required[4]. Thus, the environmental problems caused by environmental pollution can be relatively solved or resolved in different ways. To this end, it is necessary to move to modern production technology, to create waste-free or low-waste industries.

#### **4. CONCLUSION**

Future generations also need to be taken into account in ensuring that today's people have the abundance of resources by ensuring proper and efficient regulation of the use of natural resources. We must remember that the protection of the environment, preserving the ecological balance in the country and passing it to the next generation should be a sacred duty of every Azerbaijani citizen.

#### **LITERATURE:**

1. B.B.Bobovich, V.V.Dyatkin "Production and Consumption of Waste" Baku. "Ekoprint", 2018
2. Bahachi T., Mammadov R.H., Mehdiyeva V.Z. Textbook "Global problems of the modern world". Minimum WUA Baku 2006
3. Z.N.Eminov. «Geography» Baku 2004
4. Nabi Nabiyevev "Economics, society and environment". Baku 2000
5. Karib Mammadov, Mahmud Khalilov "Ecology and environmental protection". Elm Publishing House, Baku-2005
6. Aliyev H.A. "Excitement Baku." Science 2007
7. Information from international and local media (internet resources).

## WEALTH TAX AS A WAY TO REDUCE CASH HOARDING

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### **ABSTRACT**

*One of the factors negatively affecting economic growth and employment in the advanced economies is cash hoarding. The paper argues that an effective way to reduce cash hoarding is a wealth tax. It is argued that a wealth tax will encourage individuals to invest in high-yield assets, such as equities rather than to hold deposits in banks; and an increase in equity demand will cause IPO activity to increase that will contribute to investment and economic growth.*

**Keywords:** *Cash hoarding, Deposits, Economic growth, Loans, Wealth tax*

### **1. INTRODUCTION**

Despite the massive injections of liquidity and near-zero interest rates since 2008, economic growth rates and employment in the advanced economies remain below pre-crisis level. One of the factors negatively affecting the economy is cash hoarding. Until 2009, deposits and loans in the United States were roughly equal, but in 2019 the gap between deposits and loans amounted to 3.2 trillion dollars. That is, savings attracted by banks are not directed to the real sector, but are stored in banks, which negatively affects economic growth and employment, and cash at banks in the United States increased from 2% of GDP in 2007 to 8.3% of GDP in 2019. In the Euro area the gap between deposits and loans increased from 0.3 trillion euro in 2013 to 1.5 trillion euro in 2019 that caused an increase in credit institutions' current accounts from 2% of GDP (2014) to 14% of GDP (2019). Cash hoarding negatively affects equity demand. In the USA, the dominant source of equity demand is corporate buybacks, whereas other sources, including households, remain weak. As a result, despite an increase in the stock market, IPO activity remains weak that negatively affects investment and economic growth. Cash hoarding is likely to increase during an economic recession caused by a pandemic. The paper argues that an effective way to reduce cash hoarding is a wealth tax since, in order to offset the wealth tax, the rational taxpayer will invest in high-yield assets, such as equities rather than to hold deposits in banks; and an increase in equity demand will cause IPO activity to increase that will contribute to investment and economic growth.

### **2. CASH HOARDING IN DEVELOPED ECONOMIES**

In response to the financial crisis of 2007-2008 Central Banks in developed economies inject money into the financial system and cut interest rate nearly to zero, hoping to boost lending to households and businesses. However despite near-zero interest rates and massive injections of liquidity, economic growth rates and employment in the advanced economies remain below pre-crisis level (Figure 1).

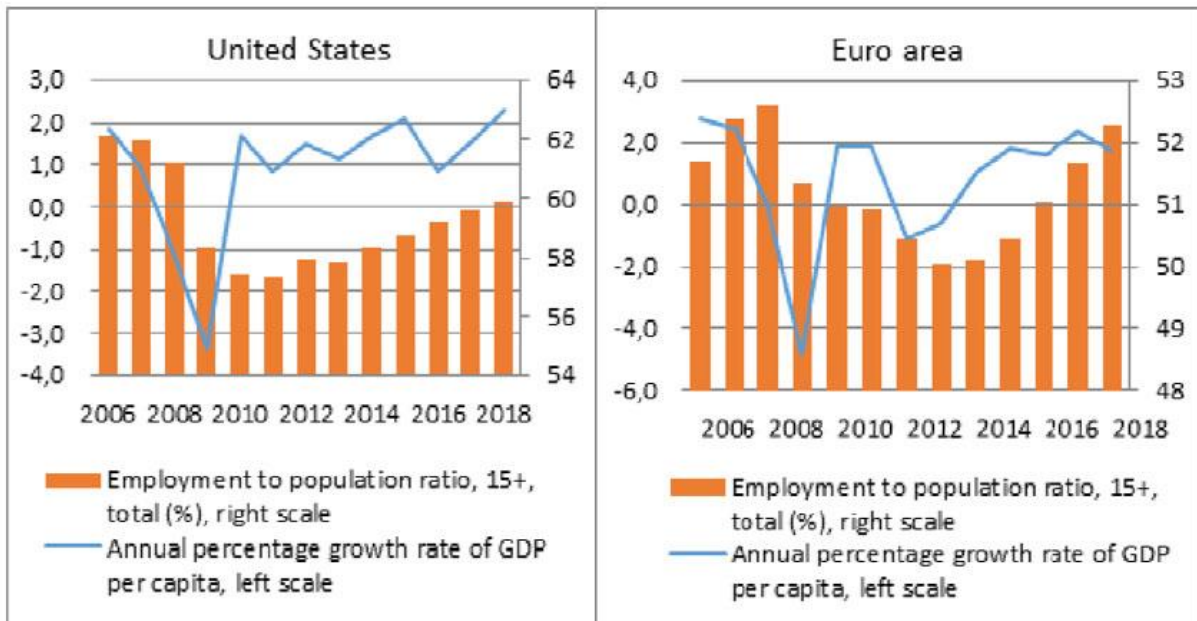


Figure 1: GDP per capita growth and employment in the United States and Euro area  
(Source: FRS, ECB and World Bank)

One of the factors negatively affecting economic growth and employment is cash hoarding. If until 2009 the volume of deposits and loans in the United States were roughly equal, then from 2009, there is an excess of deposits over loans (Figure 2), and the gap between deposits and loans increased from 1 trillion dollars in 2009 to 2.8 trillion dollars in 2014, and despite a decrease in subsequent years, it remains higher than pre-crisis level. As a result, cash at banks in the United States also increased and amounted to 8.3% of GDP in 2019 (Figure 3). Cash hoarding is likely to increase during an economic recession caused by a pandemic.

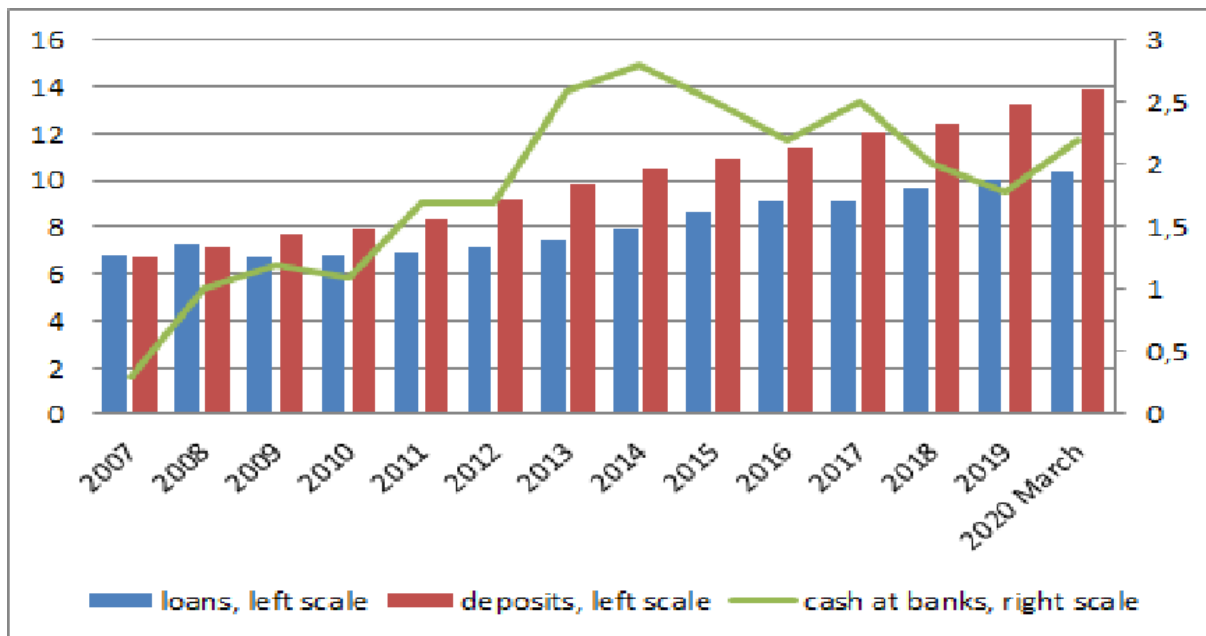


Figure 2: The volume of loans and deposits, and cash at banks in the United States (end of period), trillions of dollars  
(Source: FRS)

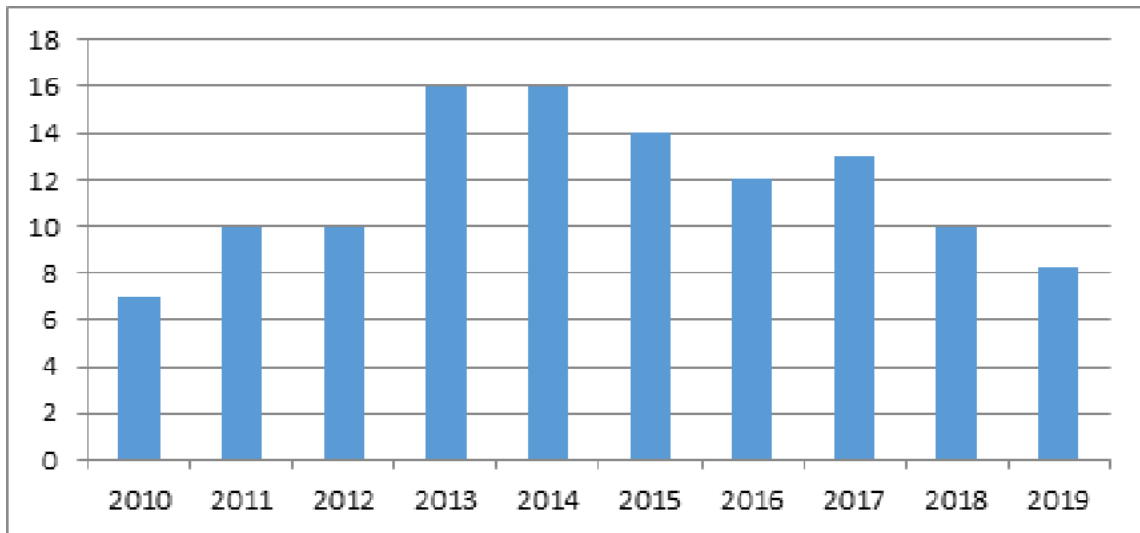


Figure 3: The ratio of cash at banks to GDP in the United States, %  
(Source: FRS)

Cash hoarding is also observed in the Euro area where until 2013 the volume of loans exceeded the volume of deposits, then from 2013, there is an excess of deposits over loans, and the gap between deposits and loans increased from 0.3 trillion euro in 2013 to 1.5 trillion euro in 2019 that caused an increase in credit institutions' current accounts from 0.2 trillion to 1.7 trillion euro (Figure 4), or from 2% of GDP to 14% of GDP (Figure 5).

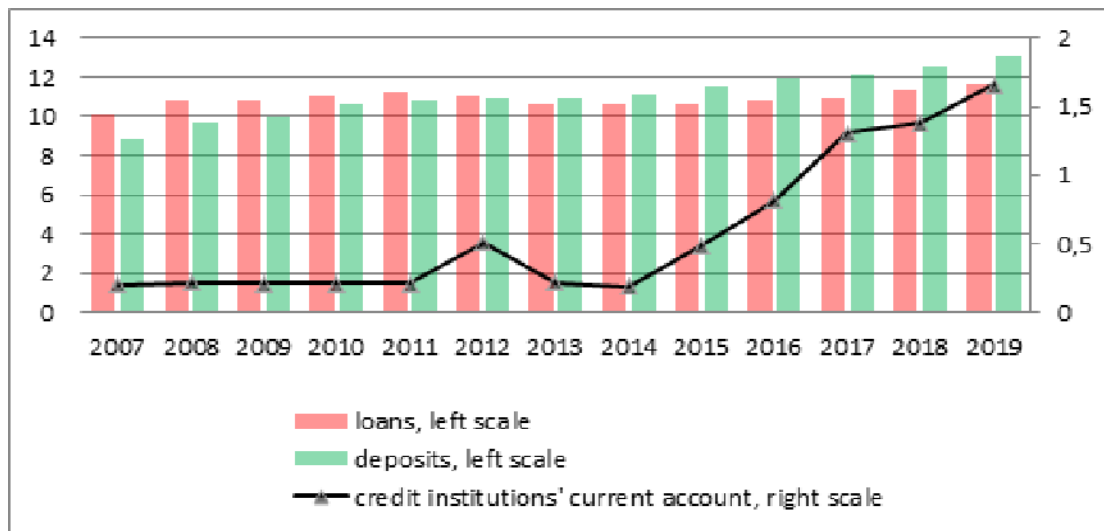


Figure 4: Loans and deposits (non-MFIs excluding general government) and credit institutions' current accounts in the Euro area (end of period), trillions of euro  
(Source: European Central Bank)

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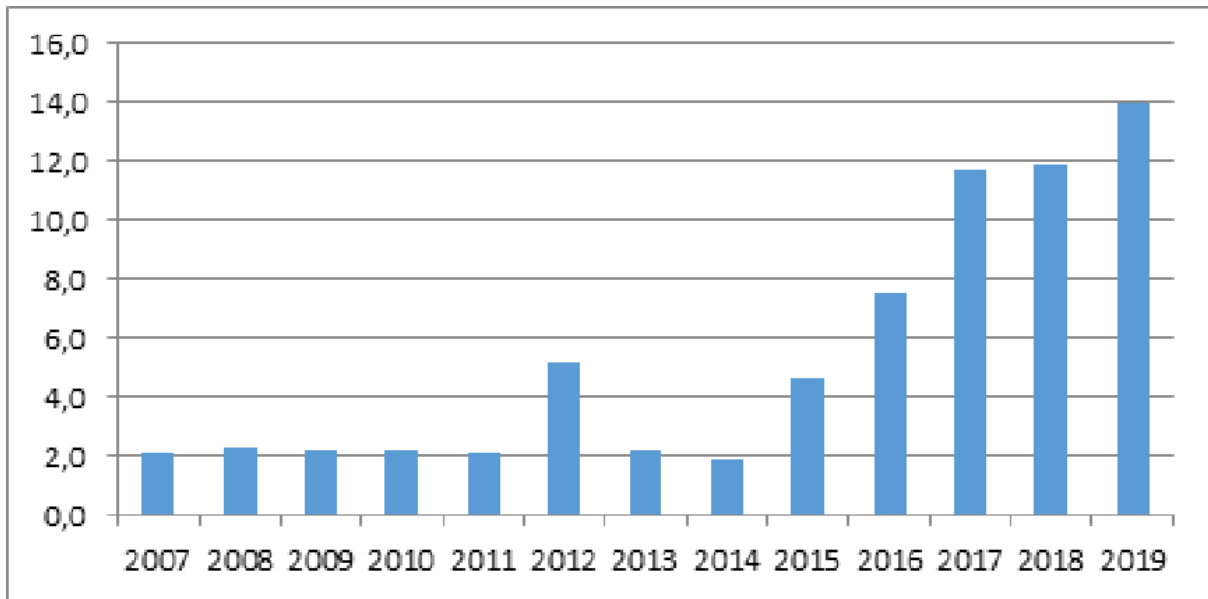


Figure 5: The ratio of the credit institutions' current accounts to GDP in the Euro area, %  
(Source: European Central Bank, Eurostat)

The increase in cash hoarding negatively affects equity demand. According to an analysis by Goldman Sachs, in the USA, the dominant source of equity demand are corporate buybacks, whereas other sources, including households, mutual funds or exchange-traded-funds, remain weak (Matthews, 2019). As a result, despite an increase in the stock market, IPO activity in the USA and Europe remains weak (Figure 6) that negatively affects investment and economic growth.

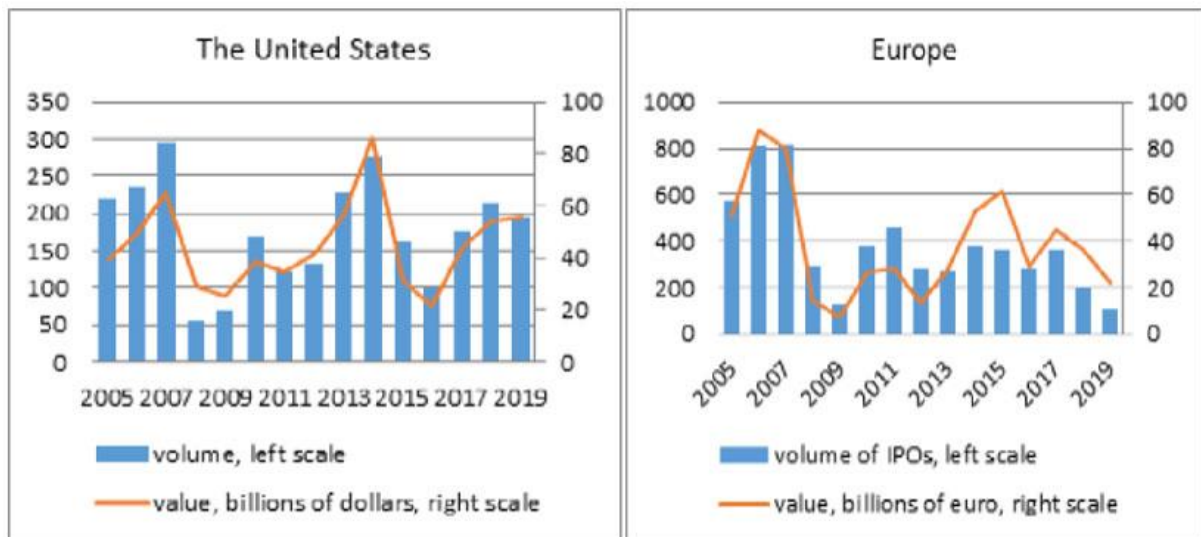


Figure 6: IPO activity in the United States and Europe  
(Source: PWC)

It is also worth noting that in the United States and Euro area there is also a rapid increase in most liquid deposits such as checkable and overnight deposits (Figure 7). It leads to an increase in the share of M1 in money supply that indicates an increase in demand for liquidity, which in turn puts an upward pressure on interest rates and negatively affects economic growth.

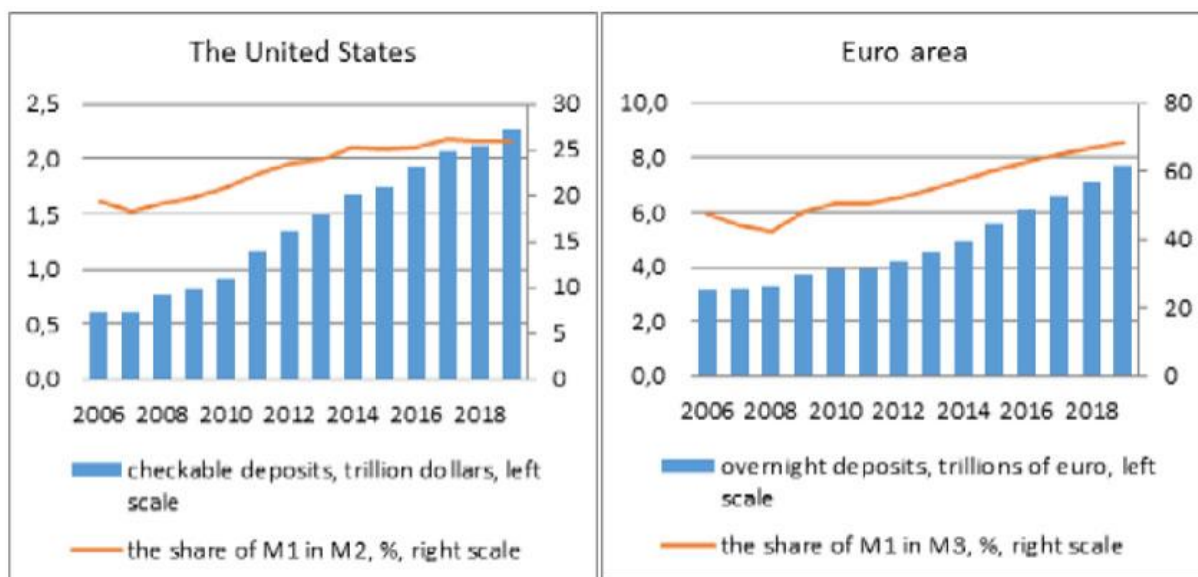


Figure 7: Most liquid deposits (checkable and overnight deposits) at depository institutions and the share of M1 in money supply in the United States and Euro area  
(Source: European Central Bank, FRS)

### 3. WAYS TO REDUCE CASH HOARDING

#### 3.1. Traditional liquidity trap mitigation approaches

As is known, a mechanism which equates deposits and loans is an interest rate. If loans exceed deposits, interest rates rise, which leads to a decrease in loans, and if deposits exceed loans, interest rates decline, which encourages borrowers to take more loans. Today, however, despite the low lending rate, funds saved in banks don't re-enter the economy that negatively affects economic growth. In a situation when Central Bank fails to reduce interest rates, Krugman to promote economic growth proposes to decrease real interest rates through higher inflation (Krugman, 2013). Bernanke also suggests (2016) that to deal with a recession negative real interest rates should be used, and he argues that with the inflation target at its current level of 2%, and assuming that the Fed does not set its policy rate lower than zero, the Fed cannot reduce the real policy rate below -2%, i.e. a zero nominal rate less 2% expected inflation. Since the real policy rate of -2% may not be enough to deal with a bad recession, Bernanke argues that to reduce the real policy rate further, the Fed would either have to lower nominal interest rates into negative territory, raise expected inflation (by raising the inflation target), or both, and Bernanke argues that negative rates are not clearly inferior to a higher inflation target and may even be preferable on some dimensions (Bernanke, 2016). However it is worth noting that higher inflation by creating a negative wealth effect will have a negative impact on economic growth. With regard to negative interest rates, to encourage bank lending some Central Banks use a negative interest rate on bank reserves. In 2014 European Central Bank introduced a negative interest rate, and its deposit rate is currently at -0.4%. The aim of negative rates on bank reserves is to discourage banks from holding cash at the ECB rather than lending it. However despite the negative deposit rate bank lending remains weak, moreover, as shown above, the gap between deposits and loans as well as credit institutions' reserves held at the central bank are not only not diminishing, but are, on the contrary, increasing from year to year. Alongside weak bank lending, banks' interest payments due to negative deposit rates also increase that have a considerable impact on banks' profitability, equating to a 4% decline in profits in 2018 (Smith, 2019). According to Richard Koo, in a liquidity trap monetary policy to stimulate economic activity becomes ineffective as interest rates are at very low levels, with no room to reduce them further.



Koo argues that when an economy is in a liquidity trap the only policy to keep the economy away from recession is government borrowing and spending the unborrowed savings in the private sector. In other words, the government should serve as borrower of last resort (Koo, 2016). It is worth noting, however, that as the funds spent by the government are obtained mainly by unprofitable firms, government borrowing and spending will lead to a misallocation of resources resulting in low economic growth.

### 3.2. Wealth tax and its impact on cash hoarding

An effective way to reduce cash hoarding is a wealth tax which induces the productive use of assets since, in order to offset the wealth tax, the rational taxpayer will invest in high-yield assets, such as equities rather than to hold deposits in banks that causes cash in banks to decrease; and an increase in equity demand will cause IPO activity to increase that will contribute to investment and economic growth. A wealth tax is applied in only a few countries. Among European countries only Norway, Spain, Switzerland have wealth taxes (Wealth taxes were applied in numerous European countries, but many countries have abolished it in recent years). However, even in countries where wealth is taxed, this tax is levied only on large wealth (in Spain a tax is levied on wealth above €700,000, in Norway a tax is imposed on wealth above 1.48 million krone, or \$174,000 (Zeballos-Roig, 2019)) that makes this tax is inefficient in reducing cash hoarding. In most countries a tax on income from savings and investments is applied. However in contrast to a wealth tax, a capital income tax distorts investment decisions because it induces people to invest in assets which increase in value rather than in assets which have a current return in order to avoid the income tax (Shakow, 2016). Thus, replacing a capital income tax with a tax on financial assets would lead to more productive uses of assets. Thus, an effective way to reduce cash hoarding is a wealth tax which encourages individuals to invest in high-yield assets, such as equities rather than to hold deposits in banks; and increase in investment in equities will cause a number and volume of IPO to rise that will contribute to an increase in investment and GDP growth.

## 4. CONCLUSION

The United States and Eurozone countries face cash hoarding that causes a low economic growth rate and low employment. The paper argues that an effective way to reduce cash hoarding is a wealth tax which encourages individuals to invest in high-yield assets, such as equities rather than to hold deposits in banks; and an increase in investment in equities will cause IPO activity to increase that will contribute to investment and economic growth.

## LITERATURE:

1. Bernanke, B. (2016). *Modifying the Fed's policy framework: Does a higher inflation target beat negative interest rates?* Retrieved 02.05.2020 from <https://www.brookings.edu/blog/ben-bernanke/2016/09/13/modifying-the-feds-policy-framework-does-a-higher-inflation-target-beat-negative-interest-rates/>
2. Koo, R. (2016). The other half of macroeconomics and the three stages of economic development. *Real-world economics review*, issue no. 75 (p. 2-48)
3. Krugman, P. (2013). *Monetary policy in a liquidity trap*. Retrieved 24.04.2019 from <http://krugman.blogs.nytimes.com/2013/04/11/monetary-policy-in-a-liquidity-trap/>.
4. Matthews, C. (2019). *Buybacks are the 'dominant' source of stock-market demand, and they are fading fast: Goldman Sachs*. Retrieved 02.05.2020 from <https://www.marketwatch.com/story/buybacks-are-the-dominant-source-of-stock-market-demand-and-they-are-fading-fast-goldman-sachs-2019-11-06>
5. Shakow, D. (2016). A Wealth Tax: Taxing the Estates of the Living. *B.C.L. Rev.*, Vol. 57 (p. 947-978). Boston College Law School

6. Smith, E. (2019). *European banks have paid over 20 billion euros to the ECB since negative interest rates*. Retrieved 02.05.2020 from <https://www.cnn.com/2019/06/10/european-banks-have-paid-over-20-billion-euros-to-the-ecb-since-negative-interest-rates.html>
7. Zeballos-Roig, J. (2019). *4 European countries still have a wealth tax. Here's how much success they've each had*. Retrieved 02.05.2020 from <https://www.businessinsider.com/4-european-countries-wealth-tax-spain-norway-switzerland-belgium-2019-11>

# THE ROLE OF THE EUROPEAN UNION IN THE SOCIO-ECONOMIC INTEGRATION OF IMMIGRANTS RESIDING IN AZERBAIJAN: CURRENT PROBLEMS, TENDENCIES AND PERSPECTIVES

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## ABSTRACT

*The chosen research proposal mainly concerns on the migration issue, which has become a phenomenon in the European Union's political economy in the contemporary era, within the last three years, which identifies the role of migrants living in Azerbaijan in the labor market and other areas of economic integration involving the current trends, challenges and perspectives in the political or socio-economic fields. The long-brewing Civil War in Syria created a large-scale trajectory of migrants, resulting in a massive influx of refugees from Turkey to Greece and then to Germany. Today, the issue of migration is now transforming into a phenomenon among the member states of the European Union prompting them to take immediate action and make crucial decisions in the country's political economy. As a result, modern migration can play a pivotal role both for the EU and for Azerbaijan in the direction of flow of people, capital and services, remittances, improving socio-economic well-being and the cheap labor force in the international labor market. The key criterion of the study is to identify specific ways in which persons or migrants who are involved in the migration process can be able to also contribute to the sustainable economic development of the region by positively influencing IDPs on the local population, labor market activities and overall political and economic activity. The main idea behind the research is to investigate the economic integration of immigrants in Azerbaijan through its original theoretical and empirical study of migration that plays an important role in the EU's political economy. The research aims to better regulate labor migration processes in Azerbaijan with the help of the European Union and to optimize the impact on labor productivity in the country by providing economic integration of migrants in the local labor market. The main focus of this study is to identify the role of the European Union in the economic integration of immigrants in Azerbaijan, the legal migration and migration process, based on the Joint Declaration on Resettlement Partnership (MOBILAZE), launched between the EU and Azerbaijan.*

**Keywords:** *European Union, Azerbaijan, Labor migration, Immigrants, Political economy, Local labor market*

## 1. INTRODUCTION

At present, Azerbaijan considers the establishment and strengthening of cooperation with the European Union in both energy and socio-economic spheres as one of the priorities of its foreign policy. It should be noted that since 1991, the EU has allocated about 333 million euros for Azerbaijan within the framework of various humanitarian and technical projects, as well as food and emergency support ones. In recent years, there have been major shifts in the migration policy of Azerbaijan, confirming economic development and the economic integration of migrants, among which the inclusion of migration legislation in the Unified Migration Code of the country is particularly considered important. Recently, the number of short-term migrants to Azerbaijan has been increasing, with 54,000 temporary residence permits issued in 2015 and 48,500 in 2016, and the vast majority of whom are citizens of Turkey, Russia, and Georgia.

However, to apply for the permanent residence permit requires a temporary living permit in the country for at least two years. In 2016, at least 15,100 people immigrated to Azerbaijan and more than 3,200 permanent residence permits were issued for them (see table 1 below). Azerbaijan is currently taking appropriate measures and decisions based on the Joint Declaration on Partnership with the European Union (MOBILAZE) to ensure transparent and efficient organization of migration, in particular, labor migration. The project called MOBILAZE aims to support the implementation of the Mobility Partnership Program between the European Union and Azerbaijan, with a special focus on strengthening the country's capacity to effectively develop and implement the government's national migration policy. The project is being implemented by the International Center for Migration Policy Development (ICMPD) with nine executive partners from seven EU member states, namely Bulgaria, the Czech Republic, Latvia, Lithuania, the Netherlands, Poland, and Slovakia. Azerbaijan started implementing this project on January 15, 2016. The five-component project mainly encompasses the development of analytical skills to formulate an informed migration policy, legal migration to Azerbaijan and other countries, document security, asylum decision-making procedures, return, and reintegration<sup>1</sup>. The importance of this program transparently implemented by the EU to boost up the integration of migrants in the socio-economic life of the country and the enforcement of economic activities in the local labor market should have to be emphasized. Recently, migration policy and its direct impact on economic life have been identified as a topical issue in the country.

## 2. RELEVANCY OF THE STUDY

The main objective of the research is the provision of the economic integration of migrants in the labor market of Azerbaijan through the engagement of the EU. Therefore, the study content is to determine the role of the European Union in the economic integration of immigrants in Azerbaijan, to achieve the proper development of legal migration and labor migration. The study is characterized as a kind of new research topic in recent years, based on the processes of economic integration and labor migration of foreign migrants in the local labor market of Azerbaijan. The research provides new points for the organization of effective economic integration of foreign migrants in the Azerbaijani labor market and the correct and transparent organization of labor migration for the development of the country's economy and in-depth analysis of possible trends, current problems and prospects. The main object of the study is a project to support the development of migration processes applied by the European Union to Azerbaijan. The study cited the MOBILAZE support project and the International Center for Migration Development, funded by the State Migration Service and the European Union. As a result of the Syrian Civil War and the refugee crisis that followed the Arab Spring of 2011, the EU's migration policy has been re-examined by many European and even local political researchers, interlocutors, and economists. However, from the point of view of Azerbaijan, the chosen study has not been fully studied before and in this respect, can be characterized as incomplete. In recent years, a sharp influx of migrants to Azerbaijan has been observed both in terms of education and work, and at the same time, the government agencies impose a number of obligations on educational institutions for the transparent organization of migration.

## 3. DISCUSSION AND ANALYSIS

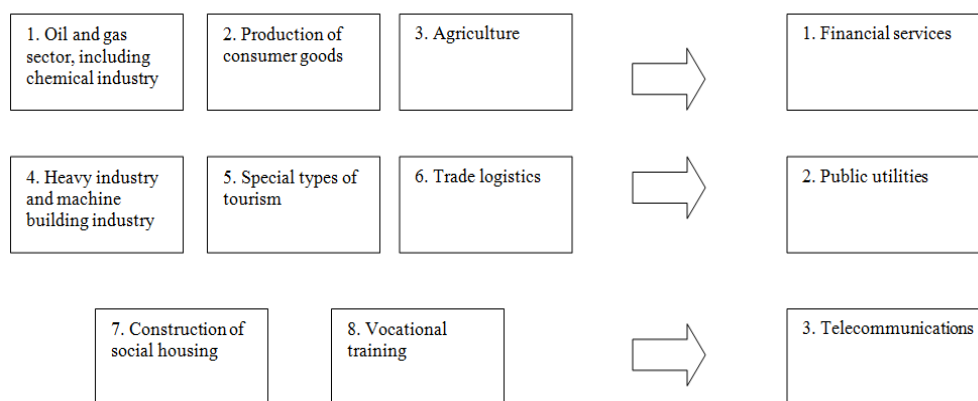
Nowadays, the European model can be successfully noted in the migration policy and the regulation of migration issues. The main criterion of the mentioned model for the admission of immigrants is the recruitment of qualified and educated foreign personnel to be successfully

<sup>1</sup> MSIBM (2016)., "Azərbaycan Respublikasında qanuni və əmək miqrasiyası mexanizmlərinin təhlili"/

"Analysis of legal and labor migration mechanisms in the Republic of Azerbaijan", "MOBILAZE Layihəsi çərçivəsində hazırlanmış hesabat, Mövcuddur: [http://www.icmpd.org/fileadmin/user\\_upload/Com2\\_Assessment\\_report\\_FINAL\\_EN.pdf](http://www.icmpd.org/fileadmin/user_upload/Com2_Assessment_report_FINAL_EN.pdf)

assimilated with locals in the region. From this point of view, Azerbaijan should take appropriate steps and implement an action plan to attract qualified and educated personnel to the labor market, which can play a crucial role in the development of the country's economy. At the same time, the opportunities for Azerbaijani migrants and members of the diaspora living abroad to use their social, educational and economic potential for existing economic purposes as much as possible have to be taken into account. In recent years, the "Strategic Roadmap for the National Economy and Key Sectors of the Economy" provides for the implementation of the necessary work to further develop 11 key sectors related to the labor market policy of the country. In this regard, the following eight key sectors as well as three other supporting sectors have been identified below.

*Figure 1: Eight main and three other supporting sectors to be developed according to the "Strategic Roadmap for the National Economy and Key Sectors of the Economy" of Azerbaijan*



*Source: Strategic Roadmap for the National Economy and Key Sectors of the Economy, Composed by author*

It should be noted that the labor quota for foreigners, introduced in 2010, is used, among other things, as a tool to protect the local workforce. Article 61.2 of the Migration Code of the Republic of Azerbaijan stipulates that one of the main conditions for foreign labor to engage in paid employment in the country is the availability of vacancies that are not claimed by a citizen of the Republic of Azerbaijan with vocational training and qualifications. This is mainly related to the introduction of labor market testing in the local labor market taking into account the foreign labor force in Azerbaijan. In general, a party intending to employ a foreign national must apply to the relevant state authorities in order to obtain a permit on behalf of foreign employee to legally reside in the country<sup>2</sup>. One of the main factors enticing immigrants to Azerbaijan is the country's economic development, which in recent years, has been characterized primarily by a significant increase in per capita gross domestic product (GDP) and a reduction in poverty compared to previous years. In 2000, the growth rate of the national economy was the highest in the world, and compared to all other countries in 2006, a record figure was achieved in this area, constituting 34.5%<sup>3</sup>. Moreover, due to the significant increase in the number of births compared to the number of deaths in the country, the country's population is estimated at 10 million in 2020 and 11 million by 2050.<sup>4</sup>

<sup>2</sup> To get acquainted with the legislation and policy related to labor migration, you need to look at the "Analysis of legal and labor migration mechanisms in the Republic of Azerbaijan" Assessment Report.

<sup>3</sup> AZSTAT, 2017d; World Bank 2018b

<sup>4</sup> Wittgenstein Centre for Demography and Global Human Capital, 2014, UNDP / United Nations Department of Economic and Social Affairs, 2015

Due to the development of labor migration in the country, the volume of remittances from Azerbaijan increased in parallel with the volume of remittances sent to this country, which, as a result, reached a record high of \$ 2.1 billion in 2012. In the same year, it was the expenditures that slightly exceeded the revenues, resulting in a negative balance. (It was set at -83 million US dollars in 2012 and -23 million US dollars in 2015)<sup>5</sup> (see tables 2 and 3 below). One of the ways to ensure future economic development is to use the potential of labor migration correctly and transparently. In this regard, the development of Azerbaijan's non-oil sector and the private sector, the attraction of foreign and local labor in the local market is of particular importance. At the same time, opportunities for sustainable business support should be used to the full. On the other hand, investment in education is considered one of the most promising strategies for increasing medium and long-term productivity in the country. For the current period, Azerbaijan lags behind other middle-income countries in terms of enrollment in higher education in the country (20%)<sup>6</sup>. It is an undeniable fact that the immigration of foreigners is mainly due to the desire to find a job in the local labor market. Thus, relocations for education and asylum only cover a very small part of the immigration process. In this regard, Azerbaijan is gradually becoming a country of labor immigration for short-term migrants. Recent innovations and developments in the construction and oil sectors are attracting a growing number of foreign workers to this country. Migration systems are mainly characterized by the development of multifaceted historical, cultural, economic, and social ties of each nation state. In this regard, one of the main priorities of the study is to accurately identify the role of migrants living in Azerbaijan in the labor market, the emerging trends related to their economic integration and adaptation, and the proper development of relevant opportunities. At present, the country is undertaking the clear-cut measures, such as the process of diversification and transparency of the migration system, proper and effective management of labor migration, and so on. Therefore, Azerbaijan, in turn, further strengthens cooperation with the EU member states including Germany, France, the Netherlands and Sweden to regulate relocation in both directions and increases the level of partnership. In addition, temporary or periodic migration processes in the country are inclined to intensify. At the present time, determining the role of migrant workers in the local labor market of Azerbaijan and scrutinizing their impact on local GDP, the proper organization of labor migration are assessed as key factors in the development of the country's economy. In this regard, the researcher identified the issue of migration, which has become a phenomenon in the political economy of the European Union in modern times and its role in the economic integration of migrants living in Azerbaijan in the labor market and other areas. The recent influx of foreign immigrants or labor force into the country is forcing Azerbaijan to take the necessary measures to properly regulate labor migration and, at the same time, to ensure their proper economic integration into the local labor market. In the end, the researcher points out that the attraction of highly qualified personnel or immigrants to the European political and economic system plays an important role in increasing labor productivity and the GDP of the host country. At the same time, this empirical approach considers it necessary to increase the socio-economic well-being of immigrants living in the country and ensure their social regulation and entrepreneurial rights.

#### 4. LIMITATIONS

The one of limitations of the research is mainly related to the threat of illegal labor migration in the country. In this regard, the State Migration Service (SMS) should have to undertake the necessary measures in this sphere and conduct scientific and statistical research.

<sup>5</sup> Central Bank 2017, Expert Estimates, International Center for Migration Development, MOBILAZE Support Project Research Estimates

<sup>6</sup> Analysis of legal and labor migration mechanisms in the Republic of Azerbaijan ", Report prepared within the MOBILAZE Project.

The main problem in the current period is the effective economic integration of foreign personnel in the country. Therefore, the opportunities for foreigners to do business with local employees and participate in the oil and non-oil sector should be increased so that they can apply their skills in the field of innovation to adapt to the local labor market and contribute to the country's economic development. In the context of the sustainable economic integration of immigrants in the local labor market in the country, the provision of social benefits should also be applied to highly qualified migrant workers in Azerbaijan. Pursuant to this, the involvement and support of returning migrants, especially in the non-oil sector (tourism, hospitality, construction, logistics, education, etc.) and the stimulation of entrepreneurship among foreign immigrants can be important in the development of labor productivity in the country. Another limitation is the regulation of the migration balance in Azerbaijan. Thus, in 2016, at least 15,100 people immigrated to Azerbaijan and at least 28,600 people emigrated from this country. Hence, it can be assumed that the negative migration balance is at least 13,500 people. Along with all these difficulties, taking into account the current economic situation, it is inevitable that Azerbaijan will be facing difficulties in achieving one of the main goals of state policy, or more precisely, in attracting highly qualified foreign labor force to the country. In this regard, the process of involving highly qualified immigrants as a foreign labor force should be stimulated in order to meet the demand for skilled labor of the country, especially in the non-oil sector of the economy.

**LITERATURE:**

1. Analysis of legal and labor migration mechanisms in the Republic of Azerbaijan,
2. MOBILAZE Layihəsi çərçivəsində hazırlanmış hesabat, Mövcuddur: [http://www.icmpd.org/fileadmin/user\\_upload/Com2\\_Assessment\\_report\\_FINAL\\_EN.pdf](http://www.icmpd.org/fileadmin/user_upload/Com2_Assessment_report_FINAL_EN.pdf);
3. Analysis of legal and labor migration mechanisms in the Republic of Azerbaijan" Assessment Report;
4. AZSTAT, 2017d; World Bank 2018b;
5. Wittgenstein Centre for Demography and Global Human Capital, 2014;
6. UNDP / United Nations Department of Economic and Social Affairs, 2015;
7. Central Bank 2017, Expert Estimates, ICMD, MOBILAZE Support Project;

## APPENDIX

Table 1: Citizenship and number of immigrants who came to the Republic of Azerbaijan for permanent residence in recent years in 10 countries of origin

Country origin	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Georgia	238	158	403	68	35	48	7	696b	490	782	1.134
Russia	1.394	1.269	2.024	1.580	1.706	1.655	1.628	1.098b	623	930	910
Turkey	7	8	267	38	4	3	4	398b	160	164	214
Iran	4	7	32	6	5	-	-	120b	106	144	145
Kazakhstan	94	92	196	157	177	183	229	130b	81	103	132
Ukraine	127	105	174	130	97	103	73	173b	72	99	126
Turkmenistan	171	159	204	154	62	37	36	91b	48	50	124
Uzbekistan	111	77	96	70	53	58	62	93b	68	95	116
Kyrgyzstan	12	10	11	18	4	13	33	42b	16	33	46
Pakistan	-	-	22	-	-	-	-	45b	22	30	19
Other	74	69	168	71	85	81	100	243b	173	219	267
CIS countries	1.956	1.749	2.781	2.155	2.166	2.111	2.134	1.668b	926	1.336	1.493
Other	276	205	816	137	62	70	38	1.461b	933	1.313	1.740
<b>Total</b>	<b>2.232</b>	<b>1.954</b>	<b>3.597</b>	<b>2.292</b>	<b>2.228</b>	<b>2.181</b>	<b>2.172</b>	<b>3.129b</b>	<b>1.859</b>	<b>2.649</b>	<b>3.233</b>

*b* - after change;

"-" = information not available;

Returned citizens of the Republic of Azerbaijan are not included. The number of temporary residence permits issued in the country was not taken into account.

Source: State Migration Service (SMS) and the Ministry of Internal Affairs (MIA)

Table 2: The volume of remittances sent to and from the country in 2008-2016 (in the amount of one million US dollars) according to the Central Bank of the Republic of Azerbaijan

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Volume of imports into the country	1.416	1.182	1.338	1.772	1.852	1.579	1.709	1.183	564
Annual shifts	18.8%	-16.6%	13.2%	32.4%	4.6%	-14.7%	8.2%	-30.8%	-52.3%
Volumes of exports from the country	399	522	840	1.138	1.892	1.579	1.523	943	490
Annual shifts	45.9%	30.9%	60.8%	35.5%	66.2%	-16.6%	-3.5%	-38.1%	-48.1%
Balance	1.017	659	498	633	-40	0	186	240	75

Table 3: The volume of remittances sent to and from the country in 2008-2016 (in millions of US dollars) according to the World Bank

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Volume of imports into the country	1.518	1.255	1.410	1.893	1.990	1.733	1.846	1.270	643
Annual shifts	19.8%	-17.4%	12.4%	34.2%	5.1%	-12.9%	6.5%	-31.2%	-49.4%
Volumes of exports from the country	567	638	954	1.280	2.073	1.903	2.031	1.293	-
Annual shifts	40.2%	12.5%	49.4%	34.2%	62.0%	-8.2%	6.8%	-36.3%	-
Balance	951	617	457	613	-83	-169	-185	-23	-

Source: Central Bank 2017, Expert estimates, International Center for Migration Development, MOBILAZE support project research calculations



## THE WORLD TRADE ORGANIZATION AND AZERBAIJAN

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### ABSTRACT

*Membership in the World Trade Organization (WTO) is a complex process involving the improvement of agreement on trade tariffs, as well as the process of improving the regulations of normative legal acts of foreign trade of the applicant country. The analysis of the bilateral negotiations of the Republic of Azerbaijan in the WTO accession process indicated that the main objective of the organization was the liberalization of world trade, the removal of existing restrictions and prohibitions. The article explored the country's agricultural sector's commitments, and the gains and losses of Azerbaijan's WTO accession were assessed in various aspects. As a result of the research, it was determined that most degraded area in Azerbaijan would be the agricultural sector during WTO admission. Therefore, in the negotiations with the WTO on subsidies in the field of agriculture, it is necessary to achieve a subsidy of 10% of annual agricultural production. As a result, in recent years our country has achieved significant economic growth and sustainable economic growth and its integration with the world community through its foreign trade policy and successful reforms in the country. Extensive analysis have been carried out, in which the WTO membership has highlighted challenges for the national economy, and the pros and cons of this process have been investigated in detail.*

**Keywords:** *WTO, agriculture, state regulation and assistance, international trade, liberalization*

### 1. INTRODUCTION

More than 98% of world trade fall into the share of WTO member countries. The WTO implements the regulation of trade relations between countries on the basis of multilateral trade agreements. The multilateral trade agreements forms the normative-legal base of the organization. These agreements regulate trade in goods and services, intellectual property, trade policy reviews and dispute resolution. The main goal of the WTO is the maximum liberalization of international trade and the creation of its solid foundations, thereby increasing economic development and improving people's living standards. The main functions of the organization is the monitoring of the implementation of trade agreements between WTO members, the organization and provision of trade negotiations between WTO members, monitoring of trade policies of WTO members, settlement of commercial disputes between members of the organization. The Republic of Azerbaijan submitted an application to the WTO Secretariat on June 23, 1997, reflecting its desire to join the WTO. On the basis of the above mentioned application, the WTO Secretariat decided to establish a working group on Azerbaijan on July 16, 1997. Since then, the negotiation process between the WTO and the working group on Azerbaijan has been ongoing<sup>1</sup>. For this reason, the Cabinet of Ministers of the Republic of Azerbaijan established an interagency coordination group for the acceleration of the process of

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<sup>1</sup><http://www.wto.az/azerbaycan-ve-utt/muraciet-ve-uzvolma-xronologiyasi/>

accession to the WTO countries by the Order # 226 S on November 19, 1999. In our opinion, joining the WTO should not be the main goal in itself, and membership in this organization at any reason cannot be considered right. Thus, this is far from reality, no matter how desirable not only for Azerbaijan, but also for industrialized countries. At the same time, it should be noted that the expenses of membership in the organization dictates certain sacrifices. Thus, the main goal for the country is to join this organization under certain conditions, i.e. for the country to have conditions that do not violate its rights in international trade, to provide access to world markets for goods and services. One of the most important outcomes of the Uruguayan tour was the adoption of comprehensive trade rules in agriculture. The main goal was to ensure fair competition and market-oriented reforms in the agricultural sector. Agreements on agriculture provide primarily for the utilization of measures to support national agricultural producers in such a way as to minimize their distorting effect on trade. Such measures include the implementation of structural reforms in the agricultural sector. The agreement takes into account the interests of developing countries, including net food importers, as well as the least developed countries. The member countries of the agricultural agreement undertake the following obligations in four main areas:

- providing access to the market of agricultural and food products;
- state support of agriculture;
- Ensuring export competition in agriculture and food trade;
- implementation of sanitary and phytosanitary measures.

The main solutions ways of the problems that negatively affect to the agricultural trade have been revealed in the agreement, including the need to reduce the maximum permissible level of customs duties on import in developed countries after accession to the WTO by an average of 36% within 6 years. Reduction of rates should be carried out in equal shares over the years, and the minimum reduction for individual goods should be 15% (according to the 9 code symbols of the Commodity Nomenclature of Foreign Economic Activity). The rules of this clause of the Agreement create certain conditions for the provision of selective and adequate protection for the most vulnerable commodity groups. Thus, the main requirements of the WTO agreement on agriculture are the opening of markets of “third world” countries, the creation of favorable conditions for the development of agriculture, where the main target is to provide the population with food. However, while this agreement created conditions for agricultural subsidies in developed countries, it also limited the access of “third world” countries to the world market with their agricultural products. For example, the United States and the European Union continue to subsidize agriculture in their countries, which leads to the overflow of markets in the periphery with subsidized products, which in turn leads to lower prices for these goods and the bankruptcy of local producers.

## **2. FINDINGS**

While analyzing the above mentioned problem, we will see that how it will affect to the agriculture of our country and the agriculture is the main occupation in Azerbaijan, and most people working in this sector are engaged in economic activities not for commercial purposes but to meet their personal needs. For this reason, it is clear that the agricultural sector will be the most problematic area in Azerbaijan at the time of accession to the WTO. It should be noted that along with agriculture, there will be other areas that will undergo adaptation decline. Examples include the financial, banking, insurance, manufacturing, and other service sectors, which have been regulated for years by foreign capital reserves. The situation of these areas should not be overlooked out of the state’s attention. Interestingly, the only area where these processes cannot be harmed may be the oil sector, as the WTO does not yet have special conditions for the oil sector.

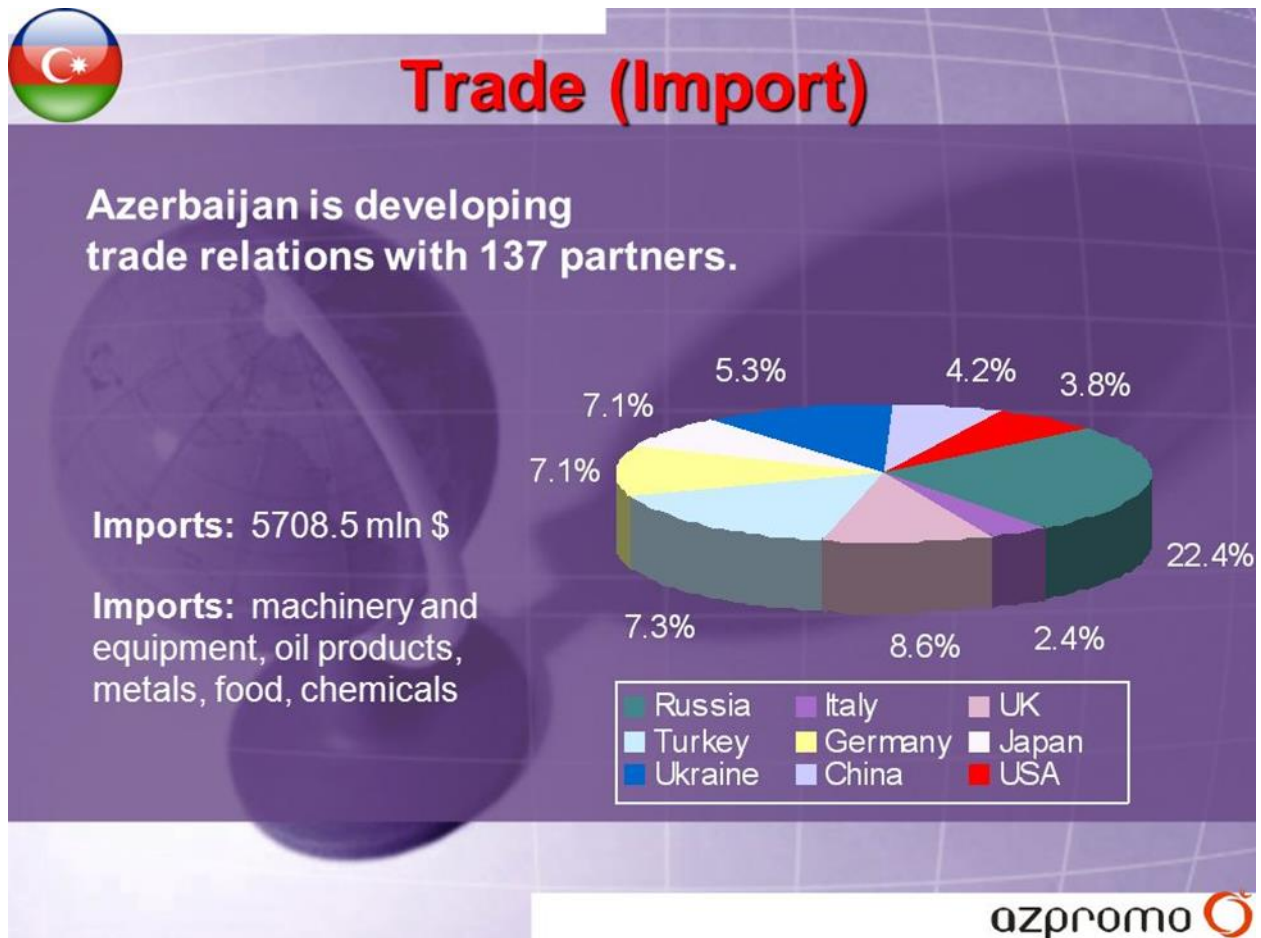
In this regard, as a fact, the terms of Azerbaijan's membership in the oil sector are not discussed. It should be noted that the WTO does not prohibit protectionism, but allows the increase of tariffs and subsidies only within the framework of negotiated and accepted norms. It must be acknowledged that the WTO seeks to eliminate quantitative restrictions on trade, to make trade policy clear and transparent, on the basis of the application of fertile national regimes based on the principle of free access to markets, as well as the elimination of quantitative restrictions on imports. It serves to ensure the effective organization, as well as to ensure openness and transparency in the foreign trade regime of member countries. At present, customs duties on imports in Azerbaijan range from 0-15 percent, and their average rate varies around 7-8 percent, and our country has committed to the IMF to adjust the average interest rate to 5-6 percent. The statistical characteristics of the trade turnover of the Republic of Azerbaijan with the WTO member countries for the last five years are given in the below mentioned table. As can be seen from the table, although our country is not a member of this organization, close trade and economic relations with member countries have developed with high growth from year to year (Table 1).

*Table 1: Close trade and economic relations with member countries*

Country	2014	2015	2016	2017	2018
<b>Total</b>	<b>31,016,306.5</b>	<b>21,945,815.6</b>	<b>21,946,732.5</b>	<b>24,103,278.5</b>	<b>30,923,602.6</b>
<b>CIS countries - Total</b>	<b>2,921,244.1</b>	<b>2,487,471.5</b>	<b>2,822,204.2</b>	<b>3,525,038.9</b>	<b>4,000,356.7</b>
<b>including</b>					
Belarus	99,032.7	93,674.6	124,531.1	147,700.6	203,665.5
Kazakhstan	250,895.6	116,883.4	124,391.3	142,099.9	220,789.4
Republic of Moldova	5,501.4	4,007.9	4,462.3	6,993.8	6,688.8
Russian Federation	1,954,751.7	1,855,692.3	2,050,953.1	2,141,121.1	2,550,906.0
Turkmenistan	51,201.2	52,433.9	152,276.0	164,135.7	133,151.9
<u>Ukraine</u>	468,021.7	333,129.0	331,215.5	889,181.2	828,536.7
<b>Other countries - Total</b>	<b>28,095,062.4</b>	<b>19,458,344.1</b>	<b>19,124,528.3</b>	<b>20,578,239.6</b>	<b>26,923,245.9</b>
<b>including</b>					
Germany	2,629,200.3	1,913,958.5	1,001,323.4	894,183.0	1,440,760.2
United States of America?	1,309,246.2	1,185,093.8	552,255.9	781,785.7	858,627.6
United Kingdom	1,104,785.1	563,735.8	575,132.5	281,064.2	525,174.6
<u>Brasil</u>	221,753.5	119,902.3	164,835.1	172,590.3	170,884.2
China	760,945.4	565,111.5	1,085,832.8	1,298,342.3	1,310,247.0
Hong Kong, administrative region of China	2,084.6	2,564.3	1,060.7	2,736.5	4,231.2
<u>Macao</u> , administrative region of China	-	-	0.0	0.6	0.0
Denmark	19,891.2	16,710.0	22,314.4	23,488.3	26,201.0
France	1,680,839.6	1,076,351.7	776,632.7	614,818.7	624,722.2
Norway	33,922.0	145,366.9	278,741.9	157,234.5	107,524.7
Saudi Arabia	14,659.6	9,247.4	12,640.6	17,675.9	19,031.5
Turkey	1,789,134.2	2,648,642.1	2,367,241.2	2,667,578.7	3,402,846.1

*Figure following on the next page*

Figure 1: Trade relations



Source: <https://www.azstat.org/MESearch/search?departament=9&lang=az>

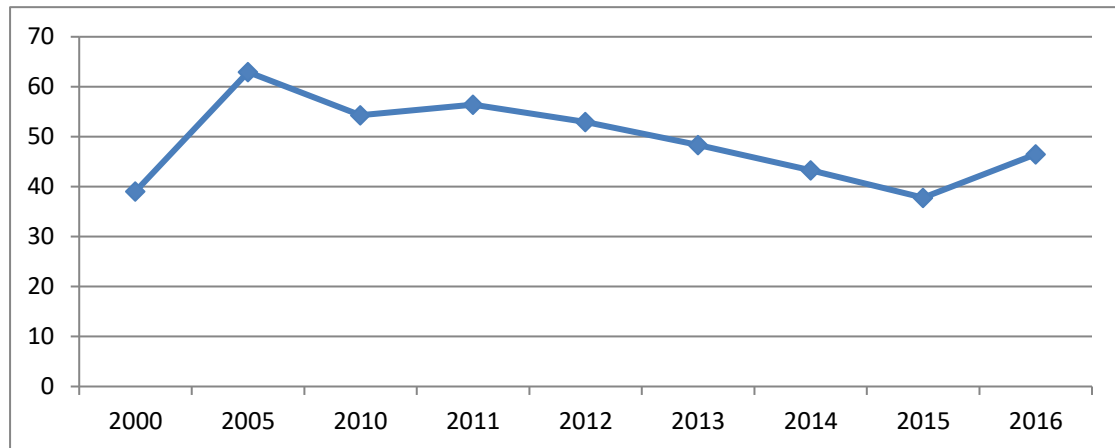
According to the conducted researches by the FAO, in the “third world” countries in the last decade has increased the volume of imports, rather than exports of agricultural products. While developed countries require other countries to open their markets, they restrict access to their markets through customs, subsidies, and the use of sanitary and phytosanitary standards<sup>2</sup>. Research shows that high poverty is high in developing countries that have joined the WTO. According to the UN report, the share of developing countries in world trade has decreased<sup>3</sup>. Thus, after joining the WTO, markets for cheap imported agricultural goods are opened, local goods are no longer competitive, and agricultural development stops. All this leads to a decline in living standards in rural areas and the country's dependence on imported products. It is evident that agriculture is a field with a high level of state protection. The system of state support for agricultural development should be aimed at improving the system of lending and insurance of agricultural production. Development funds should be invested primarily in infrastructure: the purchase of new technical equipment, the creation of inter-farm seed funds, and the improvement of the transport system. One of the main factors influencing the increase of agricultural productivity is the state funding of scientific research and projects on agriculture. As land turnover develops and land consolidation increases, infrastructure investments can also be made by individual entrepreneurs. Here it is necessary to pay attention to those agricultural products that the country has certain relative advantages over these products. In our opinion, despite certain difficulties in accessing foreign markets, Azerbaijan has great prospects for

<sup>2</sup> Murphy, Sophia (2002): Ernährungssicherheit und die WTO. p. 9

<sup>3</sup> Report of the UN organization, UNCTAD, 2002

increasing exports of its agricultural products. It should be noted that in recent years, Azerbaijan has lagged behind countries such as Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, the Ukraine and Uzbekistan in export operations. For example, according to a World Bank report, exports of goods and services (% of GDP) declined in all of the above countries. However, this figure increased significantly in Azerbaijan between 2000 and 2016.

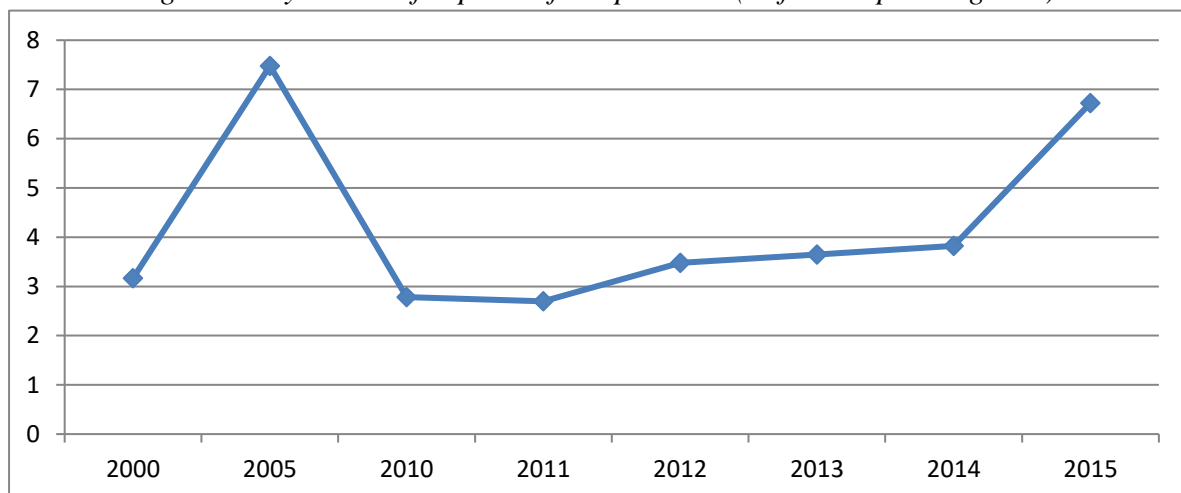
*Figure 2: Dynamics of exported commodities and goods (% of GDP)*



*Source: Based on the statistical database of the World Bank, databank.worldbank.org*

At the same time, the export of food products increased 2.1 times in the structure of exported goods in the republic during the research years. Our analysis and indicators show that the pursued foreign trade policy of our state and the implemented measures and reforms have already been reflected in this direction. Namely, as a result of carried out reforms in the country, significant economic growth and related economic development have been achieved in our country in recent years, and real opportunities and conditions have been created for the integration of our republic into the world community.

*Figure 3: Dynamics of exported food products (% from exported goods)*



*Source: Based on the statistical database of the World Bank, databank.worldbank.org*

### 3. CONCLUSION

Taking into consideration, that the accession to the WTO is a complex process and the advantages of membership will be different for different countries, as well as the challenges to the national economy, it is important to study and present the positive and negative

consequences of this process in detail. The Center of Economic Researches has developed a package of strategic recommendations for the Government of Azerbaijan with the participation of central government agencies, independent experts and business representatives. These recommendations set out the measures required by the Government in order to reduce the negative effects of Azerbaijan's WTO membership and strengthen its positive effects. In particular, recommendations are provided for agriculture, investment policy, protection of intellectual property rights and the social sphere. Azerbaijan is not heasten to join the World Trade Organization (WTO) and explains its position by the need to carefully consider all the pros and cons of taking this step. We must not forget that joining the WTO is not a goal, but only a tool. The result is to increase the gains from WTO accession, reduce losses and ensure fair trade. (9)

#### **LITERATURE:**

1. A.Aliyev: Assessment of the Impact of the World Trade Organization on the Economic Development of Agriculture in Azerbaijan
2. A.Sh.Shakaraliyev "Economic policy of the state: realities and perspectives. ASUE
3. databank. worldbank.org
4. <http://economy.gov.az>
5. [http://lib.bbu.edu.az/read.php?item\\_type=lecture&file\\_type=pdf&file=182](http://lib.bbu.edu.az/read.php?item_type=lecture&file_type=pdf&file=182)
6. <http://www.wto.org/azerbaycan-ve-utt/muraciet-ve-uzvolma-xronologiyasi/>
7. I.I. Dumulen, World Trade Organization: economics, politics, law. Moscow, Publishing House "Monograph", 2008
8. Murphy, Sophia (2002): Ernährungssicherheit und die WTO. p. 9
9. Report of the United Nations, UNCTAD, 2002
10. V. Bayramov: Policy document on the assessment of Azerbaijan's accession to the WTO.
11. WTO and the world food system, the International Union of workers of food and tobacco industry, agriculture, restaurant and hotel services, public catering and related industries, IUF-UITA-IUL, Geneva, 2002, [www.iuf.ru](http://www.iuf.ru)
12. WTO: threats and opportunities in terms of exit to the international market. Moscow, "Exmo", Collective of authors under the general editorship of S.F. Sutyryna, 2008

# THE EFFECT OF SPELT FLOUR ON THE QUALITY OF BAKERY PRODUCTS

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## ABSTRACT

*In the article, some technological features of Triticum dicoccom grain and the results of the research of amino acid composition have been stated. Triticum dicoccom is used all over the world for fried cereals, breakfast cereals, pancakes, grains, baby food and local pasta types. Nutritionists recommend cereals to provide food ration with dietary fiber, proteins, vitamins and minerals. Compared to Triticum aestivum, the Triticum dicoccom grain contains high amounts of essential amino acids such as phenylalanine, leucine, isoleucine, lysine, valine, threonine, histidine. We have developed the technology for making bakery products from crushed fermented spelt. The prepared bread had quality indicators according to the control variant. The purpose of our work was to develop the technology of bakery products from spelt flour (Triticum dicoccom). It is known that spelt is characterized by hard peel and low-quality gluten inside. Bakery technology with spelt flour is a new and actual issue that allows to get high quality bread. The technology of spelt bread has been developed using 40% thickness acidophilic cereal yeast. The prepared bread is different from others in terms of satisfying physical and chemical properties, such as long shelf life and high number of flavoring compounds. Spelt (Triticum dicoccom) is one of the oldest species of wheat. Compared to modern wheat, spelt grain has a very strong cover. Fruit and seed peels consist of several layers. Spelt has not been used for a long time due to low productivity and difficulties in grain processing. Recently, Triticum dicoccom has become famous again. The grains of this type of wheat are very useful: it contains high amounts of protein, B vitamins, iron and essential amino acids. The object of research is Triticum dicoccom, a grain grown on the Absheron peninsula in the Republic of Azerbaijan. In the article, standard research methods have been used.*

**Keywords:** Bread, Grain, Triticum dicoccom

## 1. INTRODUCTION

Triticum dicocon is a type of wheat that has been forgotten and underused in food production. It is a valuable genetic resource for increasing biotic and abiotic stress resistance of Triticum aestivum and Triticum durum and is therefore used by breeders to create new wheat varieties. As is known, ancient wheat varieties yield less, but are rich in protein and minerals [4]. It has been found out that the total share of essential amino acids in Triticum dicoccom wheat protein is high [2] and its digestibility of protein compounds is also in the high level [3].

Triticum dicoccom is used for bread production, but this bread is of lower quality than traditional wheat varieties [3].

## 2. RESEARCH

The aim of the research is to develop bread technology from the whole Triticum dicoccom wheat to expand the range of prophylactic bakery products. The object of research is Triticum dicoccom wheat, which grows on the Absheron Peninsula in the Republic of Azerbaijan. Standard research methods were used in this research. The amino acid content has been determined by GOST 31480 and the quality of gluten has been determined by IDK-1M. The quality of the carbohydrate-amylase complex has been determined on the "Amilotest-7" device 4 hours after taking the finished bread out of the oven: organoleptic indicators, porosity, the amount of aromatic substances in cereals. As a result of experimental research of some technological parameters of triticum dicoccom var dicoccon wheat, it has been found that wheat contains 18.8 g / 100 g crude gluten. So, it can be concluded that Triticum dicoccom var dicoccom grain contains quite a little gluten, which is not high in quality and "falling number". This requires the application of methods that will allow to obtain high quality bread in the development of technology of bakery products. In Table 1, a comparative analysis of the amino acid composition of triticum dicoccom var dicoccom wheat with wheat grown in that region has been indicated.

*Table 1: Triticum dicoccon var. dicoccom amino acid composition of wheat*

Amino acids	Quantity, %	
	Triticum aestivum	Triticum dicoccon var. dicoccon
Arginine	0,40	0,42
Lysine	0,34	0,40
Tyrosine	0,23	0,29
Phenylalanine	0,76	1,08
Histidine	0,21	0,34
Leucine + isoleucine	0,94	1,25
Methionine	0,15	0,21
Valin	0,60	0,82
Prolin	1,15	1,63
Treonin	0,42	0,54
Serin	0,47	0,59
Alanin	0,50	0,71
Glycine	0,40	0,55
Sistine	0,17	0,18
Glyutamic acid	3,30	5,02
Aspargin key	0,53	0,84
Tryptophan	0,11	0,10

According to the data in the Table 1, Triticum dicoccon var dicoccon wheat has more nutritional value than Triticum aestivum. The carbohydrate content of Triticum dicoccom grain has been determined chromatographically. Redistribution of low-molecular-weight carbohydrate fractions is indicated: the amount of maltose is higher, the amount of galactose, glucose and fructose is lower than in modern wheat varieties. Such distribution of carbohydrates can provide reducing the formation of toxic products in the baking process. Furthermore, Triticum dicoccom wheat grain are high in sterols, especially  $\beta$ -sitosterol. By electron scanning microscopy method, it has been determined that the microstructure of the grain and the cross-sectional surface have different characteristics.



Triticum dicoccum var dicoccum wheat, unlike Triticum aestivum wheat, has a thicker, harder, more dense peel. Although triticum dicoccum had a number of advantages over wheat, its technological characteristics were lower. But, the application of technological methods aimed at strengthening gluten will ensure the production of high quality bread from ancient wheat. Triticum dicoccum wheat has high concentrations of antioxidants. Wheat starch is mainly represented by continuous fractions, and this leads to slower assimilation (appropriation) of carbohydrates. Insoluble persistent starch is one of the factors that increase the functionality of food. The low glycemic index makes Triticum dicoccum wheat especially valuable for diabetic foods. Determination of sugar concentration in grain samples has been realized with chromatographic method - ESA Coulochem III electrochemical detector by using Agilent 1100 (Agilent Technologies, USA) electrochemical detector in liquid chromatography. The sugar mixture has been separated by an aminophase-induced anion exchange column, and then electrochemically detected. Grain samples have been ground in a laboratory mill and passed through a sieve with a hole size of 0.5 mm. Acetate buffer (0.1M, pH5.0) has been added to the flour sample placed in the conical flask. The concentration of dry matter in the suspension was 100 g / l. The flasks have been placed in a laboratory thermostated shaker (400C, 250 rpm), and here, the water-soluble components have been dried (extracted) for 2 hours. At the end of the process, the samples have been centrifuged for 14,000 cycles within 20 minutes, then supernatant (sediment) has been collected, and used to determine the sugar concentration. Triticum dicocon wheat has dense peripheral layers, so there are difficulties in its processing technology [1,4]. In order to soften the seed peel, its surface structures has been modified with the cellulose enzyme preparation (Penicillium canescens produent). The enzyme preparation contains a complex of enzymes: cellobiohydrolase,  $\beta$ -glucanase, xylanase (xylanase activity - 803 units / g). The enzyme preparation has been used in the hydration phase of wheat. The process has been relised at a pH of 4.6 and a temperature of 500°C. Hydration parameters are selected according to the optimal temperature and pH level for the action of enzymes that are part of the enzyme complex. For the protection of the pH environment, acetate buffer has been used. The rational dose of the drug is determined experimentally and is 0.12% of the weight of the dry matter of wheat. After the fermentation process, the wheat grain is washed with water for 5-10 minutes, then dried on a drying conveyor CK-70 at a temperature of 120-1800°C for 50-60 minutes. Triticum dicocon wheat is ground in the WM-200 mill at a size of 0.06-0.08 microns. The dough has been kneaded without fermentation. Wheat bread was used as an example by GOST 25832. The dough has been fermented at a temperature of 28-32 degrees in a thermostat and a relative humidity of 75-85%. Knead and acidity of the dough has been determined after each hour. When the acidity of the dough reaches 4.5-5.0 degrees, it is sent for division. The moisture content of the dough was about 48%. The duration of the fermentation process of the test samples was 2-2, 5 hours. After fermentation, the finished dough has been divided into pieces with a mass of 0.25 kg, the dough has been rounded and left to rest. Rest has been realized at a temperature of 35-40 degrees and a relative humidity of 75-85% for 35-40 minutes. The products have been cooked at a temperature of 200-220 degrees for 30-35 minutes. According to organoleptic indicators, bakery products did not differ from sample bread. Physicochemical quality indicators of bakery products could be compared with the sample variant. The porosity of the wheat bread was 58%, the specific volume was 1.98 cm<sup>3</sup> / g, and the acidity was 3.1 degrees. It has been determined that as the amount of yeast increases, the physicochemical indicators of the finished product improve: the humidity decreases, the porosity and specific volume increase. Moreover, deterioration of organoleptic characteristics of ready-made bakery products has been observed due to excessive accumulation of acidity in the filling. In this regard, the optimal dose of solid acidophilic lactic acid is 40%. In Table 2, the selection of a rational amount of solid acidophilic lactic acid yeast has been indicated.

*Table 2: Selection of a rational amount of solid acidophilic lactic acid yeast*

The name of the indicator of the bakery product researched	Example	The amount of solid acidophilic lactic acid yeast in the dough, percentage of the amount of spelt wheat flour					
		20	30	40	50	60	70
Flavour	Specific	Specific, bright expression			Sour		
Mass ratio of humidity, %	50,14	46,09	45,35	44,31	43,74	43,60	43,42
Acidity, grad	4,4	6,0	6,8	8,0	9,2	10,0	11,4
Porosity, %	39,08	47,99	48,76	51,76	51,89	52,33	53,01
Specific volume, cm <sup>3</sup> /g	1,17	1,49	1,50	1,56	1,56	1,58	1,59

The flavour and aroma of bakery products The taste and aroma of bakery products are important factors in assessing the quality, depending on the quality of raw materials used, the technology of preparation of dough and the method of baking. During the production of bread products from spelt wheat flour using solid enzymes, the amount of aroma-forming substances increases significantly. It has determined that the content of aromatic substances in wheat bread made from *Triticum dicoccon* var *dicoccon* is 1.8%, while in sample bread it is 3.6%. The results of the research show that the compression index of the bread samples analyzed during the entire storage period was higher than the sample bread. In this case, the shelf life of fresh bread was on average 20 hours longer than in the sample version. This is probably due to the lack of impact complexes in the production of sample bread. As a result, it is understood that in experience version, there are low-molecular compounds that have a high moisture retention capacity and thus inhibit the retrograde process of starch.

### 3. CONCLUSION

So, research shows that it is possible to obtain high-quality grain bread products from spelt wheat flour by using solid acidophilic yeast in technology. The technology of production of bakery products from *Triticum dicoccon* flour has been developed. The technology involves the preparation of wheat through an enzyme preparation based on cellulose and phytase, the production of flour and the preparation of bread with solid acidophilic wheat yeast with a rational dose of 40%. The baked bread has a satisfactory quality, long shelf life and a high content of aromatic compounds.

### LITERATURE:

1. Koryachkina, S.Ya., Kuznetsova, E.A., Cherepnina, L.V. The use of triticale grains in the technology of grain bread. // Bread products, 2007.- №5.- P.38-39.
2. E.A. Kuznetsova, D.S. Uchasov, G.M.Nasrullaeva, V.A. Gavrulina, V.S. Gromova. Changes in the composition and microstructure of wheat grains during germination Scientific principles of food technology. No. 6 (59) 2019.
3. Buddrick, O., Jones, O.A.N., Cornell, H.J., Small, D.M. The influence offermentation processes and cereal grains in wholegrain bread on reducing phytate content. Journal of Cereal Science, 2014, vol. 59. p. 3 – 8.
4. Kissing, L., Dyckb, K.E., Russelc, J., Clarkd, L., Hamelmane, J., Burns-Leaderf, Sh., Sendersg, S., Jonesh, J., Benschera, D., Davisa, M., Rothi, G., Zwingerj, S., Sorrellsa, M.E., Dawsonk, J.C. Evaluation of wheat and emmer varieties for artisanal baking, pasta making, and sensory quality. Journal of Cereal Science, 2017, vol. 74, p. 19-27.

## DIRECTIONS FOR THE DEVELOPMENT OF DIGITAL ECONOMY AND DIGITAL TECHNOLOGY

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### **ABSTRACT**

*The digital sector is the core of the digital economy. This is the ICT sector itself and the production of electronic components. In an expanded sense, the digital economy includes digital services, retail, free-earning economies (gigeconomy) and co-consumption economies (sharing). An even broader definition is the weight of a business that uses ICT. All types of network business and business operations algorithmization. Recently, the concept of "digital economy" has appeared both in economic theory and in the practical activities of a number of countries. The beginning of the 21st century was marked by the breakthrough development of digital technologies, a revolution in the space of information, and the acceleration of globalization of the economy. It should be noted that the process of formation of the digital economy in most countries significantly improves the quality of life of the population, and also allows to increase the efficiency of public administration. Footstone, participation in the virtual economic space significantly increases the competitiveness of countries. Most bright digital technology manifested itself in trade and services over the Internet. A leader in the development of e-Commerce is called China. In particular, the company Alibaba Group. Development of Internet services, is the United States. Namely, the company Uber, which, starting with apps for taxi booking, has significantly expanded the range of services. All countries should also pay attention to the sector of e-Commerce to promote national products in the world. All countries need to take advantage of the scientific and technological situation in the global economy, to ensure a globally competitive position in the market.*

**Keywords:** *digital economy, digital technologies, digital trade, competitiveness, e-Commerce, globalization, network business*

### **1. INTRODUCTION**

The origin of the term “digital economy” is attributed to the American scientist Nicholas Negroponte, after the publication of his monograph “Being Digital” in 1995. He talked about the shortcomings of the practicing model of production and sale of goods, in comparison with the ability to perform the same tasks virtually, optimizing this process at all stages [13]. The proliferation of digital technologies over a long period determines the development paths of the economy and society and has already led to dramatic changes in people's lives more than once. The formation of the digital economy is one of the priority areas for most countries - economic leaders, including the USA, Great Britain, Germany, Japan, etc. As a rule, they are characterized by a long period of implementation of the “digital development agenda” and continuity of priorities - from building a basic information and communication infrastructure to the formation of a coordinated policy in this area and support programs for the widespread adoption of digital technologies. The main task of digitalization of the economy at the present stage of its development is the creation of integrated digital platforms (PPIs) for the practical implementation of the aspirations and abilities of people and enterprises to share information and technologies to implement their plans (horizontal interaction). At the same time, the effectiveness of the regulatory role of the state in the digital economy increases many times due to the constant and comprehensive improvement of the order of interconnection and interaction

of economic agents, based on the natural need (motivation) of people to unite to work together on the principles of mutual benefit and complementarity [12]. This, in turn, creates the conditions and prerequisites for the most successful course of economic and social processes and an increase in investment inflows in all areas. A feature of economic relations in modern conditions is the increasing use of a variety of network and electronic mechanisms for their implementation and optimization. In this regard, the term “digital economy” arose, which in recent years has become actively used in periodicals and in scientific publications related to the functioning of the economy in the new conditions [17]. The increased interest in the use of digital technologies in various fields of activity is associated with wide opportunities to reduce the costs of commercial enterprises with their help. In addition, for state and municipal structures, the use of such technologies contains enormous potential to reduce the budget load, which contributes to the emergence of various strategies, plans and programs for the development of the digital economy. In connection with the above problems, it becomes obvious that since the emergence of a new category has a significant impact on the entire terminological apparatus of economic science, its generally accepted definition must meet certain requirements. First of all, the content of the new category should demonstrate its necessity: the totality of the relationships that it describes must have sufficient novelty and specificity so that it cannot be revealed with the help of existing economic categories (or it would be overly complex). In addition, the new wave should not distort the existing terminological structure and should fit harmoniously into it [10]. Thus, considering the digital economy as a new economic category, it is necessary first of all to develop its sound definition and determine its place among the known economic categories.

## **2. THE ROLE OF THE STATE IN THE DEVELOPMENT OF THE DIGITAL ECONOMY**

The digital economy offers great opportunities for the development of public administration. Modern technologies make it possible in the near future to create an environment of a high-tech digital public administration platform that will minimize the human factor and the associated corruption and errors, automate the collection of statistical, tax and other reporting, and ensure decision-making based on an analysis of the real situation [5]. Most developed countries have national strategies and programs for digitalizing the economy and society [9]. The goals and objectives of countries are generally similar, but approaches to the implementation of policies are somewhat different. Some of the initiatives are embedded in the wider supranational scientific, technological and innovative agenda. Thus, the digital development strategies of Germany (Digital Strategy 2025) and other EU countries are consistent with the pan-European digital agenda (Digital Agenda for Europe, 2010) [OECD, 2017]. Currently, the politics of the leading countries of the world are moving towards a comprehensive digital agenda. The main goals are the digital transformation of public administration, the development of information and communication infrastructure based on new technologies, the strengthening of information security, the development of digital skills and competencies. Particular attention is paid to regulatory aspects related to the construction and use of broadband infrastructure, access to the radio frequency spectrum, market regulation, etc. [OECD, 2017]. In addition, strategies are being developed for introducing individual digital technologies with high potential effects in various sectors of the economy (for example, the German National Strategy for the Development of Artificial Intelligence, 2018) [Die Bundesregierung, 2018]. The main prerequisite for the success of the digitalization policy is the coordination of actions and constant communication of authorities, business, scientific, educational and expert communities. Particular attention is paid to monitoring and evaluating the impact and effectiveness of policies. Thus, since 2013, the Digital Economy Index has been calculated annually in Germany, which characterizes the level of digital transformation of the economy

and its individual sectors [BMW, 2019]. At the same time, despite the overall high importance of the tasks of digitalization, there is some imbalance between the goals of the programs: a little more attention is paid to digitalization of public administration, the least to the promotion of the use of digital solutions by the population; measures to support business digitalization are intermediate [OECD, 2017]. States promote digitalization in two main areas - by supporting the ICT sector and industries - users of digital solutions. For the latter, support mechanisms cover three blocks: 1) research and development; 2) testing and implementation; 3) stimulating demand for digital technologies, including supporting the export of related products and services. To achieve the goals of the digital agenda, both traditional financial and non-financial support measures are applied, as well as newer ones, taking into account the specifics of end-to-end digital technologies. The majority of governments' portfolio of measures is dominated by financial instruments, with a substantial part of national programs focused on supporting small and medium enterprises (SMEs) and start-ups [8]. Public-private co-financing of programs is becoming a key principle of innovation policy and serves to stimulate the commercialization of new solutions based on competitive selection. Research and development support relies on traditional grants and grants. Along with this, new tools are being developed that provide a synergistic effect and involve the maximum circle of centers of competence. Among them, the central place is occupied by digital research platforms. In particular, in the USA, special platforms have been created for joint research and testing of solutions in the field of wireless communications (Platforms for Advanced Wireless Research) [NSF, 2018]. The most complex and at the same time effective already in the short term is a block of measures related to stimulating demand for SCT. To ensure the massive spread of digital technology among enterprises, flexible mechanisms are used, primarily tax incentives. They allow you to cover a wide range of economic agents. Along with concessional loans for the purchase of digital products and services, various types of vouchers are actively used, including innovative ones (subsidies for SMEs in the EU), to connect to high-speed networks (grants to ensure access of households and SMEs to fiber-optic broadband) at a speed of 1 GB [European Commission, 2018b; GOV.UK, 2018a]). Given the role of the state as a major consumer, measures are being taken to simplify the mechanism of public procurement of digital solutions, in particular those created by SMEs. To do this, the terms of competitive procedures are reduced, limits are set for the duration and cost of contracts (Australia), and access to tenders for companies with less than two years of market experience (USA) is ensured [Australian Government, 2019; GSA, 2017] and others. In order to implement long-term initiatives, special funds are being created to digitalize industries (a fund in France for investing in the equity or quasi-equity capital of ICT companies subject to private investment), including the number of general government sectors (technology fund modernization in the USA) [Bpifrance, 2019; DigitalGov, 2018]. As for public policy instruments that could contribute to the introduction of digital technologies in industry, representatives of the business community support the idea of reducing the tax burden, which, in their opinion, will accelerate the implementation of technologies [15]. The point is that now regional authorities can set different taxes on personal property, i.e. machine tools and equipment, which are the basis of "smart" production. Even 2.1% is a brake on development and investment in modernization. In addition, there are ideas about introducing subsidies for the development of strategic industries, as well as about ensuring stable production volumes at the expense of state orders and preferential lending or leasing programs. At the same time, assistance should be available not only to large corporations, but also to small enterprises.

## **2.1. Social and ethical aspects of digital economics**

Digitalization of the economy can help solve pressing social and global problems by simplifying communications between the state, business and civil society, improving the quality of social services, increasing productivity, creating new opportunities for entrepreneurship and

work, getting an education and constantly raising and expanding professional qualifications, allowing for special needs of socially vulnerable groups, creating new opportunities for socially significant scientific research and mitigate the risks of climate change, lack of drinking water and food, lack of energy, etc. Digital innovations are thus an important lever for economic development, offering innovative solutions to global problems, increasing the effectiveness of managerial decisions and stimulating the active participation of business and civil society in the formation of the economic well-being of the country [18]. At the same time, there is growing concern that waves of investment in digital technology are contributing to job cuts, wage stagnation and wage inequality. Digital technologies in the field of communications and mass communications can contribute to the formation of social microcultures that do not always adhere to generally accepted social values. Additive technologies are difficult to control and carry the risks of using project files in hard-to-predict ways. The introduction of synthetic technologies in the agricultural sector carries the risks of the appearance of invasive synthetic organisms that can destroy natural ecosystems. Given the generally recognized role of the digital economy as a driver of growth and an instrument for qualitatively changing the indicators of welfare of states, the socio-ethical aspects of the digital economy should be taken into account in the tools of analytical forecasting [7]. The state needs to predict and timely respond to emerging trends of a socio-ethical nature associated with the formation of a national and global ecosystem of the digital economy and national and global digital space. Over the next 30 years, technology will overcome the biological limitations of human potential. Wearable devices connected via the Internet will be able to transmit context-sensitive information that relates directly to our emotions. Exoskeleton and prosthetics associated with the brain will make a person stronger and return mobility to the elderly and people with disabilities. Sensors and computers built into contact lenses and permanent implants allow you to hear whispers behind the walls, give a natural night vision and allow you to immerse yourself in virtual and augmented realities. Nootropic drugs will expand the cognitive abilities of a person and transform work and education. In addition, there will be widespread robotics. Robots will be entrusted with patient care, delivery of purchases, harvesting, maintaining the infrastructure of society and providing a host of other services. Robots, guided by terabytes of data, will be responsible for automating business processes, training and providing services in the service sector. However, augmentation technologies will be expensive, and those who cannot afford such modernization may not be able to compete in an augmented economy. Network add-ons will also become an attractive target for hackers who want to control the human mind and body. Robotization can lead to higher unemployment. Technology is changing education. Colleges and universities currently offer online courses; online teachers offer new methods of learning materials; schools regularly integrate tablet computers and other technologies into classrooms. The fields of education, science, research, culture and the media are key areas for the implementation of new digital achievements and in themselves act as the most important factors and contributing to the further development of digital technologies. This means that all citizens can take advantage of the enormous opportunities in the above areas for training, continuing education, continuing education, development and participation in economic and social life. The education system should better equip people with skills and knowledge so that they meet the requirements of the digital work environment and the knowledge society. It should also increase media literacy. Therefore, it is necessary to promote the wider use of digital media in education throughout a person's life. Together with all interested parties in the field of education, it will strive to create a digital learning strategy that will systematically use, expand and implement the capabilities of digital media to provide high-quality education. Nevertheless, there remain questions of social adaptation of the population to the challenges of the digital economy related to the continuous improvement of the level of qualification and the development of new skills in the interactive space of the digital ecosystem.

In this regard, active labor market policies, income support, lifelong learning and more flexible educational systems are crucial [4]. Technology transforms the relationship between people and their work. Entrepreneurs achieve rapid innovation using technologies such as 3D printing and application programming interfaces (APIs). Over the next years, these trends will change the structure and principles of work in general. For some business participants, reducing barriers to entrepreneurship will create new opportunities. For others, competition in the “free earnings economy” will mean lower wages, lack of benefits and economic insecurity. People manipulate the genetic code of plants and animals through selection and hybridization for several millennia - long before Mendel determined the basic laws of heredity, and before the Avery-MacLeod-McCarty experiment, which identified DNA as genetic material. However, as our understanding of genetics has grown, it has become possible to develop special organisms by building new DNA sequences from scratch. Genetically modified cultures form the basis of this technology, but we are on the verge of a wider revolution that will turn life into information that can be written and rewritten just like computer code. Scientists are already developing they make algae that can secrete biofuels and use DNA to encode thousands of gigabytes of data [14]. Over the next 30 years, synthetic biology will introduce engineering organisms that can detect toxins, create biofuels from industrial waste, and create drugs through symbiosis with humans. At the same time, synthetic biology poses serious risks, including artificial biological weapons and invasive synthetic organisms that can destroy natural ecosystems.

### **3. DIGITAL TECHNOLOGIES IN MODERN ECONOMICS**

The development of digital technology is one of the most important factors of economic growth, which is becoming possible thanks to the automation of existing processes, the introduction of fundamentally new, breakthrough business models and technologies, such as digital platforms, digital ecosystems, in-depth analytics of large data arrays, Industry 4.0 technologies, robotics, the Internet of things [19]. Digital technologies serve as a mechanism for social elevators, helping to increase the accessibility, quality and convenience of receiving services in such areas as medicine, education, state and municipal services, and culture. Digital transformations make it possible to create comfortable and safe conditions for the life of the city on the basis of “smart” technologies, and digital platforms create new employment opportunities for people, help to develop additional skills and improve qualifications, especially for people who previously did not have such opportunities due to social or geographical restrictions contribute to the emergence of new digitalization-related professions and high-paying jobs [1]. Today, the task of ensuring the safety of people, companies, and the state is becoming possible due to the high level of development of digital technologies and the availability of highly qualified specialists in the field of the use of artificial intelligence, machine learning and cryptography. The digital economy is fundamentally changing the relationships in the system of production, distribution, exchange and consumption of goods and services. This is expressed, first of all, in the introduction of systems that replace a person based on the concept of intelligent enterprise management (IEM), which implies a transition from resource planning in the ERP paradigm to direct management of business processes by single entry and reuse of data, implementation of the principle of self-organization, and also automatic execution of production and business processes without personnel [6]. The source of profit in such systems is formed due to an increase in the efficiency of enterprise management through high-speed processing of an array of data in digital form and the generation of useful information. Thus, the essence of the digital economy is the transformation of the information resources and technologies available at the enterprise (in the country, city economy) into such assets, using which you can really reduce transaction costs and increase the speed and efficiency of business processes. The combination of these features and characteristics of digitized production and management determines the emergence and sustainability of the independent use of the term “digital economy”.

Today, the popularity of the digital economy, as a fundamentally new model for the development of the economic system, is growing. With the increase in the world's population and the consumption of various resources, the electronic economy can affect every aspect of human life: health care, industry, education, social policy, agriculture, culture. To formulate a national strategy in the field of digitalization and the digital economy, it is important to take into account that the relevance of digitalization is due to the growth in the scale of social communications carried out through networks and digital platforms that increase the speed and variety of exchanges and open up fundamentally broader opportunities for the development of the economy and society [3]. Suppliers and consumers are increasingly interacting with each other without intermediaries, and the price factors of linking supply and demand are being supplanted by new mechanisms of cooperation, which, in turn, expands markets in terms of membership and variety of products, leads to accelerated application of technical and organizational innovations in enterprises, which become more flexible and maneuverable. At the same time, a distributed model is being formed for coordinating the relationships between producers and consumers through network nodes (hybrid network order), which allows systems of all levels to increase their adaptability to changes in the external environment. Now it is possible to make an appointment with the doctor via the Internet, with the help of distance education you can improve your knowledge without leaving your home online to draw up documents and receive financial services. By the end of 2019, 80.4% of the population of Azerbaijan are Internet users, when, as in 2010, the audience of Internet users was only 34, 4% of the population. The number of users of the portals of state and municipal services doubled in only one 2017 year and reached 6 million people. "Digital" globalization in response to the challenges of modernization creates qualitatively different opportunities [21]. According to the developers of the report "Emerging Markets: Four Answers to the Challenges of Growth," developing countries can use digital technology to overcome the limitations of physical infrastructure, achieve greater social integrity and build environmentally friendly production facilities that can significantly increase international competitiveness. Outside the developed world today, approximately 30% of the 500 most powerful supercomputers operate. India already holds the second place in the world in the number of Internet users - despite the fact that Internet penetration is about 30% compared with 53% in China and 76% in Russia (as of 2016) [16]. The pace of digitalization in India is phenomenally high: it is estimated that over 2015, over 100 million Indians gained access to the Internet, and it is expected that in the near future the number of users will increase by another tens of millions. And this, in turn, means an increase in sales over the Internet. Even the limited digital resources of the poorest countries allow them to "jump" into a new "digital reality" with corresponding new opportunities for business and markets. Despite the still existing "digital divide" between the most developed and developing economies, on the whole, probably, we can already speak about the emerging qualitatively new conditions for the integration of developing countries into the world economy in the context of digital transformation [13]. With regard to the digital economy, it is important to understand the peculiarities of its distribution in the world, which, thanks to the rapid development of the Internet and ICT, sometimes create very unexpected opportunities for a breakthrough in certain areas of business. Under the conditions of total quarantine, in connection with the outbreak of the coronavirus, the world was able to take a different look at various values. What seemed a couple of months ago not very important now plays an extremely important role. Those aspects of life that developed slowly, are now forced to catch up with time [2]. One can already say how trivial it may sound, but life will not be the same. And if in the 20th century the impetus for scientific and technological progress was World War II, now the coronavirus can give an impetus to development. It is worth noting that the digitalization of everything around, as it turned out, is very important. Digital technologies are involved in all areas of everyday life - from entertainment to professional needs.



Over the past few years, Azerbaijan has implemented a number of digital solutions that have greatly facilitated the life of the population. In addition, at the beginning of the pandemic, agreements were reached on the implementation of new projects [21]. Based on these theoretical provisions, it can be assumed that digitalization is not a goal, but a means, and the digital economy cannot be considered separately from the rest of the economy and should be treated as a segment of activity when the value added in the production of goods and services is implemented using digital technologies, especially for industries that are internet addicted. At the same time, it makes sense and value if digital technologies and infrastructure facilitate cooperation in all areas of the economy and economic levels [11]. At the same time, a comfortable environment is being formed for the emergence, cultivation and implementation of various startups. It is possible that the current situation, however sad it may be, is a door to the future. An elementary example with home delivery. Last year, the American company Uber demonstrated food delivery using drones. The technology worked in such a way that the drone took the order at the establishment, and transferred it to the driver, who in turn delivered it to the customer. Even earlier, and more precisely in 2013, the concept of package delivery via drones was demonstrated by the American giant Amazon. However, the global Internet is currently experiencing quite serious problems. People are looking for how to entertain themselves in isolation. Consequently, various hosting companies experience heavy loads on their networks. Netflix has already reduced the quality of its broadcasting on the advice of the European Commissioner. There was a recommendation to broadcast video in standard resolution instead of HD. They also entered and presented Google, they said that the video on youtube hosting will by default be broadcast in standard resolution instead of the usual HD and FullHD [20]. The load on Internet providers around the world has increased significantly after many companies switched to remote work, and people in general almost stopped leaving their homes. One of Europe's largest mobile companies, Vodafone, this week announced a 50 percent increase in Internet consumption across Europe. Work in a crisis can serve as an impetus for the development of network infrastructure, especially in anticipation of the launch of fifth-generation mobile networks. Based on experience during a pandemic, one can take into account many factors that cannot be emulated in a simple life. We can say that the current pandemic can have a positive effect on the development of digital technologies. Given the experience that will be gained during quarantine, IT giants will be able to transform into useful innovations that can improve the life of the future.

#### **4. CONCLUSION**

Despite the fact that the introduction of digital technologies over the past decades in many countries, including Azerbaijan, has acquired the status of a “traditional” direction of development both at the state and corporate levels, the current stage, characterized by the formation of the so-called digital economy, gives rise to a fundamentally new technological and organizational and management challenges. At the same time, operational definitions of new key concepts have not yet been formed, not to mention a full-fledged regulatory framework and regulatory mechanisms, which, of course, hinders the development of the digital economy and the possibility of realizing the positive effects associated with it. In order to stimulate the demand of citizens and organizations for digital technology is important not to be limited to direct measures financial support, public procurement of digital technologies and “manual” management, characteristic of the project management model (federal and departmental projects were chosen as the main tools for implementing the national goal). By themselves, apart from a favorable institutional environment, they will not bring a multiplier effect and are unlikely to be able to provide wide coverage for private companies, stimulate a massive increase in demand for digital technologies and volumes of off-budget investments, especially in the face of many years of stagnation of innovative activity of enterprises.

Accelerated implementation of digital technologies in the economy and social sphere is an ambitious goal, which is successfully realized only in very few leading countries. It is achievable only if a number of essential conditions are met. Firstly, business and the social sphere should be ready for digital transformation, development strategies must mature and take shape, suggesting a radical change in the organization and conduct of activities due to the planned intensive implementation of digital technologies, demanded by organizations and promising stakeholders the return on investing their own funds. Secondly, the country should have a relatively mature sector of the technological offer, which, if it does not aspire to international leadership, is at least capable of a quick transfer and adaptation of foreign technological solutions and a rapid increase in its own activities. Thirdly, the demand of the population for digital technologies should constantly grow, since it is the needs and capabilities of consumers that ultimately determine the adequate demand for digital technologies for them from organizations, especially in the B2C sphere. There is considerable potential for using modern digital technologies in the activities of firms. It is important to pay attention to such aspects as the use of modern computer technology, software, the availability of qualified specialists. It should be borne in mind that digital technologies have significant potential for accelerating innovation processes, therefore investment indicators in the development of a company's digital potential are an important factor in its competitiveness in modern conditions. There is considerable potential for using modern digital technologies in the activities of firms. It is important to pay attention to such aspects as the use of modern computer technology, software, the availability of qualified specialists. It should be borne in mind that digital technologies have significant potential for accelerating innovation processes, therefore investment indicators in the development of a company's digital potential are an important factor in its competitiveness in modern conditions. In conclusion, the following list of measures aimed at the development of the digital economy can be distinguished: development infrastructure, which is the basis for the formation of new business models and the construction of scientific and social networks; reducing barriers in the digital economy; increasing the level of knowledge of digital technologies, training and retraining of specialists; confidence in the reliability and security of digital infrastructure, risk assessment; development of the digital economy.

#### LITERATURE:

1. Абрамовских, Л. (2018). *О возможности использования цифровых технологий как основы перехода на интенсивный путь развития* // Экономист. - 2018. - № 8. - С. 12-27.
2. Аллахвердиев, Ф. (2020). *Коронавирус COVID-19 – переход на цифровую экономику* // <http://interfax.az/view/799358> 15.04.2020
3. Avdeeva, I. (2017). *Analysis of the prospects for the development of the digital economy in Russia and abroad* // Digital Economy and "4.0 Industry ": problems and prospects: works of the Scientific and Practical Conference with International Participation. St. Petersburg, 2017. P. 20-26.
4. Бианкина, А. (2017). *Цифровые технологии и их роль в современной экономике* // Экономика и социум: современные модели развития. – 2017. – Том 7. – № 2. – С. 17-22.
5. Стефанова, Н., Седова, А. (2017). *Модель цифровой экономики* // Карельский научный журнал. 2017. Т. 6. № 1 (18). С. 91.
6. Денисов, А. (2016). *Анализ практик применения цифровых технологий в отборе персонала* // Экономика и управление. – 2018. - № 6. – С. 26-37

7. Добрынин, А., Черных, К., Куприяновский, В., Куприяновский, П., Синягов, С. (2016). *Цифровая экономика – различные пути к эффективному применению технологий (BIM, PLM, CAD, IOT, SMART CITY, BIG DATA и другие)* // International Journal of Open Information Technologies. 2016. Т. 4. № 1. С. 4.
8. Dahlman, C., Mealy, S., Wermelinger, M. (2016). *Harnessing the Digital Economy for Developing Countries*. Paris: OECD. Available at: <http://www.oecd-ilibrary.org/docserver/download/4adffb24-en.pdf> (accessed 1 June 2018).
9. Heeks, R. (2016) *Examining "Digital Development"*, Development Informatics Working Paper 64, University of Manchester, UK. Available at: <http://www.gdi.manchester.ac.uk/research/publications/di/> (accessed 1 June 2018).
10. Jeffrey Parker, Marshall van Alstine, Sanjit Chowdary (2017). *Platform Revolution. How network markets change the economy - and how to make them work for you* // Moscow: Mann, Ivanov andFerber, 2017. 302p
11. Костин, К. (2017). *Роль цифровых технологий в продвижении товаров и услуг на глобальных рынках* // Российское предпринимательство. - 2017. - Том 18. - № 17. - С. 2451-2460. doi: 10.18334/rp.18.17.38251
12. Купер, Р. Дж. (2017). *Седьмое чувство. Под знаком предсказуемости: как прогнозировать и управлять изменениями в цифровую эпоху*. - М.: Эксмо, 2017. - 400 с.
13. Kuker, K., Mayer-Shenberger, V. (2014). *Bolshie dannye. Revolyutsiya, kotoraya izmenit to, kak my zhivym, rabotaem i myslim [Big Data: A Revolution That Will Transform How We Live, Work, and Think]* М.: Ivanov, Mann, Ferber. (in Russian).
14. Kuzovkova, T., Kuzovkov, D., Sharavova, O. (2019). *Transformation of criteria and indicators of digital development of economy and information society* / Conference of Open Innovations Association, FRUCT, 2019. - № 24. - С. 682-687.
15. Ovsyannikova, T. (2014). *The economic mechanism for ensuring sustainable development of the region*. New technologies. 2014. № 2. P. 99-102.
16. Гирич, М. (2019). *Электронные торговые платформы: новые стандарты* // Международная экономика. - 2019. - № 2. - С. 46-55
17. Revenko, N. (2017). *The US digital economy in the era of information globalization: current trends* // The USA and Canada: economics, politics, culture. 2017. No. 8 (572). P. 78-100.
18. Srinivas, K., Yasmeen, S. (2017). *A Study on Employee Engagement in Small and Medium Enterprises in Digital Economy* // Millennial Workforce - A Contemplation / R. Aluvala (eds). Hyderabad: Zenon Academic Publishing. P. 57-64.
19. Шваб, К. (2019). *Четвертая промышленная революция*.//М.:Эксмо, 2019.-138 с.
20. Захаренко, М. (2016). *Новые технологии в экономике – находки и потери* // БИТ. Бизнес & Информационные технологии. 2016. № 8 (61). С. 19.
21. The State Program on Socio-economic Development of the Regions of the Republic of Azerbaijan (2014-2018)

# DIGITALIZATION OF THE ECONOMY: ANALYSIS OF INFLUENCE ON THE BANKING SPHERE IN AZERBAIJAN IN THE CONTEXT OF WORLD EXPERIENCE

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## ABSTRACT

*The article provides an analysis of the Azerbaijani financial sector in terms of readiness for digital transformation. A study is being made of the current state of the banking system of Azerbaijan and its development trends in the use of digital technologies. As a result, conclusions are drawn about the new capabilities of banks in the context of the digitalization of the economy. We believe that digitalization of the economy will lead to an increase in use of cashless payments and specific weight of cash payments in Azerbaijan will decrease from 74% to 40%. Judging by forecasts, the volume of non-cash payments will grow by about a tenth annually. Now Azerbaijan is carefully studying the experience of implementing block chain technologies, assessing the possible risks and prospects of use. The Central Bank has launched the country's first pilot project on the block chain platform. As a result of the project, the client will be able to open an account through video identification without coming to the bank. If now there are about 30 banks in Azerbaijan, then their number will drop to 20, maybe even less in the coming years. Such processes often lead to the fact that old infrastructures that do not correspond to new realities are replaced by new, advanced ones that keep up with the times in the combined banks. Since 2010, banks have invested approximately 25% of their net profit in financial technology.*

**Keywords:** *digital transformation, banking, digital banking, artificial intelligence, internet banking*

## 1. INTRODUCTION

In the 1990s, qualitative changes in the economy were associated with the emergence and development of the Internet which is still the basis of the digital economy. The digital economy has significant potential for developing countries for which such economic shifts can mean economic growth, increased productivity of capital and labour, lower transaction costs and increased access to world markets. Today the world is on the verge of new global changes. The innovations that came into our lives with the advent of the Fourth Industrial Revolution (Industry 4.0), the wider use of information and telecommunication technologies, use of the Internet by about 60% of the global population (this figure has increased against the backdrop of the COVID-19 coronavirus pandemic), robotization and artificial intelligence technologies, the Internet of Things (IoT), Big Data and digitalization resulting from all of the mentioned above, opens up new opportunities for us.

Countries that will be able to take advantage of digitalization faster than others will obviously become leaders of the 21st century. Having joined the “digital race”, many states began to consciously stimulate and regulate the development of digital technologies. Programs for the development of the digital economy have already been approved in the UK, Germany, China, Japan, Brazil, the USA, Estonia, the Netherlands, Ireland, Sweden, Singapore, the Philippines, Malaysia, Russia, Belarus, Kazakhstan, etc. And the number of such countries is growing (Maslenikov, 2017, p. 8). Besides, different ideas about what the digital economy is, which underlie these programs (or strategies), determine different lines of action. Taking into account the economic indicators of various countries of the world, we see that in South Korea the share of the digital sector in the economy is 12%, in Sweden 8.6%, in Finland 8.3%, in the USA 7.4%, and in the UK 7.1% (Egorov, D.V., 2017). According to the World Economic Forum, 70% of new values in the economy will be created on the basis of digital platforms in the next decade. According to Google forecasts, the volume of the digital economy will triple and achieve 240 bln USD in the countries of Southeast Asia by 2025 (F.Allahverdiyev, 2020). As in developed countries, issues of digitalization of the economy and construction of digital banking are also a priority for Azerbaijan. Azerbaijan has become a transport and energy centre connecting Europe and Asia, and work is underway to turn Azerbaijan into a digital and technological centre (Digital Hub). The Strategic Roadmap on Development of Financial Services in the Republic of Azerbaijan, adopted for the period 2016–2020, defines measures to accelerate digital transformation of banks in connection with the improvement of the regulatory mechanism to accelerate the digital transformation of banks. In addition, the State Program on Expansion of Digital Payments in the Republic of Azerbaijan for 2018–2020 was adopted. The purpose of the program is to expand significantly the environment of non-cash payments between citizens, business entities and government agencies and, as a result, to strengthen the financial resource base of the banking sector. In this regard, the main strategic priorities are to strengthen the institutional and legal framework of services in the field of digital payments by increasing infrastructural capabilities, expanding the range, quality and scope of these services, as well as large-scale involvement in their use. So, one of the main guidelines for the banking system of Azerbaijan is digitalization. Digitalization can become one of the drivers for development of the banking system, as well as will allow increasing the level of trust between depositors and banks and ensuring transparency in the sector. So, important reforms are underway and large-scale programs to build a digital economy by the public and private sectors are being implemented in Azerbaijan. Partnership of public and private sectors is being created to use digital technology and recognize the country as a digital centre at the global level.

## **2. DIGITAL TRANSFORMATION IN THE ECONOMY OF AZERBAIJAN AND EXPANDING THE USE OF DIGITAL PAYMENTS**

In the 1990s, qualitative changes in the economy were associated with the emergence and development of the Internet, which is still the basis of the digital economy. The digital economy has significant potential for developing countries for which such economic shifts can mean economic growth, increased productivity of capital and labour, lower transaction costs and increased access to world markets. It is seen as a driving force for economic growth that can lead to significant economic shifts and influence entire areas of business, the labour market, and people’s lifestyle. Among the fundamental features of the digital economy we can distinguish the following:

- High speed and pace of development;
- Transformation (conversion) of business processes of enterprises and industries;
- Reduction of the costs for implementation of business processes;
- Emergence of new business models;
- Emergence of new “smart” products, new markets;

- Changes in the structure of professions in demand;
- Continuous diffusion of innovations; and
- Active development of electronic payment systems (Абрамовских Л. -2018, С. 19).

As in developed countries, issues of digitalization of the economy, building a digital economy and application of innovations are also a priority for Azerbaijan. Today, digital technologies are used in Azerbaijan too, and the country is already on the path to digital transformation. A lot of work is being done by the country's government to digitalize the economy of Azerbaijan and build a digital economy. Digitalization, development of connection services are the basis of the AzerbaijanDigitalHub Program which is currently underway, with the goal of turning Azerbaijan into a regional digital centre. The projects carried out within the framework of the AzerbaijanDigitalHub Program will lead to the creation of a technological base and will ensure the establishment of Azerbaijan as a centre for the transfer of Internet and content between Europe and Asia. It should be noted that the implemented AzerbaijanDigitalHub Program and various projects related to this Program create favourable conditions for digitalizing the economy in Azerbaijan and creating a stable technological infrastructure for the digital economy, attracting large content providers (Facebook, Google, Netflix, Amazon, Alibaba, Tencent and others) to the country, ensuring the demand of Asian countries in data traffic through Azerbaijan and, as a result, turning the country into a digital centre. Successful completion of the Program will ultimately lead to the formation of a digital ecosystem, construction of a digital economy, and create conditions for increasing the share of the digital sector in the economy (Аллахвердиев Ф. - 2020). Azerbaijan adopted (September 26, 2018) State Programs for Expanding Digital Payments in Azerbaijan for 2018-2020. The main goal of the Program is to expand the system of cashless payments, and to strengthen the financial base of banks in Azerbaijan. In this connection, the program's priorities are: improvement of the institutional and legal base of non-cash payments and expansion of the quality of services in this direction, and the infrastructure for non-cash payments.

We believe that increased use of digital payments will result in:

- Ensuring economic transparency,
- Reducing banks' operating expenses,
- Expanding the tax base,
- Accessing enterprises and population to financial services, and
- Expanding the capabilities of the banking sector in the field of lending and investment.

Ultimately, these factors will accelerate the rates of economic growth. We believe that digitalization of the economy will lead to an increase in the use of cashless payments and the share of cash payments in Azerbaijan will decrease from 74% to 40%. At the same time, the volume of non-cash payments will grow by 7% annually. (Abbasov A., Mamedov Z.F., 2019) According to Moody's, Azerbaijan is significantly ahead of the CIS countries in Internet penetration - 79% of the population are Internet users, while the average in the CIS is 68%. By this indicator, Azerbaijan ranks first among the countries of the Commonwealth (<https://ona.az/ru/ekonomika/azerbajdzhanskije-banki-otstayut-ot-ostalnykh-stran-sng-v-processe-cifrovizacii-moodys-5275>).

### **3. DIGITALIZATION OF THE BANKING SECTOR AND DEVELOPMENT OF THE FINTECH INDUSTRY IN AZERBAIJAN: NEW TRENDS AND PROSPECTS**

#### **3.1. Digitalization of Banking Sector in Azerbaijan**

The main trends in the development of innovative technologies that have the greatest impact on the modernization of the financial system can be listed as follows:

1. Digital and mobile calculations and payments;

2. Authentication and biometrics;
3. Block chain;
4. Cloud computing and virtual reality;
5. Bigdata and big data analysis; and
6. Artificial intelligence and machine learning (Маслеников В. В., 2017. С. 8).

Azerbaijan, which has been included by the World Bank in the list of 20 countries implementing the largest number of reforms in recent years, is developing with confident steps owing to reforms covering all areas of the economy. Continuous measures are being taken to further develop digitalization, a global trend in the financial sector. Today, 90% of the banking sector of Azerbaijan uses Internet banking services, and 83% uses mobile banking. For the first quarter of 2019 alone, 772 thousand newly issued contactless payment cards were distributed to customers in the republic, which is 2.1 times more than last year's figures in annual comparison. As a result, the total number of debit and credit cards on the country's market increased to 6.8 million. By the end of 2019, approximately 31% of operations conducted on open accounts were carried out through electronic banking services, which means an increase of 7% compared to 2018. These indicators reflect the fact that the digitalization process in the country and in the banking sector is fast enough. One of the measures provided for in the State Program for Expansion of Digital Payments in the Republic of Azerbaijan in 2018–2020 is creation of an Instant Payment System (IPS), which provides for the improvement of the infrastructure of digital payments. This allows completing settlements on mutual payments transactions carried out in the country's payment ecosystem between individuals, business entities and government agencies in the 24x365 mode for 5-10 seconds. Users will be able to make non-cash payments with each other at any time and by any means (Трофимов Д. В. (2018. С 52). Today, many reputable banks and financial organizations in the world assign a significant role to block chain technologies as the safest and most effective tools in the use of digital currencies. Experience of European banks that have introduced this technology shows that the use of block chain will create new opportunities, will allow reducing time costs, reducing costs and risks in money transfers to a minimum. Now Azerbaijan, along with many countries of the world, carefully studies the experience of implementing block chain technologies, assesses possible risks and prospects for use. The entry of the financial and banking sector of Azerbaijan into a qualitatively new phase of development, improving the quality of financial services, expanding access to financial resources and ensuring global competitiveness may depend on the effective implementation of block chain technologies as well. The Central Bank has launched the country's first pilot project on the block chain platform. As a result of the project, the client will be able to open an account through video identification without coming to the bank. The created opportunities will give an impetus to expansion of digital payments between economic entities, decrease in the cash economy in the country and increase in non-cash payments. In addition, with a decrease in specific weight of the "cash" economy, the financial transparency of the activities of subjects of economic relations will increase, cases of tax evasion will decrease, the financial resource base of the banking sector will become stronger, the range of electronic banking operations and their availability will increase, and both a proportion of the population using electronic banking and volume of electronic commerce will grow. For example, Rabitabank uses a bank chatbot by means of which it is possible to conduct financial transactions. For example, to check the balance, to pay utility bills, loans, to transfer money, to collect money, to split the bill between friends, etc. This is convenient for wide segments of the people, especially for the Z generation, which does not part with the Internet, spending time in phones and chats, who are accustomed to using Facebook, etc.

### 3.2. Problems of Development of Fintech Industry in Azerbaijan

Development of fintech for the banking community of Azerbaijan is a synonym for the way to digitalize the economy; therefore, this direction is actively supported in the country, including at the state level. It is important for banks and other intermediaries to keep abreast of these and other technological trends, to understand their possible consequences and to use the opportunity of safe and effective application of appropriate technologies with the aim to increase productivity, to gain competitive advantages and to serve consumers better. There are seven trends in the world experience in the transition to fintech-industrialization: Transition from innovative business models to technological innovations; Authentication and security move into first place; Multi-channel experience is important; The Fintech Revolution is global in scope; New industry players are emerging; Fintech is evolving; Payments and loans are the most attractive areas of fintech. (Усокин В. М.2017. С. 17). If there are about 30 banks in Azerbaijan now, then in the coming years their number will drop to 20, maybe even less. Such processes often lead to the fact that old infrastructures that do not correspond to new realities are replaced by new, advanced ones that keep up with the times in the combined banks. And many banks choose to outsource the banking system in the CFT cloud (Centre for Financial Technologies). And large banks are turning into IT companies in various forms, where digital technologies and products are already generating the main contribution. According to the head of the ABA, banks spent about 310 million manats (which is 8% of non-interest expenses) on implementation of financial technologies in the period 2012-2017. As an example, we can cite a number of changes in digitalization of the sector as a result of implementation of measures provided for in the State Program to Improve the Efficiency of Digital Payments in the Republic of Azerbaijan for 2018-2020. Since 2010, banks have invested in financial technology approximately 25% of their net profit. Of these investments, 48.9% was spent on the purchase of software and licenses, 16.4% are expenses for software support, 15.9% are communication costs (including 8.1% are communication costs for banking and inter-branch network, 2.6% are expenses for mobile communication, 2.5% are for SWIFT and 2.7% are other expenses for communication), 15.3% are expenses for server and network equipment, and 3.5% are other expenses. Proportion of this type of investment in the sector is growing every day. As a result of investments in financial technology, significant changes have occurred, especially in payment systems. Thus, the volume of operations conducted through interbank payment systems has tripled since 2010 (Мамедов З.Ф.2019, С.42). We offer the following basic steps that must be taken to introduce and develop fintech in the Azerbaijan economy:

- To form the institutional framework for development of financial technologies. For example, in our opinion, it is advisable to create a single contact centre that consults startup projects and interested parties on the issues of regulating activities related to the use of financial technologies;
- To create legal conditions for supporting the development of financial technologies; combating the legalization of money laundering obtained by criminal means;
- Information security of financial technologies for all subjects of relations;
- To ensure protection of the latest financial technologies as the results of intellectual activity by introducing appropriate changes to the Civil Code of Azerbaijan;
- Legislation governing the national payment system to the needs of financial technology;
- To increase the financial literacy of the population in the field of financial technology, using various information channels.

The development of the fintech market is hindered by many factors:

1. A significant part of the population is outside the banking sector, this slows down the digital transformation,
2. Lack of qualified IT specialists,



3. A small market (compared to European countries, leaders of fintech), and
4. Absence of an internal market for mergers and acquisitions.

#### 4. CONCLUSION

So, important reforms are underway in Azerbaijan, large-scale programs to build a digital economy are being implemented by the public and private sectors. As in developed countries, issues of digitalization of the economy, building a digital economy and application of innovations are also a priority for Azerbaijan. So, by 2030, GDP growth in Azerbaijan will be associated with digitalization more than half, primarily as a result of increased efficiency and competitiveness of all sectors of the economy. We believe that digitalization of the economy will lead to an increase in use of cashless payments and specific weight of cash payments in Azerbaijan will decrease from 74% to 40%. Judging by forecasts, the volume of non-cash payments will grow by about a tenth annually. Now Azerbaijan is carefully studying the experience of implementing block chain technologies, assessing the possible risks and prospects of use. The Central Bank has launched the country's first pilot project on the block chain platform. As a result of the project, the client will be able to open an account through video identification without coming to the bank. If now there are about 30 banks in Azerbaijan, then their number will drop to 20, maybe even less in the coming years. Such processes often lead to the fact that old infrastructures that do not correspond to new realities are replaced by new, advanced ones that keep up with the times in the combined banks. Since 2010, banks have invested approximately 25% of their net profit in financial technology.

#### LITERATURE:

1. Аббасов А.М., Мамедов З.Ф. Алиев С.А. (2019). Цифровизация банковского сектора: новые вызовы и перспективы // Санкт-Петербургским университет технологий управления и экономики. Журнал - Экономика и управление. 2019. - № 6. С. 81-89
2. Аллахвердиев Ф. (2020). Коронавирус COVID-19 – переход на цифровую экономику // <http://interfax.az/view/799358> 15.04.2020
3. Абрамовских Л. (2018). О возможности использования цифровых технологий как основы перехода на интенсивный путь развития // Экономист. - 2018. - № 8. - С. 17-26.
4. Бакуменко Л., Минина Е.(2019). Классификация стран Европы по уровню цифровизации // Журнал «Экономист» №3/2019
5. Белоус А. П., Ляльков С. Ю. (2018). Вектор развития банков в потоке цифровой революции. Банковское дело. 2017. № 10. С. 16–19.
6. Куклина Е. А., Бабаев Э. А. (2019). Цифровая экономика в проекции экономической модели развития: реалии Республики Азербайджан // Управленческое консультирование. № 12. 2019. С. 90- 102
7. Мамедов З. Ф., Аббасбейли М.А. (2013) Особенности деятельности центрального банка Азербайджана // Журнал- Финансы и кредит 2013. № 47 (575)
8. Мамедов З.Ф. Цифровизация банковского сектора азербайджана: новые вызовы и перспективы // В сборнике: Каспий в эпоху цифровой экономики материалы Международного научно-практического форума. 2019. С. 38-44.
9. Мамедов З.Ф., Сабзалиев С.М. Банковская система азербайджана: глобальные вызовы и перспективы развития // В сборнике: Системный анализ в экономике – 2016 Сборник трудов IV Международной научно-практической конференции. Под редакцией Г.Б. Клейнера. 2016. С. 257-260.
10. Маслеников В. В., Федотова М. А., Сорокин А. Н. (2017). Новые финансовые технологии меняют наш мир // Вестник Финансового университета. 2017;2(21):6–11.

11. Перцева С. Ю. (2017). Финтех: механизм функционирования // Инновации в менеджменте. 2017. - № (12). С. 50–53.
12. Линников А. С., Масленников О. В. (2017). Влияние современных технологических изменений на финансовую безопасность // Известия высших учебных заведений. Серия: Экономика, финансы и управление производством. 2017. - № 1(31). С. 10–14.
13. Трофимов Д. В. (2018). Финансовые технологии в сфере розничных платежей: тенденции развития и перспективы в ЕС и России /// Вопросы экономики. 2018. № 48. –63.
14. Кузнецов Н. Г., Шхалахова С. Ю. (2016). Финтех-маркетинг и особенности современного рыночного цикла развития мобильных платежных сервисов // Учет и статистика. – 2016. № 4(44). С .110–116.
15. Усоскин В. М., Белоусова В. Ю., Козырь И. О. (2017) Финансовое посредничество в условиях развития новых технологий. Деньги и кредит. – 2017. № . С. 14–21.
16. Медведкина Е. А. (2017). Финансовые технологии для устойчивого развития: методология применения. // Финансовые исследования. 2017. - № 4(57). С. 31–36.
17. Никитина Т. В., Никитин М. А., Гальпер М. А. (2017). Роль компаний сегмента финтех и их место на финансовом рынке России. Известия Санкт-Петербургского государственного экономического университета. - 2017. № 1–2(103). С. 45–48.

## IMPROVEMENT OF THE MECHANISMS TO REGULATE AND MANAGE THE ACTIVITIES OF NATURAL MONOPOLIES

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### ABSTRACT

*Formation of a mechanism to effectively regulate the natural monopolies is one of the urgent factors in bringing the economy to a competitive position under the current conditions. The regulation of natural monopolies is the most complex field of the public regulatory system from the market economy system. Choice of the methods for regulating the activities of natural monopolies is the subject of extensive discussion. Another issue under discussion is to ensure transparency in terms of regulation of natural monopolies. A more complex part of these issues is bringing the relationship between total costs and efficiency of regulation to a positive level. The research aims to study the processes associated with formation and development of natural monopolies in the context of sustainable development, to analyze the current situation, to make suggestions and recommendations to improve the mechanisms of regulation and management of their activities. The research was fulfilled based on the research methods such as a scientific abstraction and systematic analysis, logical generalization, statistical analysis. As a result of the research, a flowchart of theoretical and practical approaches and principles for the formation of a mechanism to manage natural monopolies was developed, the principles, criteria and factors determining socio-economic efficiency systematically identified and a flowchart provided. Limits of the research: requires more extensive practical information. The practical importance of the research: may play a positive role in the enriching of scientific and practical knowledge of the specialists conducting studies in the field of natural monopoly and working in this area. Scientific innovation and originality of the research: The characteristics of the structural changes in natural monopolies and the flowchart of the required measures were developed and problems in increasing the efficiency of these areas in the conditions of the market economy were explained. **Keywords:** Mechanisms of management, natural monopoly, regulatory methods, public regulatory system, structural problems*

### 1. INTRODUCTION

It should be noted that since the second half of the XIX century, the concentration of global economic processes, in particular, the concentration of capital, the strengthening of control over the production of individual companies and syndicates have attracted attention. At that time, a tendency towards monopolization was gradually developed and manifested. In general, the issues of resources, natural resources, their management, the hegemony of the state in the process of organizing their use, the effectiveness of the use of these resources are at the root of classical economic theories. The problems of maximum rational use of national wealth for the welfare of people are in the views of the founder of classical economic theory A. Smith [2001]. A. Smith considered that the governments should consider the national welfare as the basic factor in terms of

using of the national wealth and resources. Besides, the government should not try to form unfair competitiveness conditions in the market, the government should not interfere with the market in an active manner. Thus, the government should not give preference to the monopoly in its activity [Smith A., 1776]. In the views and scientific works of the other classic economists, their thoughts about the monopolistic tendency and natural monopoly draw attention. A. Marshall researched the competitiveness issues in the product market, and drew here the attention to the relationships among the economic entities under monopoly conditions, and showed the growth in monopoly tendency [Marshall A., 1890-1891]. J. Say and D. Ricardo in their scientific works at different times noted the interaction of the entities operating in the internal system of the economy, the development tendencies associated with them, especially the need to pay more attention to monopolistic tendencies. [Say J.B., 1803; Ricardo D., 1817]. J. Mill's scientific approaches formed the theoretical basis for the effective intervention of the state in the activities of natural monopolies, and the main goal was to prevent unreasonable increase of prices by monopolists, to reduce the negative impact on consumer processes [Mill J.S., 1848]. The products and services of the natural monopoly include the transportation of the oil and oil products by the major pipeline, transportation of the gas by the gas pipeline, production of electric power and heat, and the service of their covering, railway transportation, sea and river ports and airport transportation terminal service, advanced electricity and postal communication service. The state regulation of the price determined by the natural monopoly generally is considered to be the actual issue standing before the government [Trachuk A.V., 2010].

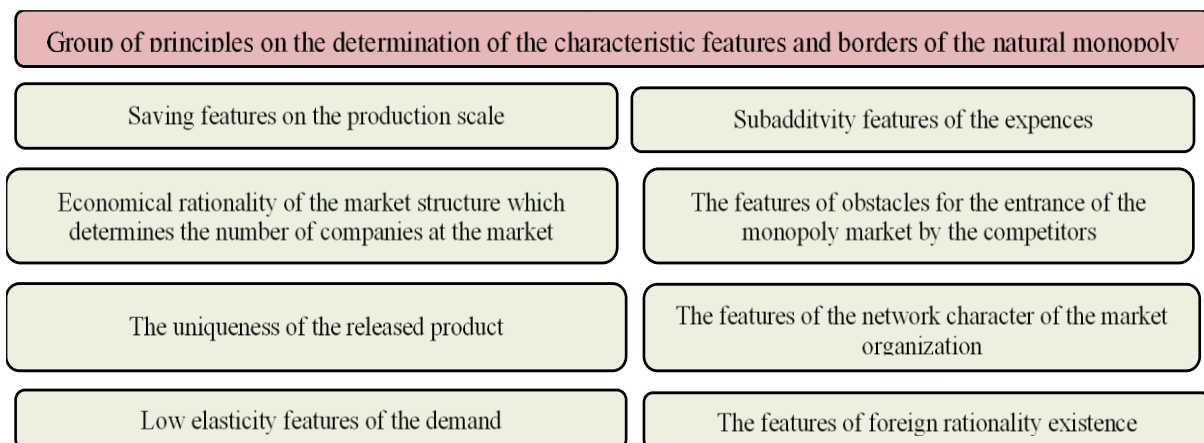
## **2. THE LEVEL OF STUDY OF A PROBLEM AND LITERATURE REVIEW**

In modern times, the identification of the development characteristics of natural monopolies and the disclosure of problems, the specifics of these complex problems are in the focus of attention of world economists and researchers. During the preparation of this article, I have studied some of them with the fact that the problem is quite complex and primarily involved the problems of efficiency of natural monopolies and related management problems. A group of researchers, including classical economists - A. Smith (2001), J. Say (1803), D. Ricardo (1821), A. Marshall (1890-1891), J. Mill (1848), A. Pigou (1985), F. Ramsey (1927), J. Commons (1931), In the works of J. Schumpeter (1954) and W. Samuelson (2003) mentioned about scientific approaches, ideas and considerations, models and concepts related to the formation, development features and problems of natural monopoly. Another group of researchers focuses on the problems of development of natural monopolies, the problems of improving their activities in a market economy and the development of market economy principles, and their solutions. This group includes T. Farrer (1902), J. Clark (1923), T. Di Lorenzo (1996), H. Frank (2018), E. Fox (2014), J. Galbraith (1970), A. Hadley (1886), P. Krugman (2012), M. Porter (1980), R. Posner (1969), W. Sharkey (1982), R. Solow (1956). At the same time, conceptual approaches to improving the structure of natural monopolies, increasing the role of entrepreneurship in this area and paying more attention to ensuring maximum efficiency have come to the fore, and have been studied in many researchers: E.A.Alekseev (2012), L.S.Belyaev (2009), M.I.Kuturnin (2010), M.W.Malkina (2009), V.K.Sosnin (2008), A.V.Trachuk and (2010). Scientific research on the main aspects of the development characteristics and approaches to the problems of natural monopolies in Azerbaijan has intensified in the last 15-20 years. The main reason for this is the establishment of the principles of a market economy in our country and the deepening of these principles. A group of Azerbaijani scientists T.A.Guliyev, A.I.Bayramov (2006), G.S.Huseynov (2010), A.J.Muradov, Y.H.Hasanli and N.O.Hajiyev (2012, 2014, 2019) conducted research and wrote scientific works in the field of development features of natural monopoly in the country, research of problems in this field, disclosure of their essence, identification of effective mechanisms of action on existing problems. At the same time, most of the problems related to the efficiency of natural monopolies in our country remain unresolved, and the problems of developing these areas on the basis of market economy

principles remain unresolved. In connection with all this, there is a need for fundamental scientific research, and we have tried to take this into account as much as possible.

### 3. MODERN TENDENCIES OF THE NATURAL MONOPOLY AND THEIR CHARACTERISTIC FEATURES

It is of strategic importance to regulate the possible mechanisms of operation of natural monopolies in accordance with the interests of the state and society. For this, it is important to have better country laws, legal framework, effective practical mechanisms, flexible state bodies and structures, effective natural monopolies and public control over their transparent activities. It is important to optimally identify each feature of the natural monopoly market and take into account related issues. In particular, the principles of defining the boundaries of the natural monopoly market create additional opportunities for more efficient organization and regulation of the activities of monopolies. A new market-oriented paradigm of state regulation is developing. Its essence is to exclude such forms and methods from monopoly regulation in the direction of the markets in which they operate [Kuturnin M.I., 2010]. Here we also talk about the level of state anti-monopoly policy in all economic sectors, reduction of horizontal obstacles, etc. Such kind of measures aims to determine such behavioural rules and structure in the market which can stimulate and provide the development of competitive relations. The approximate scheme of a group of principles on the determination of the characteristic features and borders of the natural monopoly is expressed in Figure 1.



*Figure 1: Prepared by the authors based on research materials*

We considered relevant to review the approximate scheme of a group of principles on determination of the characteristic features and borders of the natural monopoly given in Figure 1 more detailed: 1) saving features on production scale; 2) subadditivity features of the expenses - reviewing these, we can see that it is based on expenses function of natural monopoly determination; 3) economical rationality of the market structure which determines the number of companies at the market; 4) the features of obstacles for entrance of the monopoly market by the competitors - give an opportunity to choose the diversity of natural monopoly in the framework of monopoly classification; 5) uniqueness of released product - in this case the natural monopoly produces and supplies not only the non-replaceable but also mass use products; 6) the features of network character of the market organization - is connected with the existence of the whole system possessing the determined volume in the network; 7) Low elasticity features of the demand - here the question is both the separate consumers and the low elasticity of the demand of the market in general, and 8) The features of foreign rationality existence - is connected with both positive and negative cases caused by the pauses in network activity.

#### **4. THE ISSUES AND PRINCIPLES OF DEVELOPMENT OF THE NATURAL MONOPOLY MANAGEMENT MECHANISMS**

In determining the natural monopoly, the optimality of the decisions made and the approaches to the principles of action developed in this regard are important. Serious substantiation of approaches to the principles of operation of decisions in the field of natural monopolies ultimately creates a solid basis for improving socio-economic efficiency. Thus, optimizing the costs of the sector, regulating their activities on the basis of more efficient mechanisms, comprehensive analysis of the behavior of natural monopolies in the market of products and services and taking adequate measures, researching and strengthening the sustainability of management structures of natural monopolies, balanced government intervention; identification, equal consideration of public and corporate interests in these processes, increasing attention to the effectiveness of natural monopolies in the market they dominate, assessing the conditions of the competitive environment, creating conditions for natural monopolies to achieve socially acceptable results, price regulation by strengthening the system of control over the activities of natural monopolies creates a strong potential to ensure the socio-economic efficiency of the activities of natural monopolies in general. It should be considered that the natural monopoly management is a complex process, and contains many strategic issues. The distribution market features contain the necessity of the terms of products consumed directly or indirectly by the natural monopoly itself to consumers [Gorokhova E.V., 2009].

#### **5. APPROACHES OF THE NATURAL MONOPOLIES TO THE SOCIAL AND ECONOMIC RATIONALITY ISSUES**

In the scientific works of a group of researchers also the attention was drawn to the issues of monopoly and natural monopoly, mechanisms development, the role of the government in this direction, management issues, the behaviour of market entities in the monopoly environment. First of all, the attention was drawn to the potential possessed by the natural monopoly before the information of the main elements of the competitive environment. Under these conditions, the problem of subjectivity of the competitive environment comes on the agenda and draws the attention [Porter M.E., 1980]. The necessary possessing of the monopoly position of the natural monopoly under the market conditions allows increasing its potential. But in all cases, the natural monopolies are characterized as the valuable elements and important mechanisms of the economics system. The larger amount of state regulation mechanisms in many important sectors, such as electricity generation, extraction and distribution of energy resources, transport system, public utilities, etc., the policy of establishing absolute advantages of natural monopolies in these sectors are peculiar to some countries today also. Nevertheless, in the natural monopoly activity regulation, it is also important to pay attention to the issues of study and estimation of the social-economic influences which can be caused by its activity [Slay B., Capelik V., 1998]. Regulation of the natural monopoly issues, improvement of the state policy and management mechanisms are among some of the most complex issues in the governmental approach to the economics system development problems, estimation of its activity mechanisms adequateness under market economics conditions. Because of this, the government should estimate each feature of the natural monopoly activity from the economic development aspect [Krugman P.R., Obstfeld M., Melitz M.J., 2012]. But most times in many governments of the world the more sensitive approaches to the social and economic rationality issues in the formation and development of management mechanisms on the national monopoly draw the attention. Even though most opponents and researchers are targeted to criticize them, it is not so easy to note the strong deformation of the state policy on the natural monopoly and making fundamental changes. Thus, because of the maximum high volume of production and service sectors, the social and economic importance of the national monopoly activity for the government draws the attention [Samuelson, W.F., Marks S.G., 2003]. The natural monopolies having the quite specific activity mechanisms of the economic system can influence the inner social and economic processes in the country.

Thus there is no other economic entities of the natural monopoly on produced products or services at the local market but the monopoly entities, and even if they exist they are quite weak in comparison with the natural monopoly [Joskow, P., 1997]. Taking into consideration the specific features of the natural monopoly from the government side, they should have regulation mechanisms. Even if today the monopoly issues are considered to be the cases which interfere the deepening of the market economy relations, the government must get involved in these processes, thus the regulation of the social and economic processes in the country demands it [Fetodovskaya O.A., 2014]. For the solution of these problems considering the social and economic aspects by the government, there should be provided with the formation and development of the more excellent anti-monopoly policy, and minimization of the negative influence of the natural monopolies to the existent social and economic processes in the country. There should be determined the borders and areas of the social and economic dividends which the government can get, the systematic measures should be taken. Some opponents do not consider such kind of approach to the natural monopoly entities rational and give preference to disposition the monopoly and area of the market relations domination.

### 5.1. The analysis of the principles, criteria and factors responsible for the social and economic rationality of the natural monopolies

As the processes of natural monopoly reforms in developed countries deepen, their classic interpretation gradually undergoes sea changes with a complex structure as an unchallenged competitive category. Till relatively recent age the natural monopolies were accepted as a special case of the monopoly company as a rule, according to this approach the medium expenses on any product sell level decrease the production function of the product until meeting all the market demand.

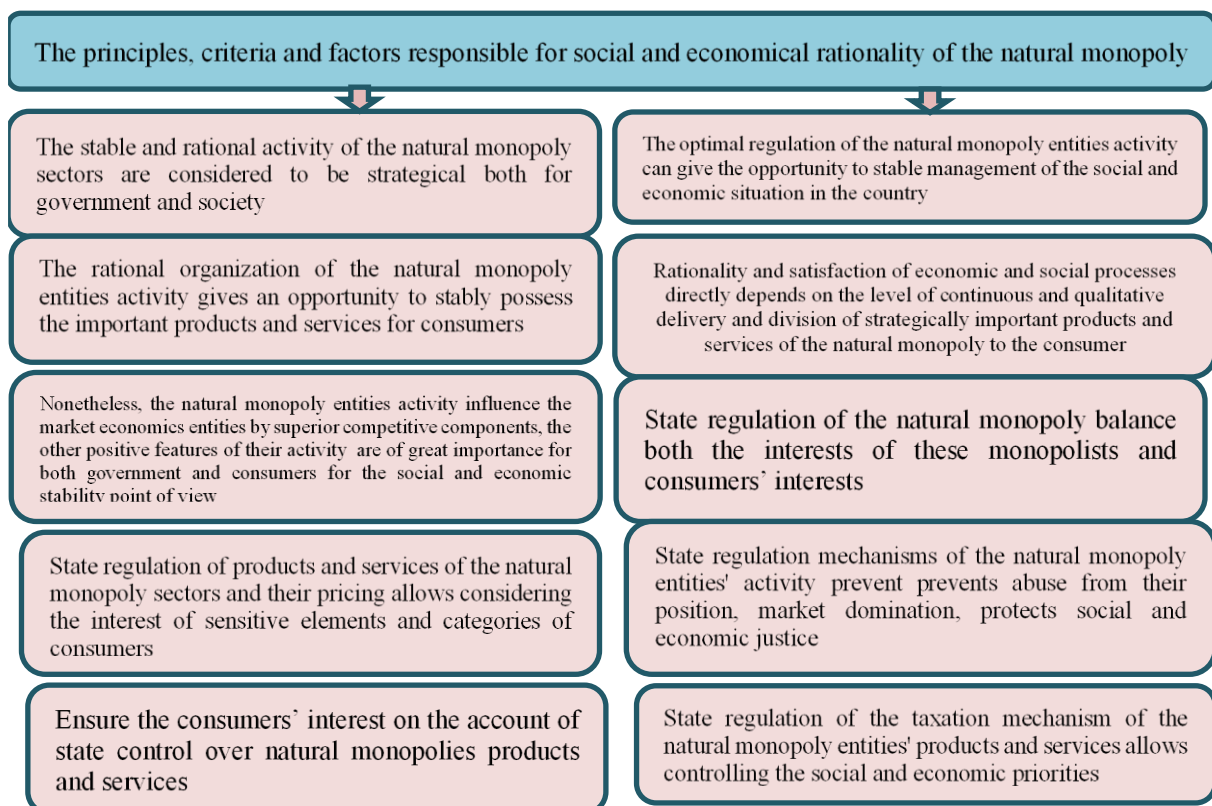


Figure 2: Prepared by the authors based on research materials

If the natural monopoly is multi-productive, the factor of saving opportunities is evident. In this case, the product manufacturing or provision of services in the natural monopoly enterprises is

cheaper than the production and provision of services in a specialized enterprise. Some enterprises can be protected from the competition on political motives for the assurance of fixed income earnings of the essential services from social interest [Porter M.E., 1985]. In Figure 2 the blocking scheme of the principles, criteria and factors responsible for the social and economic rationality of the natural monopolies is shown. If we try to generalize the principles, criteria and factors responsible for the social and economic rationality of the natural monopolies and analyses the data given in Figure 2, it is possible to come to such a conclusion that among them the advantages of stable and rational mechanisms of action, optimal regulation of the natural monopoly entities' activity, management system formation, delivery of the demanded value of the services provided and products manufactured by these entities to the last consumers, the formation of the tariff and price policy, consideration of the vulnerable layers of the population in the pricing policy, strong state control over the natural monopoly entities' activity, etc. have more distinctions.

## 5.2. Natural monopoly organization of the basis of social and economic rationality criteria and possible forms and models of management

If analyse the data given in Figure 3 about the social and economic rationality criteria of the natural monopoly the first to attract attention are the main forms and models of the social and economic rationality. The matter is that the main components of these models and forms wield major influence on social and economic rationality of the natural monopoly in the future processes. The possible forms and models of organization and management based on

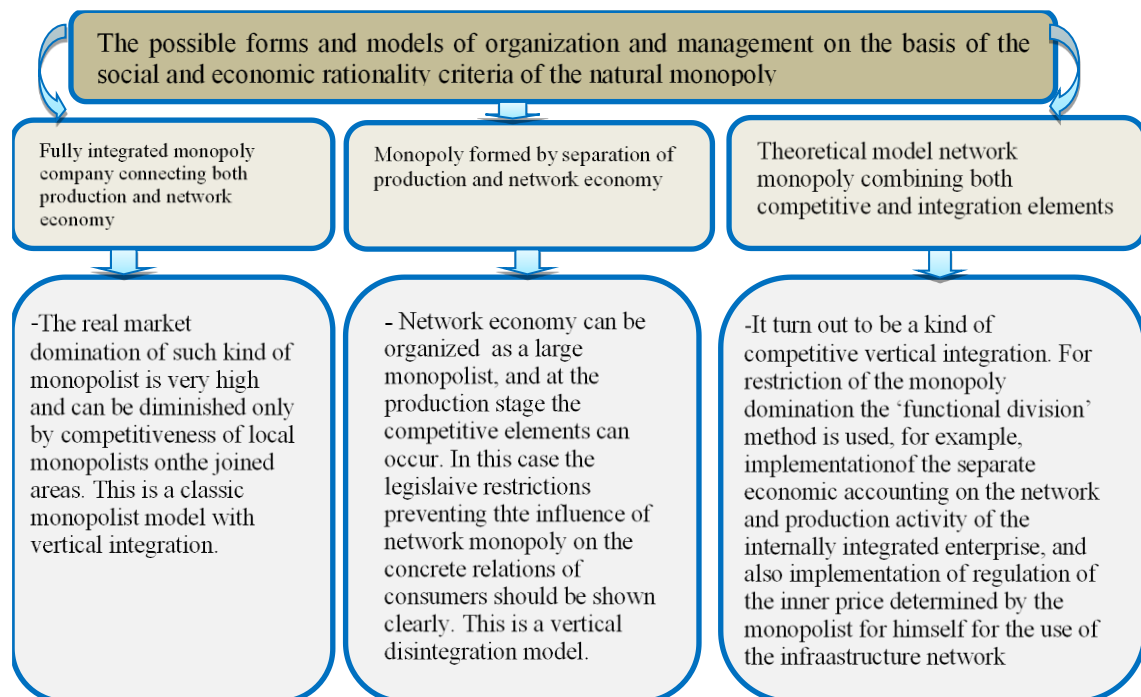


Figure 3: Prepared by the author based on research materials

social and economic rationality criteria of the natural monopoly are given in Figure 3. The rationality indicators of the natural monopoly depend on not a few factors and criteria. First of all, the quality indicators of the institutional environment where the natural monopoly acts should be analyzed and estimated. One of the main points here is a stable organization of the natural monopoly production or service providing by population number and other consumers' demands. To provide the satisfaction of consumers with the natural monopolies activities the state policy on their activity was developed, the legislative framework was formed and



reinforced. Besides, the mechanisms of the pricing regulation on the services and products manufactured by the natural monopolies were prepared. For the continuous and rational organization of the tariff policy, there was created a relevant state structure. It is known that in the natural monopoly sectors the irrational economy made the governments of many developed and developing countries carry out serious structural reforms which caused important changes in the natural monopoly markets activity at the end of 20th century. There were changed the activity conditions of the economy subjects, the experience of interaction between natural monopoly subjects and state regulation authorities from one side and last service users and their products consumers from the other side. Furthermore, the natural monopoly sectors play a very important economic, social and political role in the life of every country. Special attention should be given to the issues connected with the social and economic rationality problems of the natural monopoly. First of all, it is necessary to consider the direction issue of the natural monopoly through the realities context on a more fundamental level. A natural monopoly is an objective case expresses the special situation of the market, and a company tries to realize its interests through this framework.

### **5.3. The characteristic features of the structural changes in the natural monopoly**

Carrying out the structural changes in the natural monopoly is considered to be important and strategical objectives to the more deepening of the market economy mechanisms and relations from the global economic challenges point of view. Thus, the structure changes allow the improvement of the sector activity on the level of new challenges, the more optimal formation of the structure units, rational implementation of the other organizational, economic and juridical mechanisms. In this case, the optimal structure of the sector with minimized production expenses continue to exist. The splitting of a sustainable natural monopoly is associated with major losses of technological efficiency and important social expenses. Optimization of these expenses, improvement of their management mechanisms, and especially strengthening of the structure policy are important conditions. The classification showing the main approaches to the natural monopoly sectors reform is used as the basic criteria of the sector structure. The first is to maintain a vertical integration monopolist, while the other two approaches consider the use of competitive relations at the production stage. In this case, it is supposed that all conditions have already be formed for implementation of competitiveness [Baumol, W.J., 1983]. Solution of the discrimination problem while entering the infrastructure as a rule inevitably demands the separation of the infrastructure segment from the competitive activity types. It is possible to combine three main approaches depending on the complexity degree of the distribution of the specified functions: 1) functional distribution – considers the dual financial and management account keeping on competitiveness and infrastructure services, provision of the entrance into infrastructure on the general basis for all market participants, at the same time the actual separation of the competitive services on the stage of production and network services; 2) executive distribution – executive management of the network infrastructure and adoption of investment decisions is possible in case of realization by the authorities not depending on the independent production companies' owners. In this case, the property right on the production objects and network infrastructure can be joined, and 3) joint owner distribution - production of the competitive products types and separation of the network economy, and giving them to the separate legal bodies possessing the different management functions. The systematic review, determination of the specific features on structural changes of the natural monopolies and their adequate consideration are of great importance. In this case, a solid foundation is formed for the more rational organization of natural monopoly entities' activity. In Figure 4 the blocking scheme of the demanded measures and characteristic features of structural changes in the natural monopoly sector is given. The maximum rational carrying out of the structural changes in the natural monopoly sector and taking into consideration the characteristic features of its entities in these processes are characterized as an important term.

The structure changes raise competition between monopolist companies, give an incentive to the processes of expenses optimization and price improvement. If the potential competitor of the monopolist company has an opportunity to enter the market and create non-returnable costs, the simple entrance threat will

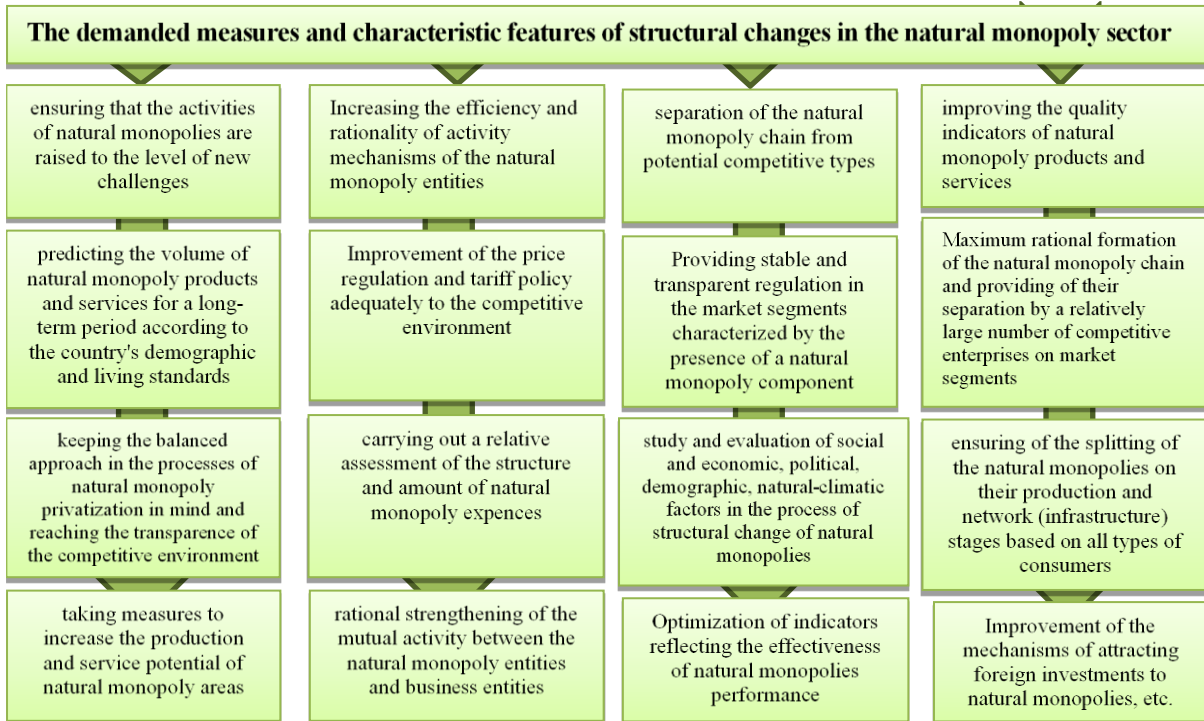


Figure 4: Prepared by the author based on research materials

keep the monopolist's price on its medium expenses level in case of subadditivity of the sector functions of the expenses. Overall, in this case, we consider that the concept of conflicting markets expresses the future development of the neo-classic model of the excellent competitiveness by specially marking the entrance-exit independence.

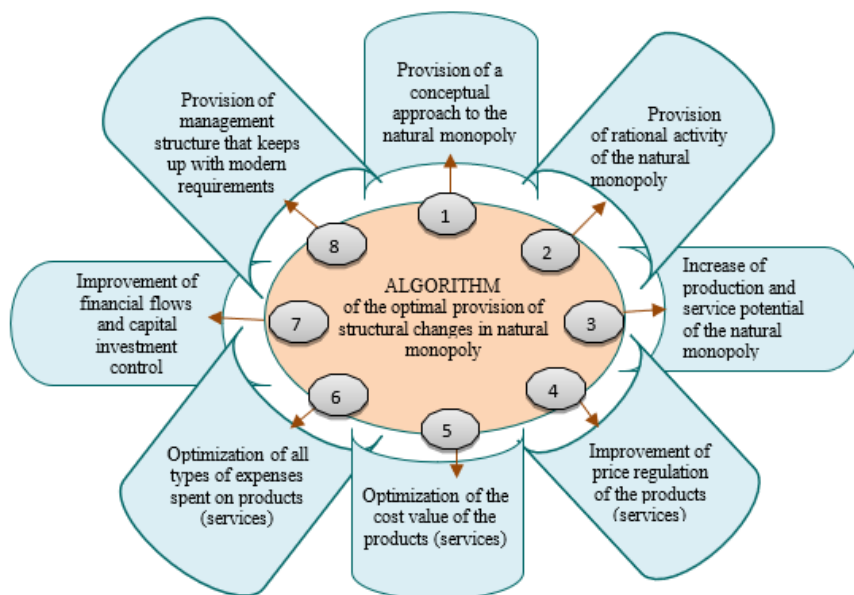


Figure 5: Prepared by the author based on research materials

From the mentioned above generally speaking based on research materials, we gave the algorithm of an optimal provision of structural changes in natural monopoly in Figure 5. In this regard, it is important to ensure the consistent implementation of the tasks contained in the algorithm in order to solve the problems of efficiency of natural monopolies.

## 6. CONCLUSION

The analysis of the development characteristics of the natural monopoly, their formation and processes of becoming the absolute monopolist at the market shows that the important role in this issue plays the government and state regulation mechanisms. Because of this, it is not so real to expect the denationalization of the natural monopoly in a short time, in other words, privatization, the development of the enterprise in this sector. A complex and systematic review of the existing issues of the natural monopoly in the framework of 'state-private' sector cooperation, maximally concrete determination of the state interference borders to this sector plays an important role. Alongside this we considered necessary to give importance to a group of issues: 1. It is necessary to manage many complicated tasks for the maximum rational and flexible activity of the natural monopoly entities, and for this reason, the quality indicators of the services and products of the natural monopoly must be kept in the center; 2. The conceptual approaches to the features and problems of natural monopoly development are quite important, and in this case, the rational organization of natural monopoly activity from modern realities and demands can be real; 3. The improvement issues of the regulation mechanisms of the products or prices are also characterized as a key aspect in the optimality of the structural changes of the natural monopoly sector; 4. To provide the satisfaction of last consumers the cheaper or the higher quality product or service is considered to be attractive; 5. The measures on optimization of the cost value of the products or services of the natural monopoly entities should be taken, and alongside with this the minimization of expenses on the other activity circles should be provided; 6. One of the strategic tasks in the structure change of the natural monopoly sector is the increase of rationality of the control mechanisms on financial flows and capital investment; 7. Creation of the management system matching the modern standards acting as strategic mechanisms in rationality increase of the natural monopoly and the issues on this, optimal determination and distribution of the tasks and functions of the natural monopoly entities should be provided, etc.

## LITERATURE:

1. Baumol W.J. Some Subtle Pricing Issues in Railroad Regulation//*International Journal of Transport Economics*, 10 (1-2), 1983. P. 341-355.
2. Belyaev L.S. The problems of the electricity market. - *Novosibirsk: Science*, 2009. 296 p.
3. Clark J.M. *Studies in the Economics of Overhead Costs*. Chicago, 1923, 309 p.
4. DiLorenzo T.J. The Myth of Natural Monopoly//*The Review of Austrian Economics*. Vol. 9. № 2, 1996. p. 43-58.
5. Farrer T.H. *The State in Its relation to Trade*. L.; N.Y., 1902.
6. Fox E.S. Natural monopolies in the global economy: nature, genesis and development trends // *Questions of Economics*. 2014. №5. p. 12-18.
7. Frank H.R. *Microeconomics and Behavior*. McGraw-Hill. 2018, 410 p.
8. Galbraith J.K. Economics as a System of Belief//*American Economic Review*. 60 (2): 1970, p. 469-478.
9. Gerasimenko V.V., Sosnin V.K. Institutional conditions for the restructuring of natural monopolies in Russia//*Moscow University Bulletin*. Ser. 6. Economy. No.2, 2008, pp.57-69.
10. Goodwin N., Nelson J., Ackerman F., Weisskopf T. *Microeconomics in Context* (2nd ed.). Sharpe. 2009, 420 p.

11. Gorokhova E.V. Natural monopolies as a unique form of organization of the market for imperfect competition // *News of the BSU*. 2009. No. 5, p. 43-51.
12. Hadley A.T. Private monopolies and public rights // *The Quarterly Journal of Economics*. 1886.-№ 1(1). p. 28-44.
13. Hajiyeu N.U.. (2012). Studying of special practical issues of abuse of dominance. *Journal of Economic Sciences: Theory & Practice*. 69 (2). p.55-90
14. Huseynov G.S. Theoretical, practical and evaluative problems of natural monopolistic reforms// *The Journal of Economic sciences: theory and practice*. №2, 2010.
15. Commons J.R. Institutional Economics. *American Economic Review*, vol. 2 1931, p. 648-657.
16. Igoshina D.R. Institutional gap in the definition of a natural monopoly as an economic entity // *Modern problems of science and education*. 2014, p. 51-62.
17. Joskow P. Restructuring, Competition and Regulatory Reform in the U.S. Electricity Sector // *Journal of Economic Perspectives*. № 11, 1997. p. 117-129.
18. Koptin D. R. The role of antitrust regulation in the development of competitive relations in natural monopoly markets // *Izvestia*. 2015. № 4. p.15-20.
19. Krugman P.R., Obstfeld M., Melitz M.J. “*International Economics. Theory & Polycy*”. Ninth edition. England, 2012, 305 p.
20. Krugman P.R., Wells R. “*Microeconomics*”. Princeton University, New York, 2013, 206 p.
21. Kuturnin M.I. *Natural monopolies as an instrument of state regulation of the economy*. Diss. dr. econ. of sciences. Moscow, 2010, 440 p.
22. Malkina M.W. *Economic theory. Microeconomics*. Nizhny Novgorod: Publishing house of Nizhny Novgorod State University, 2009, 436 p.
23. Marshall A. *Principles of Economics*, 1890-1891. [www.library.fa.ru/files/Marshall-Principles.pdf](http://www.library.fa.ru/files/Marshall-Principles.pdf).
24. Mill J.S. *The Principles of Political Economy: With Some of Their Applications to Social Philosophy*. John W. Parker. London, 1848. <https://www.gutenberg.org/files/30107/30107-pdf.pdf>.
25. Muradov A.J., Hasanli Y.H., Hajiyeu N.O. (2019). The assessment of impact of competitiveness to economic development. *Economic and Social Development: Book of Proceedings*, p.1170-1177. Varazdin Development and Entrepreneurship Agency (VADEA). (Feb 14/15).
26. Muradov A.J., Hajiyeu N.O. (2014). Analytical frameworks and procedures for application of demonopolization. *Journal of Economic Sciences: Theory & Practice*. 71 (1). p.4-25.
27. Pigou A. *Economic theory*. Welfare in 2 volumes. Moscow, 1985. 968 p.
28. Porter M.E. *Competitive Advantage*, The Free Press. New York. 1985. Ch. 1, pp. 11-15.
29. Porter M.E., *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free Press, 1980, 380 p.
30. Posner R.A. Natural Monopoly and its Regulation // *Stanford Law Review*. 1969 (2), P.134-153.
31. Ramsey F. A Contribution to the Theory of Taxation // *Economic Journal*. Vol. 37. № 145, 1927, P. 47-61.
32. Ricardo D. *On the Principles of Political Economy and Taxation*. 1817 (1821), 333 p.
33. Samuelson W.F., Marks S.G. *Managerial Economics* (4th ed.). Wiley. 2003, P. 102-119.
34. Say J.B. *A Treatise on Political Economy*, 1803, 492 p.
35. Schumpeter J.A. *History of Economic Analysis* Oxford University Press, 1954, 1260 p.
36. Sharkey W. *The Theory of Natural Monopoly*. Cambridge: Cambr. Univ. Press, 1982, 308 p.
37. Slay B., Capelik V. Natural monopoly regulation and competition policy in Russia // *Antitrust Bulletin*, Springer, 1998, p. 81-93.
38. Smith A. *An Inquiry into the Nature and Causes of the Wealth of Nations*. London: W. Strahan and T. Cadell, 1776. Vol. 1, p.75-92.
39. Smith A. *Wealth of Nations*, edited by C. J. Bullock. Vol. X. The Harvard Classics. New York: P.F. Collier & Son, 1909–14; Bartleby.com, 2001. <https://www.bartleby.com/br/01001.html>.

40. Solow R.M. A contribution to the Theory of Economics Growth // *Quarterly Journal of Economics*. 1956, Vol. 70, №1. p.151-173.
41. Sosnin V.K. *Directions of structural reforming of natural monopolies in Russia*. Avt-t diss. cand. econ. of sciences. Moscow, 2008, 27 p.
42. *The law of the Republic of Azerbaijan on regulated prices*. Baku, May 30, 2003.
43. Trachuk A.V. *Theoretical and methodological substantiation of the improvement of the mechanism of activity of natural monopolies*. Diss.d-econ. sciences. 2010, Moscow, 456 p.

## THE EFFECT OF FERTILIZER TYPES ON POTATO YIELD IN AZERBAIJAN

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### ABSTRACT

*The main purpose of this research is to evaluate the impact of fertilizer types (phosphorus, nitrogen, potassium, and mixed fertilizers) on potato yield in Azerbaijan. To conduct the research, cross-sectional sample data of 2017 has been selected from Farm Data Monitoring System survey. OLS estimation has been employed for multiple regression models. The results of the research indicate that there is positive relationship between fertilizer types and potato yield in Azerbaijan. In adding control variables such as region, irrigation, and input cost into the regression model, all other variables except phosphorus fertilizer, were found positively related with potato yield in Azerbaijan.*

**Keywords:** *potato, yield, fertilizer types, OLS regression*

### 1. INTRODUCTION

Potato is considered as one of the most important crops in the world as it is the main agricultural crop in terms of consumption and a major source of smallholder farmers' income. Potato is also the most worldwide producing vegetable crop. According to the Food and Agriculture Organization of the United Nations (FAO) statistics, 388.2 million tons of potatoes are produced globally during year of 2017 while this indicator is 913.9 thousand tons in Azerbaijan (The State Statistical Committee, 2017). Tovuz, Gadabay, Jalilabad, and Shamkir regions account the main part of the potato production in the country. Potato yield (15 ton/ha) in Azerbaijan is low compared to the world average productivity (20.1 ton/ha). Reasons of such low yield of potato can be the consequences of poor soil fertility, inappropriate fertilizer application, unbalanced plant nutrients, disease and pests, irrigation schemes, water supply, and shortage of quality seed (Bezabih and Mengistu, 2011). On the other hand, it is worth to mention that fertilizers such as phosphorus, potassium, and nitrogen are important elements for increasing the productivity of potato (Pervez, et al., 2013). The application of higher amounts of nitrogen fertilizers has a positive effect on the growth of potato and maximizes potato yield. Similar to nitrogen fertilizer, potato requires sufficient amount of phosphorus fertilizer for the optimum production and the productivity. Potassium fertilizer has a crucial role on potato tuber and starch which further resulted with high level of yield. The reason of applying these fertilizers on potato plants is to reduce massive production and increases the productivity of potato in the country (Mokrani et al., 2018). On the other hand, government of Azerbaijan pays great attention to the agricultural sector. As one way to increase the productivity of the crops is applying different kinds of fertilizers on the plants, 70 percent of the fertilizer costs is paid by

the government through subsidy mechanism and many articles written related to the support of agricultural sector in Azerbaijan (Humbatova and Hajiyeu, 2019). Taking into account the importance of different fertilizer types such as nitrogen, phosphorus, and potassium on potato plants, the purpose of this research is to investigate the effect of fertilizer types on potato yield in Azerbaijan. The remainder of this paper has been organized as following: Literature review has been captured the existing research related to the impact of fertilizer on potato yield. Methodology and data part have described the methodology employed and the data used in the research. Result and discussion part have stated the results and findings of the research. Conclusion part has briefly summarized all the work done. Finally, in references, all the sources used in this study has been described.

## **2. LITERATURE REVIEW**

The article, “The Effect of Mineral and Organic Fertilizers on Potato Tuber Yield and Quality” written by Baniuniene and Zekaite (2008), evaluated the impact of organic and mineral fertilizers on potato tuber quality and yield. In the research, experiments were conducted covering the period 1994-2005. Potatoes growth was tested by applying and not applying mineral fertilizer combination with farmyard manure. The result of the experiment showed that farmyard manure has a positive effect on potato tuber yield. Depending on the combinations of fertilizer, potato tuber yield increased by 35-82%. The research “Impact of Bio and Organic Fertilizers on Potato Yield, Quality and Tuber Weight Loss after Harvest” analyzed the effect of organic, mineral, and bio-fertilizers on potato yield, quality, and weight loss after harvest in Egypt by conducting two field experiments. The result of the study showed that application of 50% of mineral fertilizers + 23.8 ton/ha compost and 35.7 ton/ha compost had a significant positive effect on both marketable and total potato yield. Nevertheless, mineral and bio-fertilizers with 11.9 ton/ha compost decreased the productivity of potato (Sayed et al, 2014). In his paper, “Effects of Nitrogen and Phosphorus on Potatoes Production in Ethiopia: A Review”, Khasay (2019) reviewed how inorganic fertilizers (phosphorus and nitrogen) affected potato production and yield in Ethiopia. The result of different experiments showed that an increase in nitrogen and phosphorus application rose the productivity of potato. However, insufficient application of these fertilizers led to the minimization of potato yield. The study “Effect of Different Rates of Nitrogen and Phosphorus on Yield and Yield Components of Potato (*Solanum tuberosum* L.) at Masha District, Southwestern Ethiopia” conducted by Zewide, Mohammed, and Tulu (2012) investigated how the rates of nitrogen and phosphorus influence potato yield and yield components. Experimental analysis was carried, and the result of the study indicated that higher rates of phosphorus and nitrogen affected production and productivity of potato positively in Southwestern Ethiopia. The effects of fertilizer types (organic and inorganic) on potato yield were assessed using qualitative method by Mitiku, Tolasa, and Bekele (2019), in their research “Effects of Blended NPS Fertilizer and Composted Cattle Manure Rates on Potato (*Solanum tuberosum* L.) Production: A Review”. According to the result of the research, application of both organic and inorganic fertilizers influences the productivity of potato and improve soil fertility and structure. The article “Potato Response to Potassium Application Rates and Timing under Semi-arid Conditions” evaluated the impact of potassium rates and timing on potato yield, yield components, and tuber quality by conducting field experiment. The result of the study revealed that the productivity and quality of potato rose with the increasing rates of potassium fertilizer at tuber bulking stage (Karam et al, 2011).

## **3. METHODOLOGY AND DATA**

The study attempts to examine the effect of fertilizer types on potato yield in Azerbaijan by using cross-sectional sample data of 2017. The data is taken from “Farm Data Monitoring System (FDMS)” survey gathered by Agricultural Research Center under the Ministry of

Agriculture of Azerbaijan once a year and the survey was conducted in all regions of Azerbaijan among 3500 farmers. In the study, those farmers who were engaged in the production of potatoes have been analyzed. Two economic regions, Ganja-Gazakh and Lankaran, where potato production is the most, have been assessed. After selection of the relevant data for the research, the sample consists of 108 farmers. The main limitation of the research is that sample selection of the farmers for the survey is from subsidy database of Ministry of Agriculture of Azerbaijan. The farmers who do not get subsidy are not included in the survey that can make the result of the research bias. In order to address the purpose of the study, eight variables including yield, irrigation, region, input cost, phosphorus, nitrogen, potassium, and mixed fertilizers have been selected. Yield has been defined as a dependent variable in this research. It shows potato production per hectare which is measured as ton/ha. The data of Yield (LnYield) has been transformed into log form to reduce the variance; thus, the coefficients can be interpreted as elasticity. Phosphorus, nitrogen, potassium, and mixed fertilizers which are the important elements to impact potato yield have been selected as explanatory variables. They express the amount (tons) of these fertilizers applied per hectare of potato area. Irrigation, region, and input cost have been chosen as control variables. Irrigation used in this study is a dummy variable, where irrigated takes the value of 1, and not irrigated values as 2. Region is chosen as a dummy variable as well. Ganja-Gazakh economic region takes the value of 1 while Lankaran economic region values as 2. Input cost indicates the amount spent per hectare of potato which is measured as AZN. The data of this variable (LnCost) has also been transformed into log form. To analyze the effect of fertilizer types on the potato yield in Azerbaijan, Ordinary Least Square (OLS) estimation has been employed. STATA software has been applied for the estimation. Firstly, multiple linear regression model for measuring the sole impact of fertilizer types (phosphorus, nitrogen, potassium, and mixed) on potato yield has been constructed. Then second multiple regression model has been run to account for other variables such as irrigation, region, and input cost that can have a significant effect on potato yield. In order to get accurate and unbiased result, the model should satisfy the OLS assumptions. In this study, the model meets all OLS assumptions except homoscedasticity that all residuals should have a constant variance. To avoid the problem of heteroscedasticity, robust regression method has been applied for the multiple regression models. Table 1 illustrates the summary statistics for the data. The value 0 in phosphorus, nitrogen, potassium, and mixed fertilizers indicates that some farmers do not apply fertilizer to their potato area.

*Table 1: Descriptive statistics of the variables: yield, region, irrigation, input cost, and fertilizer types*

Variable	Obs.	Mean	Std.Dev.	Min	Max
<b>LnYield</b>	108	2.66	0.55	0.26	3.77
<b>Region</b>	108	1.19	0.40	1	2
<b>Irrigation</b>	108	1.34	0.48	1	2
<b>LnCost</b>	108	7.57	0.67	5.53	9.12
<b>Phosphorus</b>	108	0.09	0.16	0	0.67
<b>Nitrogen</b>	108	0.21	0.19	0	0.87
<b>Potassium</b>	108	0.03	0.07	0	0.36
<b>MixedF</b>	108	0.04	0.09	0	0.55

#### 4. RESULT AND DISCUSSION

The following multiple regression model has been constructed to test the effects of fertilizer types on potato yield for the year 2017 in Azerbaijan.

Model 1:

$$\text{LnYield} = 2.49 + 0.67*\text{Phosphorus} + 0.02*\text{Nitrogen} + 2.13*\text{Potassium} + 1.17*\text{MixedF}$$



Table 2: The effect of fertilizer types on potato yield in Azerbaijan

Variable	Coefficient	Robust Std. Error	t-value	$\rho$ – value
Constant	2.49	0.09	29.19	0.00
Phosphorus	0.67	0.41	1.65	0.10
Nitrogen	0.02	0.25	0.09	0.93
Potassium	2.13	1.05	2.03	0.04
MixedF	1.17	0.38	3.06	0.00

The result indicates that phosphorus, nitrogen, potassium, and mixed fertilizers have a positive impact on potato yield. Among these fertilizers, potassium is the most effective to improve the productivity of potato and its effect is statistically significant at 5% significance level. So that 1 unit (ton) increase in potassium leads to the rise in potato yield by 213%. On the other hand, phosphorus, nitrogen, and mixed fertilizers increase potato yield by 67%, 2%, and 117% respectively. Moreover, second multiple regression model has been constructed to control for other factors that can influence potato yield in Azerbaijan. As mentioned above, the additional variables are region, irrigation, and input cost.

Model 2:

$$\text{LnYield} = 0.95 - 0.14*\text{Region} - 0.35*\text{Irrigation} + 0.30*\text{LnCost} - 0.37*\text{Phosphorus} + 0.07*\text{Nitrogen} + 1.74*\text{Potassium} + 0.25*\text{MixedF}$$

Table 3: The effect of region, irrigation, input cost, and fertilizer types on potato yield in Azerbaijan

Variable	Coefficient	Robust Std. Error	t-value	$\rho$ – value
Constant	0.95	0.95	0.61	0.55
Region	-0.14	0.10	-1.41	0.16
Irrigation	-0.35	0.16	-2.18	0.03
LnCost	0.30	0.18	1.66	0.09
Phosphorus	-0.37	0.34	-1.09	0.28
Nitrogen	0.07	0.20	0.36	0.72
Potassium	1.74	0.78	2.24	0.03
MixedF	0.25	0.50	0.51	0.61

When adding other variables, the effect of phosphorus on potato yield becomes negative. As such 1 unit (ton) increase in phosphorus decreases potato yield by 37%. The effect of potassium and mixed fertilizers decreases to 174% and 25%, respectively and the effect of mixed fertilizer on potato yield turns to be statistically insignificant. Positive association exists between input cost and potato yield. 1% increase in input cost leads potato yield to rise by 0.3% and its effect is significant at 10% significance level. Unsurprisingly, irrigated area has 35% higher impact on potato yield than not irrigated area. Despite the fact that potato yield is slightly greater in Lankaran economic region (16.6 ton/ha) than in Ganga-Gazakh economic region (16.0 ton/ha) (The State Statistical Committee, 2017), the findings of the research contradicts this statistic. According to the result of this study, potatoes grown in Ganga-Gazakh economic region have 14% higher effect on the yield than potatoes grown in Lankaran economic region. The reason why this result contradicts the statistics can be due to the lack of data availability. 87 selected farmers out of 108 are from Ganga-Gazakh economic region. This unequal distribution of selected farmers in the regions can lead to the misleading result.

## 5. CONCLUSION

Overall, in this research, the result of OLS regression models showed that fertilizer types (phosphorus, nitrogen, potassium, and mixed fertilizers) and potato yield share a positive relationship in Azerbaijan. Additional application of these fertilizers increases the productivity of potato. The positive and significant effect of potassium fertilizer is higher than the effect of remaining ones on the potato yield which rises by 213%. Moreover, the yield increases by 67%, 2%, and 117% with the expanded application of phosphorus, nitrogen, and mixed fertilizers on potato plants, respectively. This finding is consistent with the existing literature that fertilizers are important elements of rising the productivity (Nityamanjari, 2018). When control variables (region, irrigation, and input cost) included into the model, the effect of phosphorus turns to be negative that decreases potato yield by 37%; however, the impact of other fertilizer types stays positive. Input cost, which has an essential role in the yield component, is positively related with potato yield based on the result of this research. Comparing the effect of Ganga-Gazakh economic region with the effect of Lankaran economic region on the productivity of potato, difference is 14% in a favor of Ganga-Gazakh economic region. According to the result of the research, fertilizer types have been found to positively affect potato yield in Azerbaijan. To increase the productivity of potato, there exists a need to rise farmers' awareness on the application of various kinds of fertilizers in Azerbaijan. The rise of productivity can lead to competitiveness of potato in the world market and issues regarding competitiveness has been found in the articles (Humbatova et al, 2018). Moreover, fertilizer rates are also considered as an important factor influencing potato yield, and overdose application of fertilizer can have adverse effects on people's health. Due to the lack of data availability, the scope of this research is limited for only analyzing the effect of fertilizer types on the productivity of potato.

## LITERATURE:

1. Baniunuene, A., and Zekaite, V., (2008). "The Effect of Mineral and Organic Fertilizers on Potato Tuber Yield and Quality". *Latvian Journal of Agronomy*, No.11.
2. Bezabih, E., and Mengistu, N., (2011). "Potato Value Chain Analysis and Development in Ethiopia". *Addis Abeba*, Ethiopia.
3. Food and Agriculture Organization of the United Nations (FAO, 2017). *World Potato Production*.
4. Food and Agriculture Organization of the United Nations (FAO, 2017). *World Potato Yield*.
5. Humbatova, S. İ., Hajiyev, N. GO., Gasimov, R. Kh., and Tanriverdiev, S. M., (2018). "Interaction of Production Cost, Price and Labour Factors in Increase of Competitiveness in Agrarian Sector of Azerbaijan". *Bulgarian Journal of Agricultural Science*, 24 (1), p.23–34.
6. Humbatova, S. İ., and Hajiyev, N. GO., (2019). "The Mutual Relations between Food Product Prices and Consumer Behavior of Population in Azerbaijan Domestic Agricultural Market". *Bulgarian Journal of Agricultural Science*, 25(5), p.909-919.
7. Karam F., Massaad R., Skaf S., (2011). "Potato Response to Potassium Application Rates and Timing under Semi-arid Conditions". *Advances in Horticultural Science*, 25(4), p.265-268.
8. Kashay, W.S., (2019). "Effects of Nitrogen and Phosphorus on Potatoes Production in Ethiopia: A Review". *Cogent Food & Agriculture*, 5(1), 1572985.
9. Mitiku, M., Tolasa, M., and Bekele, M., (2019). "Effects of Blended NPS Fertilizer and Composted Cattle Manure Rates on Potato (*Solanum tuberosum* L.) Production: A Review". *International Journal of Agriculture & Agribusiness*, 5(2), p.118-129.
10. Mokrani, K., Hamdi, K., and Tarchoun, N., (2018). "Potato (*Solanum Tuberosum* L.) Response to Nitrogen, Phosphorus and Potassium Fertilization Rates". *Communications in Soil Science and Plant Analysis*.

11. Nityamanjari, M., (2018). “Effect of Fertilizers on Growth and Productivity of Potato-A Review”. *International Journal of Agriculture Sciences*, 10(4), p.5183-5186.
12. Pervez, M. A., Ayyub, C. M., Shaheen, M. R., and Noor, M. A., (2013). “Determination of Physio-Morphological Characteristics of Potato Crop Regulated by Potassium Management”. *Pakistan Journal of Agricultural Sciences*, 50, p.611–615.
13. Sayed, F.S., Hassan A.H., and Mohammed M.M., (2014). “Impact of Bio and Organic Fertilizers on Potato Yield, Quality and Tuber Weight Loss after Harvest”. *European Association for Potato Research*, 58, p.67–81.
14. The State Statistical Committee of the Republic of Azerbaijan, (2017). Potato Production in Azerbaijan.
15. Zewide, I., Mohammed, A., and Tulu, S., (2012). “Effect of Different Rates of Nitrogen and Phosphorus on Yield and Yield Components of Potato (*Solanum tuberosum* L.) at Masha District, Southwestern Ethiopia”. *International Journal of Soil Science*.

# HUMAN CAPITAL AS A STRATEGIC RESOURCE OF ECONOMIC DEVELOPMENT

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## **ABSTRACT**

*Due to the entry of the world economy into the post-industrial, and essentially technetronic stage of development with its involvement in the production process of a revolutionary new technology and electronics, a knowledge economy began to take shape. In this regard, the intellectual component at all levels of social reproduction begins to outweigh the traditional material sources of economic growth, and human capital is put forward as the leading factor in modern socio-economic development. A distinctive characteristic of the knowledge economy is that there is not limitedness, but inexhaustibility of resources in the form of knowledge, which can be infinitely enriched and freely exchanged. It should be emphasized that only people can generate new knowledge. Moreover, it is a person, their creative potential, and not the possession of resources and technologies that ensure the competitiveness of the goods produced. This is because technology is always possible to copy, but human intelligence is not, because it is a unique resource. All this actualizes the issue of the formation and effective use of human capital, as well as the calculation of the optimal costs associated with education, healthcare and culture in each segment of the economy. The value of human capital can be explained with the fact that this resource determines the development of all other areas of economy, both in manufacturing and in mining, as well as in agriculture and in services. The technetronic nature of the modern economy, as noted above, creates a vital need for highly qualified personnel. In this regard, the development of education, health care, the training and retraining of professional personnel and the provision of jobs for them are becoming a priority in the policy of the state and firms.*

**Keywords:** *asymmetry, human capital, knowledge economy, spillover effect*

## **1. INTRODUCTION**

The technetronic nature of the modern economy creates a vital need for highly qualified personnel. According to P. Drucker, “no matter what material resources the system possesses, they do not multiply themselves. Both the state and the firm are developing with the energy and intelligence of its people” (Drucker, 2005). Drucker also noted that the most valuable assets of companies in 20th-century was its production equipment. The most valuable asset of a 21st-century (whether business or nonbusiness) will be its knowledge workers and their productivity (Drucker, 2000). In this regard, the development of education, health care, training and retraining of professional personnel and providing them with jobs are becoming a priority in the policy of the states and firms. At the same time, this process in the market economy appears as institutional, due to which the formation and realization of human capital occurs through its accumulation and use on a national scale, as well as for each individual and enterprise, based on expected benefits. This creates a competitive environment that stimulates both national and private efforts in the fields of education, healthcare, industrial innovation, and of course, in the labor market. In the modern economy, all these phenomena are accompanied by mechanisms to ensure a positive asymmetry between the costs of formation and the results of the implementation of human capital. For example, at the state level, this kind of asymmetry can manifest itself in the form of a spillover effect, when the development of education, health care and other areas that form human capital stimulate the development of almost all spheres of economic activity and the growth of macroeconomic indicators of the country.

The asymmetry of costs and results in this context is undoubtedly positive, since the development of human capital is an impetus to the development of the economy as a whole, the growth of enterprises' profits and citizens' incomes. Human capital is considered as an extremely specific resource. This is because its formation and implementation depend on many factors. Here, an important role is played by the guidelines of state economic policy, as well as socio-mental stereotypes in relation to education, the specifics of management at enterprises and other non-economic factors that are difficult to modify. Human capital is a part of national wealth, and its size directly depends on the quality of the population, that is, its intellectual level, educational qualifications, professional skill, general culture, moral success, prevailing in this nation and moral society.

## 2. MEASUREMENT OF HUMAN CAPITAL

The impact of many factors on the formation of human capital complicates the possibilities of its exhaustive measurement. However, the Global Economic Forum carries out a calculation in the following directions: capacity, development, deployment, know-how. All of them are expressed in the Global Human Capital Index. The index covers 130 countries depending on their level of human capital development and varies from 0 to 100. As an integral indicator, this index covers the situation with human capital in countries in 5 age groups of the population, from 0-14, 15-24, 25-54, 55-64 and above 65 years old. As a result, we can demonstrate the following picture of elements that equally affect the human capital index. Each of these elements form 25% of its value.

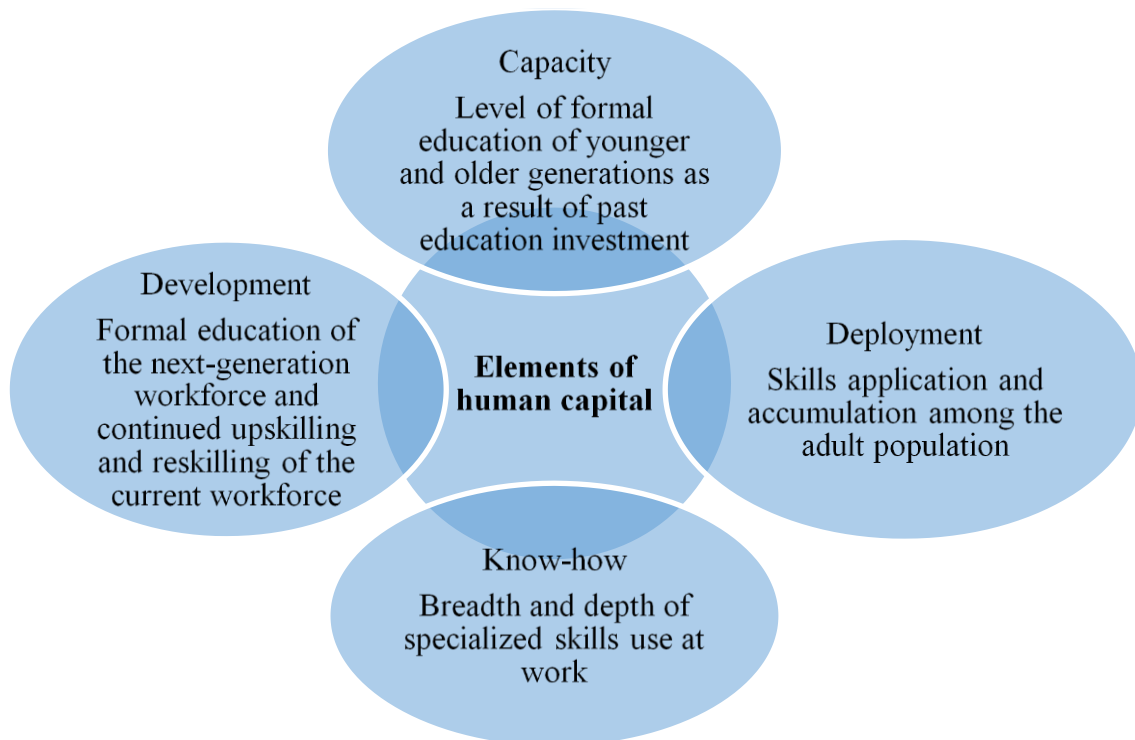


Figure 1: Elements of human capital (Source: World Economic Forum 2017)

Countries in the Top 5 on this index are Norway, Finland, Switzerland, United States, and Denmark. (World Economic Forum, 2017). According to data for 2016, Azerbaijan ranks 54th in the human capital index. Among the key indicators affecting the formation of the index in our country are government spending on education, which is 2.5% of the country's GDP, unemployment -5%, people over 65 - 5.8%, labor force activity - 65, 2%, GDP per capita -

17.521 US dollars. (World Economic Forum, 2016). In the global economy, countries today demonstrate the most diverse levels of human capital development. There are many reasons for this, which requires a comparative analysis of a large group of prerequisites, the practice of transformations and economic policies carried out in certain countries. In this regard, the successes achieved by Azerbaijan in implementing qualitative socio-economic changes, as well as achievements in the field of production growth, solving social problems, and ensuring economic security are of interest both for scientific generalization and for practical application.

### **3. HUMAN CAPITAL DEVELOPMENT IN AZERBAIJAN REPUBLIC**

It is important to highlight that the issue of human capital development is a strategic goal of the economic policy of the Republic of Azerbaijan. If we analyze the specific areas of this policy, not only the processes of increasing job places become noticeable, but also the fact they reflect positive qualitative changes in the structure of employment. For example, over the past decade, an increasing proportion of those employed in the industrial sector are workers in the manufacturing spheres. If we take into account that, it is in the manufacturing industry that products a greater share of value added, then we can conclude that such a trend in the economy contributes to its stable and long-term development. This is the result of public policy where the diversifying and socializing goals of the economy occupy an imperative position. This is also evidenced by statistics which shows a sharp decline in unemployment and poverty in the country in recent years. If in 2003 the number of people living in poverty was 49% in Azerbaijan, in 2018 they are only 5.1 % of the population (stat.gov.az). Positive dynamics is also observed among the employment of the female part of the population, there is a decrease in unemployment and if in 2000 the unemployment rate among women in Azerbaijan was 12.8%, then by 2019 this figure dropped to 6.3%. For comparison, the world average in 2019 based on 182 countries is 8.5%. The highest value was in Palestine: 40.94 percent and the lowest value was in Niger: 0.36 percent. (<https://www.theglobaleconomy.com>). Such large-scale social shifts became possible due to the course of turning the natural factor (oil resources of the country) into the basis for the development of human capital. President of Azerbaijan I.G. Aliyev, citing strong arguments and criticizing "the forces that connect our economic development more with the oil factor", emphasized that oil is the "fulcrum" of the national economy today, but the resource leading to the future is qualified, professional, loving the motherland human capital of the country (president.az). At this point, the emphasis on education as a leading component in the formation of human capital is very significant, since it has particularly significant positive externalities. The quality of the accumulated and involved human capital of the country depends on the level of education, which directly affects technological progress and increasing labor productivity. Precisely such a pattern can be seen in the policy of fundamental reforms of economic and social development pursued by Azerbaijan. In this regard, it is logical that the "State Strategy for the Development of Education in Azerbaijan Republic" approved by the Decree of the President of the Republic of Azerbaijan dated October 24, 2013, preceded many concepts and projects of modernization of socio-economic life and bringing it into line with best international practices. The preamble of the abovementioned Strategy emphasizes that modernization is primarily associated with its successful application in the socio-economic life of the country with advanced technologies and management methods, innovations created based on scientific achievements. The priority direction for this, along with accelerating the integration of the country's economy into the global economic environment, is the development of human capital in the country, the person's familiarization with modern knowledge and professional skills. The development of human capital, being one of the most important conditions for a more effective use of international competition by the country in its favor, is the main task of the country's education system. In the decree of the President of the Republic of Azerbaijan on the approval of strategic roadmaps

for the national economy and major sectors of the economy adopted by the decree of the President of the Republic of Azerbaijan dated December 6, 2016, a separate paragraph outlines the “Strategic roadmap for the development of vocational education and training in the Republic of Azerbaijan”. It shows that it raises the problem of not only professional education, but also covering the entire educational space of the country, which is associated with a mismatch (asymmetry) in the structure of specialists trained in educational institutions to the needs of developing national economy and the labor market. Highlighting this issue indicates an important prognostic view on the formation and implementation of human capital in an integrated manner. It is estimated that by 2025, 450 thousand new jobs will be created in Azerbaijan. These will be new enterprises created at the expense of the state, private business, foreign investments, which form the demand for high-quality labor. In this regard, the significance of investment growth and institutional modernization of the entire education system becomes actual. Azerbaijan is sending ever-increasing funds to the education sector. 40 percent of the budget is socially oriented, and the funds allocated for education, science and health from the state budget for 2020 are 38.3 percent more than in 2019. The part of the budget allocated for science and education is approximately 4 percent of GDP. For comparison, in developed countries this figure reaches 6-7 percent. Increasing social payments, pensions, increasing the number of state-funded students, increasing the cost of education, health care—all this is part of the 2020 state budget which shows that it is socially oriented (taxes.gov.az). In order to develop the entire educational system in our country, measures are being taken to develop national universities, which already have sufficient international rankings. Social Navigator MIA Russia Today and the British company QS Quacquarelli Symonds presented the Russian-language version of the international QS Emerging Europe and Central Asia University Rankings, annually compiled by QS. The list of two hundred best universities includes Azerbaijani universities, such as Baku State University, Khazar University, Azerbaijan State University of Economics, Azerbaijan University of Architecture and Construction, Azerbaijan University of Languages and Baku Slavic University. In the QS ranking, the best universities in the world are determined on the basis of nine criteria: scientific reputation, reputation among employers, the ratio of faculty and students, the share of foreign faculty, the share of foreign students, the publication activity of teaching staff, the scientific citation of publications, the share of employees with a scientist degree, the effectiveness of Internet resources. At the same time, new modern universities are opening, equipped with the necessary specialized technical facilities, which include ADA University, Baku branch of the Moscow State University named after Lomonosov, Baku branch of Moscow State Medical University named after Sechenov, French- Azerbaijan University, Academy of Justice, Baku higher oil school, Customs Academy. All these new universities play an important role in the development of human capital in Azerbaijan, as well as attract students from abroad.

#### **4. REVIEW OF THE STATISTICAL DATA OF HUMAN CAPITAL**

In order to develop human capital and social protection of the population, the President of the Republic of Azerbaijan signed a decree dated December 29, 2012, the Concept of development "Azerbaijan - 2020: a look into the future." The priority areas of this concept are improving the quality of education and healthcare in the country, strengthening social protection of the population, ensuring gender equality and family development. One of the main problems requiring solution within the framework of this plan is to ensure the availability of high-quality medical care for the entire population, especially for its low-income groups. The concept provides that by the end of 2020, the country will switch to compulsory health insurance. The focus of the above concept is on staffing, raising skilled workers in all areas, including medicine, training and retraining of specialists, and foreign trainings. One of the problems in the field of medicine in Azerbaijan is that medical staff are not interested in improving the

efficiency of their activities, nor they involved in competition. (Mamedova, 2009). According to Azerbaijan's statistics for 2016, with a total average salary of 499 manat in the country, the average salary of medical staff and other social services is 214 manat, that is, less than half the average. In this case, negative individual asymmetry can be observed when an individual invested time and money in his or her education, but there is no result of this investment. Below is a table showing the amount, as well as the percentage of the state budget expenditures of the country's GDP for social needs.

	Million manat	As percent from GDP
<b>Total</b>	<b>24425.6</b>	<b>29,9</b>
From them:		
<b>Healthcare</b>	<b>873.6</b>	<b>1,1</b>
As percent to total state budget expenditures	3,6	
<b>Social protection and security</b>	<b>2281.0</b>	<b>2,8</b>
As percent to total state budget expenditures	9,3	
Science	<b>122.3</b>	<b>0,1</b>
As percent to total state budget expenditures	0,5	
<b>Education</b>	<b>2195.7</b>	<b>2,7</b>
As percent to total state budget expenditures	9,0	

*Table 1: State Budget Expenditures on healthcare, social protection and security, science and education, 2019*

*(Source: The State Statistical Committee of the Republic of Azerbaijan)*

As can be seen from the table, healthcare expenditures account for a small fraction of the country's GDP, namely 1.1%. For comparison, it should be noted that for OECD countries for the same period of time, healthcare costs averaged 8,8%, starting from a minimum of 4.2% in Turkey and ending with a maximum of 17.1% in the United States (Organization for Economic Co-operation and Development, 2018). Speaking about the situation with health care, it is impossible not to mention the main indicators characterizing this area in the country. These include the number of doctors in certain field, the number of medical institutions, beds in hospitals, etc. The state of these indicators in our country can be shown on the following chart.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Physicians of all specializations, thsd. persons	32,8	33,1	31,4	32,3	32,4	32,8	32,5	32,2	31,9	32,5
per 10 000 population	36,9	36,8	34,5	35,0	34,7	34,6	33,9	33,2	32,6	32,9
Paramedical staff, thsd. person	62,9	60,1	57,8	57,5	56,9	56,1	54,9	54,5	52,8	54,0
per 10 000 population	70,9	66,8	63,4	62,3	60,9	59,3	57,3	56,2	54	54,8
Number of hospitals	756	516	523	539	553	566	559	569	566	563
Of which number of beds in hospitals, thsd.	67,4	45,8	42,4	43,2	44,1	46,4	44,9	45,3	44,1	44,0

*Table 2: Main indicators of health care*

*(Source: The State Statistical Committee of the Republic of Azerbaijan)*

The problem of financing health care is acute not only in Azerbaijan, but also in many countries of the world. Even the richest countries are forced to pursue a policy of restructuring expenditures for institutional reasons, an integral element of which is the setting of priorities for the allocation of resources for certain types of medical care and specific medical technologies. (Mursalov, 2012). An important prerequisite for the formation of human capital is development of science, research and development, financing of these areas by the state, as well as other sources. In order to develop this direction in the country, one of the main steps was the Presidential Decree of October 21, 2009 on the establishment of the Science Development Foundation. The main goal of creating the Fund is to maintain the scientific and technical base in the country, to use scientific potential in economic development, to finance



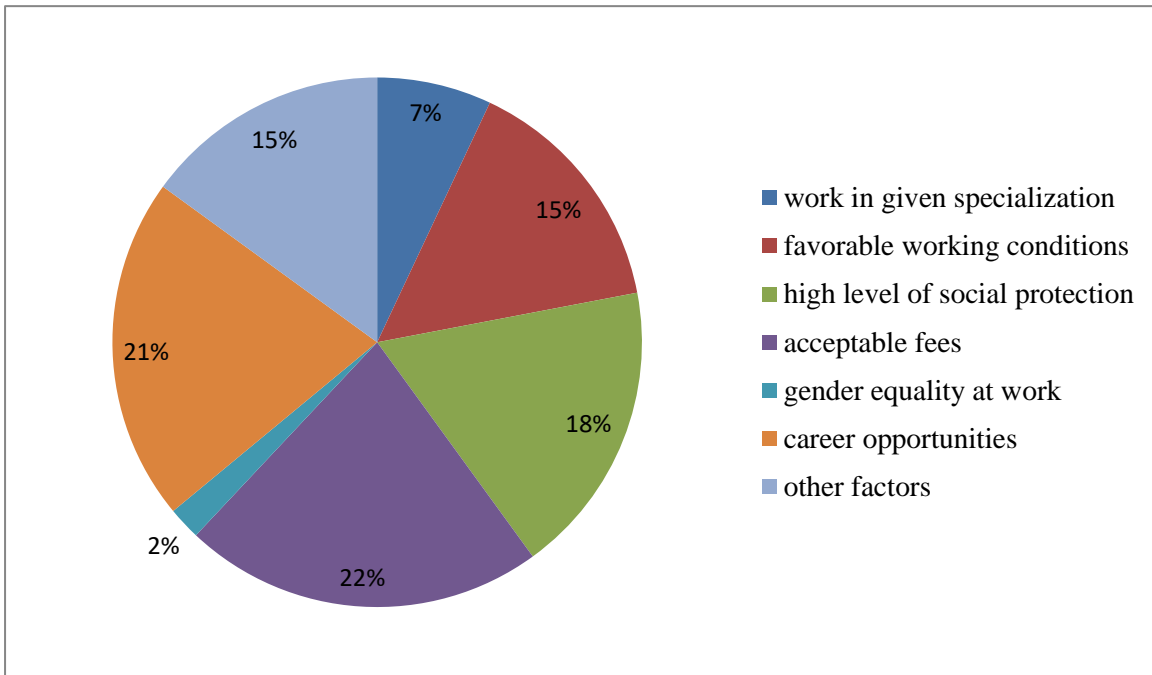
projects, R&D carried out by research institutes, educational institutions and other relevant bodies. The focus of the Fund since its opening is the provision of grants for the development of science through competitive bidding. In the graph below, there is shown the total and percentage change in spending on science and R&D in Azerbaijan from 20010-2018.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Expenditures for science from state budget:</b>									
<b>million manat</b>	<b>92,8</b>	<b>106,1</b>	<b>116,7</b>	<b>117,0</b>	<b>124,2</b>	<b>113,2</b>	<b>110,2</b>	<b>109,8</b>	<b>117,8</b>
In percent to GDP	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
In percent to state budget expenditures budget expenditures	0,8	0,7	0,7	0,6	0,7	0,6	0,6	0,6	0,5
<b>Expenditures for R&amp;D works from state budget</b>									
<b>million manat</b>	<b>92,1</b>	<b>109,8</b>	<b>117,3</b>	<b>122</b>	<b>123,8</b>	<b>120,9</b>	<b>124,7</b>	<b>129,9</b>	<b>147,5</b>
In percent to GDP	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
<b>Capital expenses for research and development works</b>	<b>97,6</b>	<b>95,2</b>	<b>88</b>	<b>107,2</b>	<b>122,2</b>	<b>114,2</b>	<b>129,5</b>	<b>157,4</b>	<b>149,1</b>

*Table 3: Expenditures on science and R&D in the Republic of Azerbaijan  
(Source: The State Statistical Committee of the Republic of Azerbaijan)*

According to the indicated data, since 2010, expenditures on science in quantitative terms have significantly increased, but in percentage terms, no changes were observed for 9 years. This is a negative factor, since a quantitative increase indicates an increase in budget revenues and expenditures, but percentage increase indicates an increase in the share of science and R&D in total costs. For comparison, it is worth noting that in OECD countries the expenditures on R&D in 2018 amounted to an average of 2.4% of GDP, in Azerbaijan 0.2%, which is 12 times less (<https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm>). The share of expenditures on science can divide countries into 3 groups: 1) with a high rate - more than 3% 2) an average rate of -1-3% 3) with a low rate - less than 1%. In economically developed countries, the average indicator of spending on science is at least 2% (Rodionova, Kokuytseva, Galkin, 2013). A serious indicator that forms asymmetries in the development of human capital is the migration of personnel from the country. Despite the fact that migration from the our country has decreased compared to the 90s, the problem of brain drain, migration of highly qualified personnel, as well as students, is still on the agenda. One of the main tasks of the state in this regard is to identify methods of attracting these personnel back to the country. In order to determine the main causes of migration and the circumstances that may affect the arrival of migrants to their homeland, a survey was conducted among Azerbaijanis living abroad. The survey involved 100 respondents from around the world, mainly North America, Europe, as well as Japan, etc. The survey results are illustrated in the following graph.

*Figure following on the next page*



*Figure 2: Circumstances that may bring the migrants back into Azerbaijan*  
 (Source: [https://www.ru.surveymonkey.com/analyze/hNbszuumNiRIOmJLHKp6WPd1BYOM\\_2F9U47zQrhTIW\\_2BOY\\_3D](https://www.ru.surveymonkey.com/analyze/hNbszuumNiRIOmJLHKp6WPd1BYOM_2F9U47zQrhTIW_2BOY_3D))

## 5. CONCLUSION

The analysis of the above circumstances reveals the areas of efforts that need to be undertaken both in order to involve emigrant specialists in the socio-economic life of the country, and to prevent brain drain in the future. It is of great importance to single out the tasks of not only increasing the costs of forming human capital, but also solving institutional problems:

- 1) To carry out the training of specialists according to the needs of the labor market through close coordination of educational institutions with production structures;
- 2) Raise the prestige of working professions and overcome the functioning of the informal labor market;
- 3) Intensify the process of transition to a universal health insurance system;
- 4) Increase research costs by differentiating the salaries of scientists according to the results of their activities.

Human capital must generate income, and the greater it is, the greater will be the desire of people for knowledge, the requirements of students for teachers, the efforts of the latter to innovative teaching methods, and the search for intellectual resources of entrepreneurs. As a result, not only the state will invest more in human capital, but also individuals, families, and business structures. Despite the moments that need to be resolved, Azerbaijan is on a development path in which the state takes measures for comprehensive social and economic development where priority is given to human capital.

## LITERATURE:

1. Drucker, P. (2006). *The Practice of Management* Harper Business; Reissue edition.
2. Drucker P. (2000). *Knowledge-Worker Productivity: The Biggest Challenge*. California Management Review.
3. Mamedova S. (2009). Health care financing in Azerbaijan: state and prospects. *Journal of Finance and Credit*.

4. Mursalov M. (2012). Problems of improving the healthcare system of Azerbaijan. Theory and practice of social development. No. 3.
5. Rodionova I., Kokuytseva T., Galkin M. (2013). Expenditures on scientific research and country leadership in the production and export of high-tech products in the 21st century: the world and Russia. Innovative Economics.
6. Oleinikov A. (2011). Economic theory. Political economy of the national economy. M .: Institute of Russian Civilization.
7. Organization for Economic Co-operation and Development, (2017)  
<https://www.oecd.org/els/health-systems/Health-at-a-Glance-2017-Chartset.pdf>
8. Organization for Economic Co-operation and Development, (2018)  
<http://www.oecd.org/els/health-systems/health-data.htm>
9. Taxes.gov.az
10. World Economic Forum. (2016).  
[http://www3.weforum.org/docs/HCR2016\\_Main\\_Report.pdf](http://www3.weforum.org/docs/HCR2016_Main_Report.pdf)
11. World Economic Forum. (2017).  
<https://weforum.ent.box.com/s/dari4dktg4jt2g9xo2o5pksjpatvawdb>
12. 14.TheGlobalEconomy.com.(2019).  
[https://www.theglobaleconomy.com/rankings/Female\\_unemployment/#Azerbaijan](https://www.theglobaleconomy.com/rankings/Female_unemployment/#Azerbaijan)

## TOOLS FOR SUPPORTING INTERPERSONAL TRUST IN MANAGEMENT SYSTEM

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### **ABSTRACT**

*The central purpose of this article is to draw attention to ways that interpersonal trust between supervisors and employees can be fostered through activities associated with the four functions of management. Interpersonal trust has received increasing attention as an important variable for effective management and the success of organizations. Further, managers serve a critical role in promoting organizational success. Practical insights regarding activities that promote interpersonal trust within each of the four functions of management is briefly discussed. These insights are offered with the intent of encouraging a more deliberate focus on trust within the functions of management. The purpose of this article is to initiate a practical dialogue regarding the question of how the four core functions of management (i.e., planning, organizing, leading, and controlling) can be used to foster interpersonal trust between supervisors and employees. Justification for framing the dialogue within the context of the four functions of management is based on the use of these functions as the foundation or core of most management education curricula and courses. For many, the exposure to managerial concepts in entry-level courses serve a formative role in influencing future management philosophies, values, and behavior. Surprisingly, however, the topic of trust is not covered consistently in management texts. Organizing and assigning work by a manager that fosters trust is through the structure of authority. A structure that relies on decentralized authority, as well as empowerment, allows employees to become more responsible for their jobs and decisions related to their jobs, contributing to heightened employee trust. Trust has also been determined to provide a sense of psychological safety for team-members, one in which members are at ease with criticisms of their work, or discussing their mistakes.*

**Keywords:** *Management, functions of management, management education, training programs*

### **1. INTRODUCTION**

History has marked numerous shifts in the nature of organizational environments that have necessitated simultaneous adjustments in the way organizations are managed. As a matter of practicality, managers serve a number of important purposes in organizations and are recognized as having a substantial impact on the overall climate of the workplace. Further, the successful leadership of organizations embodies a complex set of skills and abilities. Within this complex and dynamic nature of management remains the critical element of trust which must be fostered on an ongoing basis since it is regarded as a crucial component of organizations. Management and leadership training programs also serve as potential catalysts influencing individual's perceptions, philosophies and approach to management. Nevertheless, a review of the management development and leadership development literature over the past several decades, suggests that while an understanding of trust may be a desired outcome of many management or leadership development programs, it is not clearly listed as a specific goal of the training or development process. Of the articles selected, the only one in which trust was specifically mentioned as a goal was that of Broderick and Pearce (2001), which was grounded in an Adventure Training approach which has its roots in the Outward Bound movement. Interestingly, the much-written-about management development program General Electric requires for future managers did not specifically address trust as an integral key to success

(Tarley, 2002). Most training programs appear to be focused on knowledge content specific to the organization, as well as providing training or at least an understanding of issues such as communication, dealing with conflict, problem solving, teamwork, and leading change. Trust is, of course, a desired outcome. Indeed, it is likely that the training programs and practices noted above?) should have or did result in a development of, or increase of trust between supervisors and employees. But that result is achieved only if those going through the training actually attempt to apply the training once they return to the workplace. But, when the training does not emphasize trust, the concern is whether the trainees will perceive both the need for and/or the opportunities to act in ways that enhanced interpersonal trust within the work place. Consequently, a discussion that emphasizes trust at this fundamental level has the potential to diffuse to other management practices, theories, and strategies predicated on the four functions of management.

## **2. OVERVIEW OF TRUST**

From an applied or practical perspective, Sonnenberg described trust as something that must be a central component of organizations. Tzafrir provides additional support, stating that “Trust is a key component of organizational relationships, and management’s approach to the issue of trust is of academic and practical significance”. Furthermore, trust is regarded as fundamental to the notion of the multiple social exchanges that occur within organizations. The implicit value of supervisor-employee interpersonal trust within the framework of the functions of management is important to recognize (at least in a general sense), since trust is known to be a salient factor in organizations . More specifically, the recognition that the behavior of managers is a relevant factor in the trust that develops within the management- employee dyad . This importance is further reinforced through the observation that gaining the trust of individuals in the workplace is crucial to the success of contemporary organizations. McDonald further emphasizes the significance of relationships by offering a compelling definition of management as, “a trusting work relationship with other human beings that produces sustainable, escalating value”.

### **2.1. The Concept of Trust**

Researchers acknowledge a growing interest in literature related to trust. Trust is regarded as a dynamic, multifaceted phenomenon including, but not limited to essential components such as truth, integrity, and communication. Trust is also recognized as something that must be earned, representing an essential element in relational capital, as well as social exchange. In an effort to promote conceptual clarity this article will adopt the definition of trust provided by Rousseau et al. who described the concept as, “... a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behavior of another”.

### **2.2. Importance of Supervisor-Employee Interpersonal Trust**

High quality relationships between supervisors and employees, in the form of leader-member-exchange, are recognized as important determinants of desirable organizational outcomes. In their review of literature related to LMX over the preceding 25 years, Graen and Uhl-Bien included studies linking the quality of the supervisor-employee relationship with outcomes including, but not limited to performance, organizational citizenship behavior, and organizational commitment. There is considerable interest in understanding factors associated with effective management, as well as the quality of the dyadic relationship between managers and employees . “Management theory and practice are facing unprecedented challenges.” Admittedly, there are a variety of characteristics associated with effective management, with trust increasingly being recognized as an essential concept in management. Employee trust in supervisors is acutely needed. According to Covey, “Trust is the highest form of human

motivation. It brings out the very best in people.” This perspective is mirrored by others who have described trust as a fundamental need for organizations, contributing to commitment, enhancing innovative efforts and promoting cohesion within the workplace . The integrity, benevolent behavior, and ability of the manager are among the factors related to worker trust that have been identified. A number of valuable outcomes are associated with employee trust. For example, a meta-analysis of trust in leaders conducted by Dirks and Ferrin listed a number of important outcomes associated with this referent form of trust including job related attitudes (i.e., job satisfaction and organizational commitment), organizational citizenship behavior and better performance of the employee’s job.

### **3. INTERPERSONAL TRUST IN THE CONTEXT OF MANAGEMENT FUNCTIONS**

College courses on management are often grounded in the four functions of management that evolved from Fayol’s writings on management theory and the practice of management. The essential content of these functions are intended to serve as a prescriptive overview of managerial responsibilities, and to provide a framework for what students (as future managers) should do in the practice of management. Fayol proposed five basic functions with commanding and coordinating subsequently merged into the function of leading. He also proposed fourteen principles of management. A review of these principles reveals no regard for the importance of employees’ trust in supervisors. Fayol’s writings were translated to English in the early 1900s and came at a time when Taylor’s scientific management held sway (it, too, provided little room for a recognition of trust). Arguably, Fayol’s theories, combined with principles embodied within Taylor’s scientific management shaped the future of the study of management. In some respects, the mental models that evolved from their work remains firmly entrenched today: This sentiment is reflected in the philosophy, still present in some organizations today, that management’s responsibility is to plan, organize, lead (within a framework of commanding), and control the organization. Similarly, for employees it may also be argued: Follow the plan, within the framework of designed policies and procedures, do what you are told to do. Interestingly, this fits within McGregor’s Theory X model. McGregor viewed this type of thinking as mechanistic. McGregor observed that “Managerial practice appears to reflect at least a tacit belief that motivating people to work is a ‘mechanical’ problem...[that] it requires the application of external forces to...motivate him to work.” McGregor described this approach as Theory X ( For him, Theory X reflected a belief about the nature of man that suggested employees could not function unless told what to do.). Such a belief would not be conducive to an orientation toward building interpersonal trust in the organization. McGregor proposed a counter-belief called Theory Y which held a more organic view of man in that employees are oriented to work, to seek responsibility, to be creative in the workplace. McGregor , referring to Maslow’s need for self-actualization, argued that people have the capacity to grow and develop throughout life, and that management strategies can hinder or support growth. For McGregor, the self-actualized person is emergent in an organization grounded in a Theory Y belief. This emergence relies on mutual agreement, open communications, mutual trust, and mutual support. Thus, for McGregor, the practice of effective management clearly requires the development of trust. Indeed, according to this theory, managers with a Theory Y perspective tend to trust employees. Having established a historical foundation, the focus shifts to more specific insights and dialogue regarding the implicit value of supervisor-employee interpersonal trust within the context of the functions of management.

#### **3.1. Functions of Management**

The four common functions of management include planning, organizing, leading and controlling. Leung and Kleiner suggest that these four functions are necessary, but not sufficient

in promulgating successful management, with strong emphasis placed on adopting practices that include a focus on employees within organizations. While not immediately obvious, critical reflection on the nuances of these four functions of management highlights potential areas where trust may be enhanced through inclusion of intentional activities within each function (see Figure 1). Moreover, recognizing the implicit value of supervisor-employee interpersonal trust that permeates each function may serve an integrative role in helping to facilitate more fluid and effective deployment of the respective functions.

### *3.1.1. Planning*

Planning is typically where the direction of the organization is established through a variety of activities including the development of goals. As such, the planning function of management embodies various levels of decision making. Allowing employees to participate in making these decisions may generate additional ideas that offer valuable insights. These new ideas could, in turn, have a positive impact on the quality of the plan since employees have a variety of different experiences and skills. Of particular interest in the context of the current article are findings that employee involvement is linked to higher levels of trust. Whitener et al. also note that involving employees in decisions has symbolic value in conveying a sentiment of trust to employees, while Dirks and Ferrin discuss the implicit confidence associated with allowing employees to participate in decision making. Indeed, managerial trust is associated with increased levels of employee involvement in decision making. Two important elements of decision making are gathering and analyzing information. Employees offer valuable insights and assistance in regard to both of these elements. First, employees often engage directly with customers, suppliers and other stakeholders. As a result, they have first-hand knowledge of key information that can be useful in guiding the planning process. Asking employees to assist in gathering information may serve to validate their perceptions and add perceived credibility to the value of their observations/interactions with key stakeholders. This, in turn, fosters increased levels of trust. Likewise, allowing employees to participate in analyzing information sends the message to employees that they have valuable insights that offer unique perspectives on specific nuances of the information. A logical progression from collecting and analyzing information might be to include employees in developing and prioritizing goals resulting from this analysis. This involvement would then enhance employee buy-in related to the goals, as well as contribute to increased levels of employee trust in supervisors.

### *3.1.2. Organizing*

The organizing function of management is comprised of numerous activities directly or indirectly related to the allocation of resources in ways that support the achievement of goals and plans that were developed in the planning function. Included within the organizing framework are numerous human resource management (HRM) related activities such as job design and the assignment of job duties. Since HRM practices serve such a critical role, it is important, first and foremost, that the organization develop transparent and effective employment practices. Transparency is needed to help employees gain a sense of being fully aware of how the organization promulgates employment practices.

*Figure following on the next page*

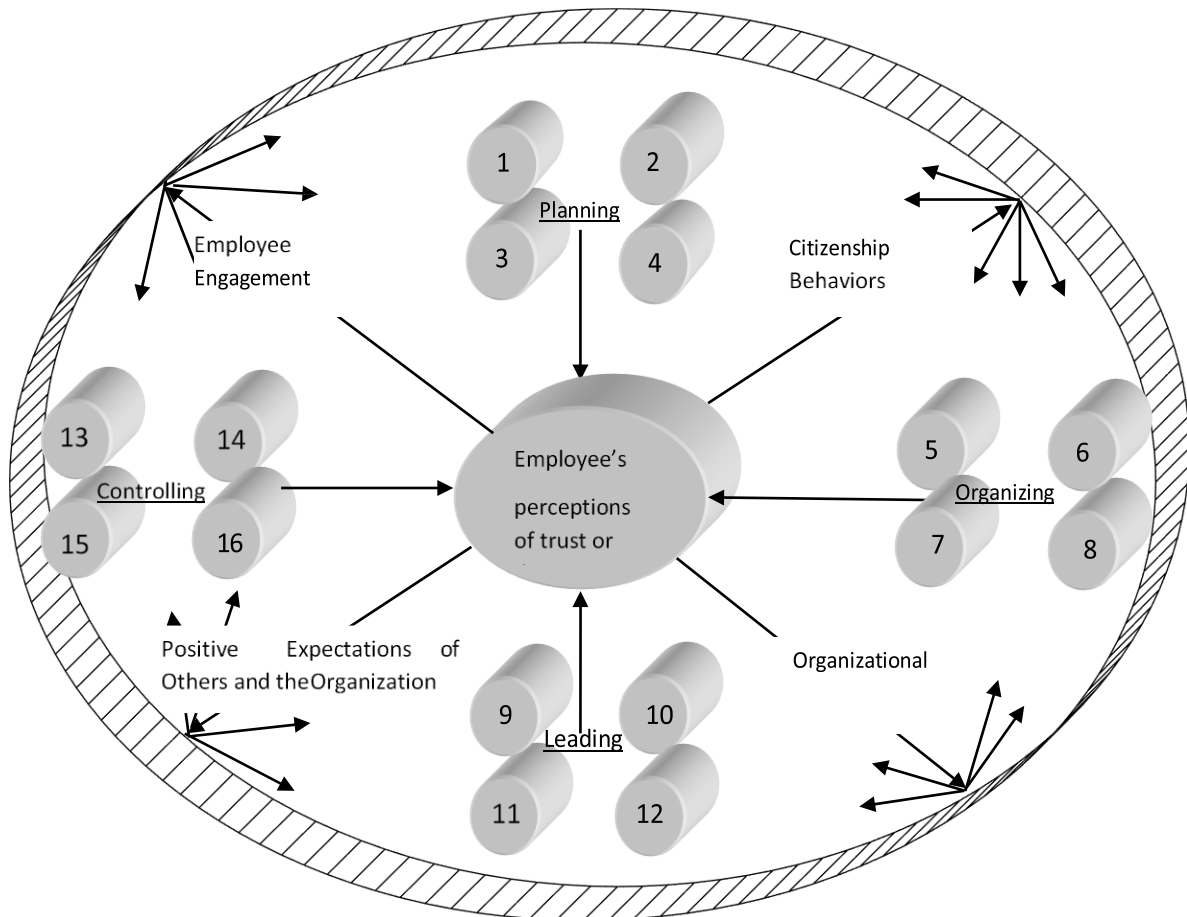


Figure 1: Interpersonal Trust and the Four Functions of Management

#### Planning

1. Employee Involvement Decision Making
2. Employee Involvement in Gathering Information
3. Employee Involvement in Analyzing Information
4. Employee Involvement in Establishing and Prioritizing Goals

#### Organizing

5. Transparent and Effective Employment Practices
6. Job Design (Create Enriched Jobs)
7. Decentralized Authority
8. Teams

#### Leading

9. Communication
10. Motivation
11. Job Attitudes
12. Effective Change Management

#### Controlling

13. Use Control as a Tool for Employee Development and Continuous Improvement
14. Psychological Empowerment
15. Involve Employees in Developing and Managing Control Related Activities
16. Provide Timely, Accurate, and Informative Performance Data Used for Control Purposes



Effectiveness of these practices is necessary for employees to have confidence in the utility of these activities. In combination, employee perceptions of full awareness and confidence in practices/policies that impact employment decisions within the organization serve as powerful mechanisms fostering employee trust. A study by Vanhala and Ahteela examining posited relationships between six common (HRM) practices and organizational trust provides compelling evidence that employee trust in organizations is, indeed, influenced by common HRM practices. Additionally, human resource management highlights the attractiveness of companies to potential employees in part due to human resource practices that focus on tangibles (e.g., pay, benefits, etc.) and intangibles such as trust-based work climate. In regard to effective HRM practices, employee trust may also be promoted through the specific structure of their work assignments (job design). For example, the creation of enriched jobs may be interpreted by employees as an indication that the organization trusts the employees enough to give them some degree of authority, autonomy, or flexibility in performing their job assignments. Having received this, employees, then, may be inclined to reciprocate through increased levels of trust.

### *3.1.3. Leading*

Dirks and Ferrin (acknowledge that trust is embedded within a variety of leadership theories. The value and importance of trust cannot be overstated, regardless of the leadership style or philosophy of the leader. Leadership theories, such as consultative and transformational; authentic servant ; and LMX provide support for trust as an essential management concept for leaders. Leadership is a multi-dimensional process that includes motivation and influence of employees. As a part of this process of motivation and influence, exceptional leaders are typically skilled communicators. Communication, in turn, is positively associated with trust. More importantly, the quality of supervisor communication has been linked to trust. Unfortunately, however, the opposite may also be true with ineffective communication resulting in an erosion of trust. In the context of leadership, trust plays a valuable role in the job attitudes displayed by employees in the work environment. Recent research indicates different aspects of trust are related to higher levels of many of these job attitudes, to include perceived organizational support and affective organizational commitment ; organizational citizenship behaviors and job satisfaction; and employee satisfaction and loyalty. The leading function of management can also include organizational change. This is important to consider since trust is of paramount importance in the context of major change. Change is ubiquitous in the current business environment, often accompanied by undesirable implications for employees. The level of employees' trust in their supervisors impacts their concomitant attitudes toward change. For instance, Lines, Selart, Espedal, and Johansen found that the way in which changes are implemented either diminishes trust in management or increases trust in management. In an effort to tie this back to prior assertions that employee involvement and leadership communication contribute to employee trust, consider Beer's discussion of the change process in which the importance of open communication and employee participation in promoting trust is acknowledged. In reality, the functions of management do not, necessarily, operate in a discrete manner. Instead, operationalizing the functions within the context of organizations often entails considerable overlap and fluidity between these dynamic functions. For example, leadership is commonly associated with creating a shared vision. Developing this shared vision, in turn, is considered important in framing the boundaries and direction of organizational efforts enacted by employees. While vision is indeed an important element of leadership, activities associated with this vision are also prevalent within the other three management functions. Specifically, the function of planning would be framed, to a large extent, by the vision of the organization.

If employees are afforded an opportunity to contribute to the formulation of the vision and subsequent decision making within the planning function, interpersonal trust may be enhanced, thus creating the potential for improved deployment of the management functions.

#### *3.1.4. Controlling*

The fourth function of management, control, includes managerial efforts directed toward monitoring both organizational and employee performance and progress toward goals. Organizations and managers utilize a variety of strategies or methods related to control. These methodologies range from overt, highly restrictive, and assertive forms of control to more implicit, decentralized, indirect forms of control. The methodology may include the use of various management information systems, but has been manifested, in the past, by managers directing employees, telling them how to do their jobs, and by close monitoring of the employees' performance. This control strategy (use of systems, exercising of authority) has been deployed by managers attempting to reduce risk or uncertainty within an organization. While this approach may have been deemed adequate in the past, the complete reliance on formal controls is not sufficient in the contemporary business environment. Specifically, organizations face increased competition, not just locally, but globally; the pace of doing business has increased in speed requiring faster response time to change. To react to this new environment, one of the actions taken by top management has been to flatten organization structures, leading to wider spans of control, simultaneously adopting the use of teams in both in geographic and virtual environments. In a practical sense, the traditional forms of control may still have some value, but are no longer sufficient. The fundamental problem for managers is how they can give up control without losing control. Management must necessarily rely on trusting its employees not to act opportunistically, but to make the right decisions and perform in a way to fulfill organizational goals. At times, trust and control seem to be considered as opposite ends of a continuum or at least inversely related. Costa and Bijlsma-Frankema, argue that trust and control are alternative strategies to be used within the organization. The reality is that the relationship between control and trust is much more complex. Coletti, Sedatole, and Towry present evidence that rather than control and trust being an either-or dilemma for managers, control actually builds trust between parties, perhaps because control regulates a set of expectations, so that either party is comfortable that the other will not take advantage of them. Over time, the control systems can reinforce non-opportunistic behaviors, contributing to trust. As a result, controls may later be reduced because trust remains. Indeed, there is evidence that trust and control may complement each other further reinforcing the potential value of trust related to effective management. McDonald notes the central importance of coordination to the practice of management, emphasizing that coordination is not synonymous with the control. If the traditional form of command-and-control style of management is eroding as a result of emerging organizational trends, then a greater need for collaboration is apparent, as well as the use of teams to enable the organization to successfully compete in an environment of changing technology, increased globalization, and increased competition. Drucker noted that given the current business trends that organizations would need employees who were not only skilled but who possessed the ability to learn and adapt quickly to turbulent business environments. This seems consistent with increasing the active participation of employees in decision-making processes, as discussed earlier in the planning function of management. Ideally, in this type of environment, managers would believe that employees will not be opportunistic in their behaviors, and that employees would strive to make good decisions consistent with pursuing the vision, as well as goals of the organization. Thus, viewing trust and control not as opposites, but as complementary in nature, may be enlightening with both the manager and employee using the control systems in a collaborative fashion to achieve both the goals of the organization and the individual, trusting that each has the other's best interest

at heart. Other possible strategies for enhancing employee trust through activities within the controlling function of management may be worth considering. For example, control activities could be structured in ways that guide employee development and promote continuous improvement. As such, data gained through control activities would highlight employee areas that were strengths available to be leveraged by the organization for competitive advantage, while areas identified as needing improvement could be used for guidance in training and employee development programs. Used in this context, control measures may be viewed more positively by employees. The potential efficacy of control activities to foster increased trust can also be enhanced by ensuring that managers provide timely, accurate and information employee performance data to employees for feedback purposes.

### *3.1.5. Emerging Theories*

Quite often, emerging theories related to management incorporate elements from the four functions of management, while also encapsulating dynamics associated with interpersonal trust. For example, Sendjaya and Pekerti identified dynamics enacted through servant leadership theory (i.e, placing the needs of employees and others above those of the leader) as an antecedent of worker trust. In addition, key factors reflected in the theory of authentic leadership, such as effective communication, are recognized as an important component in worker trust. Finally, trust has been found to be both an outcome of transformational leadership and as a mediator of the relationship between transformational leadership and outcomes such as organizational citizenship behavior, performance, and affective commitment . In cases where trust is a component in emerging theories, efforts to emphasize this might contribute to a better understanding the enduring importance of interpersonal trust within the context of management.

## **4. CONCLUSION**

Organizations will continue to evolve and new management theories will continue to emerge. From a pedagogical perspective, fulfilling their role in preparing business students for successful careers in this dynamic environment will require that business schools remain vigilant in adapting curricula to meet these ever-changing needs. For traditional-aged students, exposure to management concepts is the first opportunity for many to develop an understanding of what it means to be an employee or manager and what one should strive to do to be successful. On the other hand, many non-traditional, older students may be employed, but not managers or supervisors. For them, exposure to management principles (either through college courses or management training programs) provides the opportunity for them to compare their own organizational experiences of how it is (what they experience) with how it could be (the ideal, if delivered effectively by the instructor and applied in the workplace). For both types of students, gaining this understanding of management, with an emphasis on trust, can lead to a transformed workplace if they have the opportunity to successfully apply what they have learned. Viewed from a practical perspective, organizations endeavoring to facilitate the development of their managers can benefit by helping these managers understand the fundamental implications that trust has on employees within the organization through their actions embodied with the functions they perform. Managers typically perform the four overarching functions of planning, organizing, leading, and controlling. This article has discussed ways in which that these four functions can be performed that will increase employee trust in their supervisors, which will, in turn, have positive implications for the organizations. By allowing employees to participate in the planning process, organizations can leverage new ideas, while also indicating, through this action, that employee input is valued. This, then, will have positive implications on employee trust levels. Similar benefits may ensue from allowing employees to get more fully engaged in the organizing function by allowing them to participate in planning tasks and activities related to their specific jobs.

Specific HRM practices undertaken during the organizing function can also contribute to increased trust. In deploying the leadership function, managers can enhance employee trust by focusing on quality communication and the open exchange of information. The final function, controlling, can enhance employee trust in a number of ways including the fact the employees will receive more timely feedback if they are directly engaged in the control process. In summary, management is an important concept to organizations and business schools. Since trust is espoused as a vital factor in organizations and management, college management courses, as well as management/leadership training programs might be improved through more intentional efforts to emphasize the implicit value of supervisor-employee interpersonal trust within the context of the management functions of planning, organizing, leading, and controlling. Similarly, the overall performance of organizations might be improved if managers are more mindful of how their enactment of the four functions of management can be promulgated in ways that will have a positive impact on employee trust.

#### **LITERATURE:**

1. Bijlsma, K.M., & van de Bunt, G.G. (2003). Antecedents of trust in managers: A “bottom up” approach. *Personnel Review*, 32(5), 638-664.
2. Caldwell, C., Hayes, L A., & Long, D.T. (2010). Leadership, trustworthiness, and ethical stewardship. *Journal of Business Ethics*, 96, 497-512.
3. Daft, R.L., & Marcic, D. (2011). Understanding Management. *Mason, OH: South-Western, Cengage Learning*.
4. De Jong, B.A., & Elfring, T. (2010). How does trust affect the performance of ongoing teams? *The mediating role of reflexivity, monitoring, and effort. Academy of Management Journal*, 53(3), 535-549.
5. Goodwin, V.L., Whittington, J.L., Murray, B., & Nichols, T. (2011). Moderator or mediator? *Examining the role of trust in the transformational leadership paradigm. Journal of Managerial Issues*, 23(4), 409-425.
6. Knoll, D.L., & Gill, H. (2011). Antecedents of trust in supervisors, subordinates, and peers. *Journal of Managerial Psychology*, 26(4), 313-330.
7. Mahajan, A., Bishop, J. W., & Scott, D. (2012). Does trust in top management mediate top management communication, employee involvement and organizational commitment relationships?. *Journal of Managerial Issues*, 24(2), 173-190.

# MODELLING AND DEFINITION OF OPTIMUM DIVIDEND POLICY OF OIL AND GAS COMPANIES IN MODERN CONDITIONS

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## **ABSTRACT**

*This article substantiates the necessity for improving approaches towards optimization of a dividend policy of oil and gas companies. The actual problems of the dividend policy of oil and gas companies in modern times have been explained and their essences have been elucidated. Therefore, this research develops a new conceptual approach in the theory of corporate management aiming at substantiating the feasibility for considering a dividend structure factor of a company, while maximizing the company's market value. According to the situation in the market segments, the issues of diversification of oil and gas companies' dividend structure and increasing their efficiency have been emphasized. A quantitative measurement of the level of optimum dividend payouts that are differentiated according to the company's capital structure is an advantage of this approach. Due to this approach, the dividend potential of the company is objectively researched and the available opportunities are determined in the most transparent way. A functional dependence of the company's market value against the level of dividend payouts, with regard to the company's capital structure, has been presented. A range of quantitative levels of dividend payouts of oil and gas companies under consideration has been calculated, and a type of the optimum policy regarding the established company's capital structure has been determined, in accordance with such range. Such approach allows for substantiating the most effective type of the dividend policy subject to the financial condition of the company for maximizing its market value. It utilizes the subjectivity in the course of optimizing the company's dividend policy and ensures accurate evaluation of the optimum level of dividend payouts. It facilitates increasing efficiency of the net profit of oil and gas companies under consideration and building capacity of the market value of such companies.*

**Keywords:** *dividend policy of oil and gas companies, maximizing the company's market value, dependence of dividend policy on the company's capital structure, net profit of a company, capital structure of a company*

## **1. INTRODUCTION**

A dividend policy is a key factor of a profit distribution mechanism for oil and gas companies, and, consequently, financial support of such companies. The strategic value of the industry predetermines the specificity of oil and gas companies usually issuing most liquid ordinary shares that are often referred as 'blue chips.' These securities are known for their high liquidity and they predetermine the environment and development trends of the global stock market. The high liquidity of the 'blue chip' securities is ensured by an ongoing payout of dividends to share holders, which predetermines exactly an increasing demand of securities of oil and gas companies (Kaźmierska-Jóźwiak, 2015). Given that the level of dividends paid out to the shareholders decreases the amount of profit (equity capital), which can potentially be re-invested, the dividend policy predetermines the financial condition of the companies and their financial stability prospects (Caliskan and Doukas, 2015). Against the geopolitical crisis and global trend towards a fall in oil prices, a non-effective dividend policy may trigger a threat of disturbing the financial balance and decreasing market value of oil and gas companies, even with the target capital structure of such companies (Al-Malkawi et al., 2014). Moreover, considering that public revenue in certain countries comprises over 50% of receipts from the

oil and gas industry (Bloomberg, 2015), optimization of the dividend policy with regard to the company's structure factor is of strategic value for establishing the resource base of such country. This determines the relevance and timeliness of this research. Issues of dependence of the dividend policy, capital structure and market value of a company have been pictured by leading financial experts, such as F. Modigliani and M. Miller (Modigliani and Miller, 1963). Scientists substantiated the theory of dividend irrelevancy, which was based on the statement that the value of a firm is determined exclusively by the ROA of such firm. An investment policy and proportions of revenue distribution between the dividends and re-invested profit does not affect the total income of the shareholders. Consequently, there is not any optimum dividend policy as a factor in increasing the value of the firm. On the contrary, according to F. Modigliani and M. Miller, an investor relies primarily on the optimum capital structure of the firm that ensures further stable profit, instead of the amount of current dividend payouts. An anticipated profit and increased demand of the shares are the ones that determine the investor's behavior, and not the amount of current dividend payouts (Modigliani and Miller, 1958). We believe this theory to lack rationality in terms of issuer's functionality. As long as the market value and investment attractiveness, effective functioning and business activity of the issuer is predetermined to a great extent by the optimum ratio of the consumed and capitalized profit. The theory of optimizing the capital structure of a company as a growth factor of value of the company was the basis of scientific concepts of scientists, such as: Florackisaetal. (2015), Fairchildetal. (2014), CaliskanandDoukas, (2015), Aggarwal and Kyaw, N. (2010). Followers of Gordon's and Lintner's theory of importance of dividend policy took up an attitude that was opposite to Modigliani-Miller's theory. They believed optimum dividend policy of a company to be achieved against maximization of shareholders' dividend payouts only. With no regard to a correlation between borrowed and equity capital of the firm, ongoing payout of dividends will still lead to maximization of the value of the company (Damodaran, 2013). Such modern scientists, as Damodaran (2013), Karpavičius (2014), MoriandIkeda (2015) and Zhouetal. (2015) supported this theory. Meanwhile, according to the analysis, these scientists focus on the issue of increasing the market value of a firm by optimizing the capital structure, or, contrarily, active dividend policy. And, optimization of the dividend policy against the available capital structure as factor in increasing the value of the firm is of scientific interest for this research. Therefore, the objective of this research is developing an approach to determining a type of rational dividend policy by calculating the optimum level of dividend payouts as differentiated with respect to the capital structure of a firm as a qualitatively new measurement of the corporate management methodology. An analytical part of the conceptual approach has been presented through example of a number of international oil and gas companies.

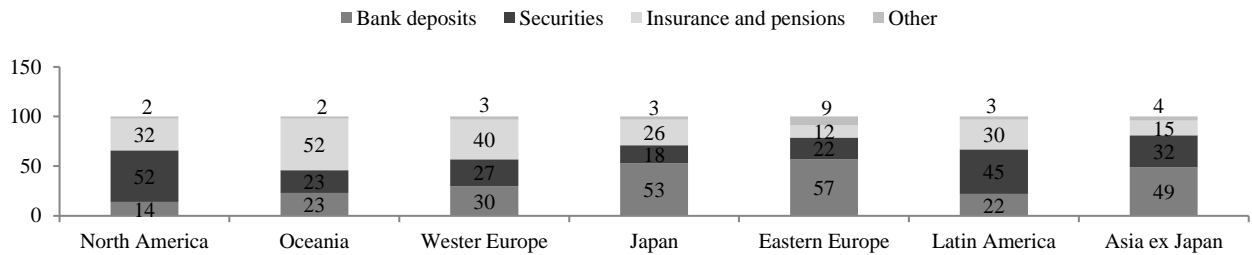
## **2. MATERIAL AND METHODS.**

### **2.1. The study branch**

Securities are a top-priority investment field in the global financial environment. Despite the fact that global investment is rather differentiated with respect to world regions (see Figure 1), over 39% of the global monetary capital is invested in the securities (TheStatisticsPortal, 2015), among which approximately a fourth is shareholders' capital. Thus, global investment volume in shares is marked by a small amount of growth for the last ten years and steady domination in the global investment capital structure (see Figure 2). Shares of oil and gas companies that are issued by most capitalized and financially stable companies are among highly profitable and least risky investment instruments in the world. The stability of dividend payouts by oil and gas companies ensures a stable demand of the shares and a high level of their liquidity, and, consequently, maximized the market value of the companies. As at 2014, the largest relative share of dividend payout - 3.7% and the highest level of market value of companies - 6.2% were taken solely by shares of oil and gas companies among 100 most capitalized companies

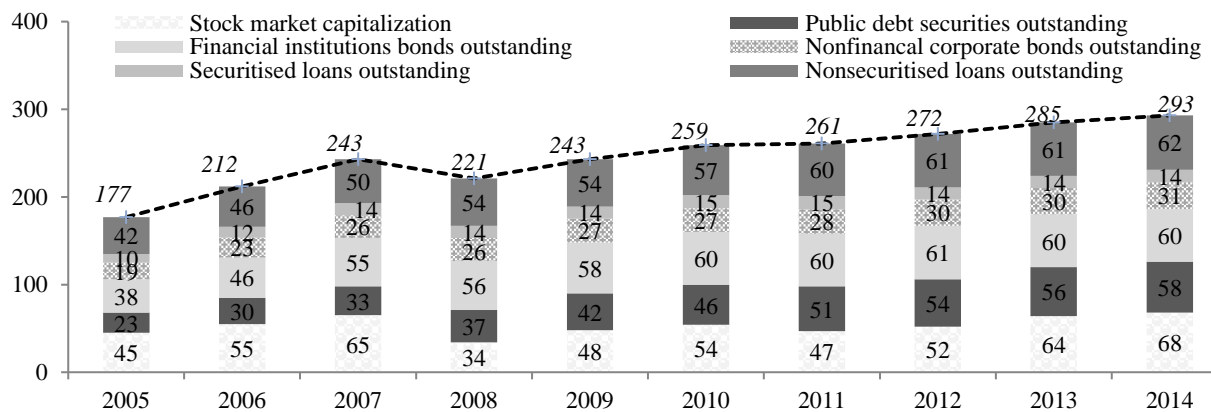
of the world (PwC, 2015). Nevertheless, according to data against the geopolitical crisis, oil and gas companies became the most vulnerable spot of energy-dependable countries of the world (Bauerleand Jaśkiewicz, 2015). A fall in world oil prices gave rise to a negative trend of the level of net profit of most companies in 2014 (see Figure 3), and approximately 50% in the industry on average (Bloomberg, 2015). These circumstances caused a decrease in the level of paid-out dividends of the companies, which, in its turn, lead to a significant decrease of their market value.

Figure 1: Share of priorities of financial investing, broken down by world regions as at 2014 [%]



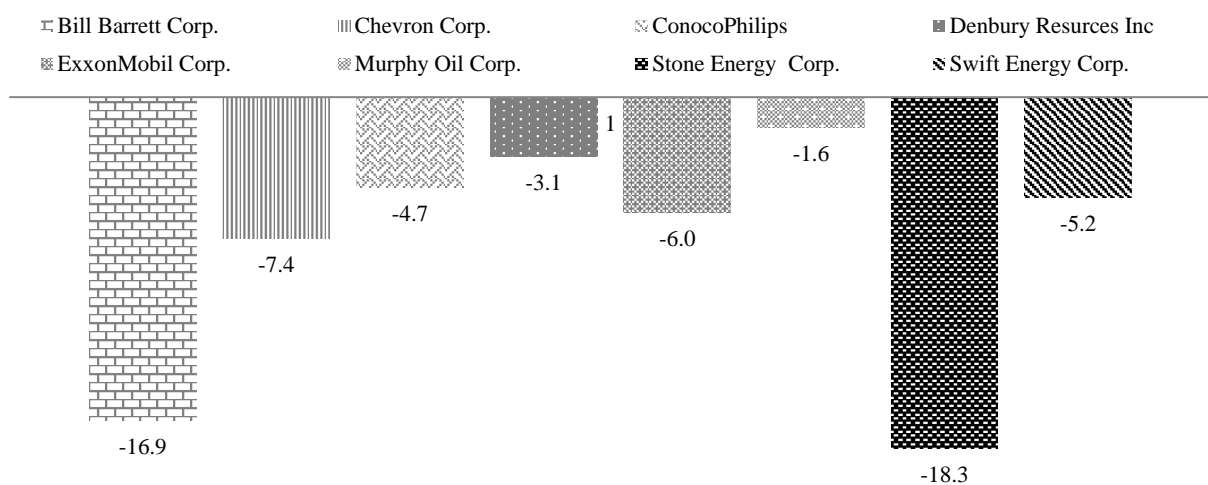
Source: Brandmeir et al., 2015. Financial Markets, 2015.

Figure 2: Dynamic structure of financial assets of the global stock market [trillion USD]



Source: The Statistics Portal, 2015.

Figure 3: Negative change of net profit of a number of oil and gas companies for 2013-2014



Source: The Statistics Portal, 2015. Own calculations

Such circumstances predetermine the necessity of search for solutions to optimize the dividend policy of the oil and gas companies with regard to the available capital structure for increasing their market value. Therefore, this research aims at developing an approach to quantitative determination of the optimum dividend level subject to the capital structure of a company.

## 2.2. Data and Methodology

The basis of the dividend policy of any company is maximizing its market value, with the dividend policy and capital structure being its factors (Kaźmierska-Jóźwiak, 2015). As long as this article aims at optimizing the dividend policy with regard to the capital structure of a company, financial indicators, such as: equity-assets ratio as an indicator of the capital structure of the company; level of dividend payouts as an indicator of the volume of dividend payouts per share of the company; and average market capitalization of the company as an indicator of the effective dividend policy of the company have been taken as analytical indicators. Financial statements of eight international oil and gas companies, such as: Bill Barrett Corporation; Chevron Corporation; Conoco Phillips Company; Denbury Resources Inc.; Exxon Mobil Corporation; Murphy Oil Corporation; Stone Energy Corporation; Swift Energy Company served as a statistical basis for this research. The choice of these companies is justified by the instability of payout of dividends on their own shares, but by the high ROE at the same time. In view of the recent trends, these companies are also marked by a decrease in the net profit and market value, which itself determines the necessity to raise efficiency of their dividend policy (see Annex 1). The dependence of the market value of a company on the level of dividend payouts, with regard to the capital structure of the company, was built up, using a polynomial regressive model. This model is a type of non-linear modeling and appears to be the following (Nizametdinov and Rumiantsev, 2012):

$$f(x) = b_0 + b_1x_1^n + b_2x_1^{n-1} + \dots + b_ix_1 + b_{i+1}x_2^n + b_{i+2}x_2^{n-1} + \dots + b_jx_2 + \dots + b_mx_k, \quad (2.1)$$

Where  $f(x)$  – an  $n$ -power function of the polynomial regressive model;

$x_{1,\dots,k}$  - independent variables;

$b_0$  - a constant term;

$b_{1,\dots,i,\dots,j,\dots,m}$  - coefficients at independent variables; and

$1 < i < j < m$ .

Parameters of the regression model are estimated, using a least square method. This method relies on fitting parameters of the model, with minimized sum of squared deviations of actual values of a dependent variable from the predicted values (Nizametdinov and Rumiantsev, 2012):

$$\sum_i^N (y_i - f_i(x))^2 \rightarrow \min, \quad (2.2)$$

Where  $x$ - independent variables;

$y_i$  - actual value of a dependent value to the  $i$ -period;

$f_i(x)$  - predicted value of a dependent value to the  $i$ -period; and

$i = 1, 2, \dots, N$ .

The range of values of dividend payouts of a company for determining a corresponding type of the dividend policy was determined, using a multidimensional scaling method according to the Fibonacci's Law. This approach implies a proportional division of a section of data values in parts in the following proportion (Vorobiev, 1978):



$$\begin{cases} a:b = b:c \\ c = a + b, \\ a < b < c \end{cases} \quad (2.3)$$

Where  $a$  – length of a smaller section;  
 $b$  - length of a larger section; and  
 $c$  - length of the whole section.

According to the presented proportions, changes of data levels occur in ratio of  $38.2\% \times 61.8\%$ . Then, indicator level value ranges are determined by a system (Vorobiev, 1978):

$$\begin{cases} x_{min} \leq x \leq x_1 \\ x_1 < x \leq x_2 \\ x_2 < x \leq x_{max} \\ x_1 = x_{min} + 0.38(x_{max} - x_{min}) \\ x_2 = x_{min} + 0.62(x_{max} - x_{min}) \end{cases} \quad (2.4)$$

Where  $x_{min} \leq x \leq x_1$  – a range of low values of  $x$  indicator;  
 $x_1 < x \leq x_2$  – a range of medium values of  $x$  indicator; and  
 $x_2 < x \leq x_{max}$  – a range of high values of  $x$  indicator.

In order to confirm data about the level of dividend payouts of oil and gas companies, which were obtained by means of the polynomial regression modeling, neural modeling technologies were applied. An artificial neural network is a mathematic model, featuring a system of simple processors (artificial neurons) and interconnections between them that are defined by weighing coefficients (Borovikov, 2008). A neural network of a multi-layer perceptron type consists of the following: 1) a layer of input neurons that receive and encode a signal from the external environment; 2) a layer of interneurons that constitute the basis of neural networks and serve as the medium for necessary transformations of a modeled system; and 3) a layer of output neurons with their output values to present effects of the neural network. Principle of operation of the artificial neuron is as follows. The neuron receives input signals that pass through a connection (synapse) with their intensity corresponding to the synaptic activity of the neuron. The current state of the neuron is determined by a post-synaptic potential function, which is calculated as a weighted total of inputs with regard to the threshold value. The post-synaptic system is linear for the multi-layer perceptron neural network (Borovikov, 2008).

$$net_j = w_0 + \sum_{i=1}^N x_i w_{ij}, \quad (2.5)$$

Where  $net_j$  – a post-synaptic function;  
 $w_0$  - the threshold value of the function;  
 $x_i$  – an input signal of the  $i$ -th neuron;  
 $w_{ij}$  - weight of the synaptic connection between the  $i$ -th neuron and the  $j$ -th neuron; and  
 $i, j = 1, 2, \dots, N$ .

Obtained value of the PSP-function is transformed via an output signal activation function (Borovikov, 2008):

$$y_j = f(net_j), \quad (2.6)$$

Where  $y_j$  – an output signal; and  
 $f(net_j)$  - an activation function.

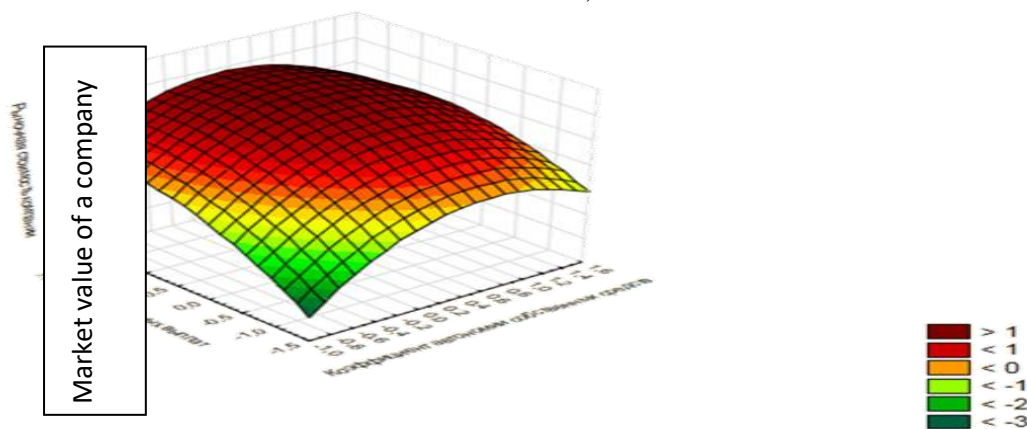
Liner, logistic, hyperbolic, exponential, sine, piecewise linear or step function is used in neural networks, depending on the nature of interaction between the neurons.

### 3. RESULTS

#### 3.1. Modeling dependence of the market value of a company on the level of dividend payouts and capital structure

The efficiency of dividend policy depends on the capital structure and financial capabilities of a company, which predefined the market value of the company (Bauerleand Jaśkiewicz,2015; Moriand Ikeda, 2015). Therefore, a polynomial regression model of the market value of a company that reflects the dependence of firm's capitalization on the level of dividend payouts, subordinate to the capital structure has been developed. An average annual capitalization of oil and gas companies under consideration is a dependent variable, and the level of dividend payouts and equity-assets ratio for 2010-2014 are dependent variables. As long as statistical indicators are expressed in different units of measurement (Annex 1), data have been priorly standardized for developing the model. Visualization of dependencies of standardized variables of international oil and gas companies under consideration for 2010-2014 has been presented in Figure 4.

*Figure 4: Indicators of dependence of market value of oil and gas companies under consideration on equity-assets ration and dividend payouts for 2010-2014 (standardized values)*



*Source: Own calculations*

The dependence of the market value of a company on the level of dividend payouts with regard to the capital structure was revealed in the research using linear modeling. Model coefficients have been determined according to an error level minimization criterion (p-level) and comparison of actual values of the Student's t-test (see Table 1).

*Table following on the next page*

*Table 1: Indicators of statistical significance of a model of dependence of market value of a company on the level of dividend layout, with regard to the differentiated capital structure*

Model coefficients	t-value	p-level
b0	-2.34	0.0098
b1	2.54	0.0073
b2	3.01	0.0018
b3	-4.03	0.0003
b4	-3.96	0.0004
b5	-2.11	0.0256
b6	2.73	0.0039
b7	-3.58	0.0006
b8	-4.01	0.0003
b9	4.13	0.0002
b10	4.86	0.0000

*Source: Own calculations*

Based on the obtained model coefficients, the 5-power polynomial has been determined to be the model of highest statistical significance.

$$b0 * Rea + b1 * Rea^4 + b2 * Rea^3 + b3 * Rea^2 + b4 * Rea + b5 * Ldp^5 + b6 * Ldp^4 + b7 * Ldp^3 + b8 * Ldp^2 + b9 * Ldp + b10 \quad (3.1)$$

Thus and so, the polynomial regression model of market value of Russian oil and gas companies that represents the dependence of capitalization of a company on the level of dividend payouts, with regard to the differentiated capital structure (equation 2.1; 2.1) appears to be the following:

$$f = -0.3387 * Rea^5 + 0.2427 * Rea^4 + 1.1955 * Rea^3 - 0.8716 * Rea^2 - 0.4322 * Rea - 0.1069 * Ldp^5 + 0.6058 * Ldp^4 - 0.6178 * Ldp^3 - 1.0598 * Ldp + 1.2974 * Ldp + 0.2990, (3.2)$$

Where  $f$  – a function of dependence of market value of a company on the level of dividend payouts and capital structure;  $Rea$  - a standardized value of an equity-assets ratio that defines the capital structure of a company;  $Ldp$  - a standardized value of a level of dividend payouts of a company.

As long as any value of the p-level does not exceed 0.05 for all model coefficients, and calculated value of the t-test does not exceed the table value in modulus (2.08), one can speak of adequacy of the model that has been developed within this research.

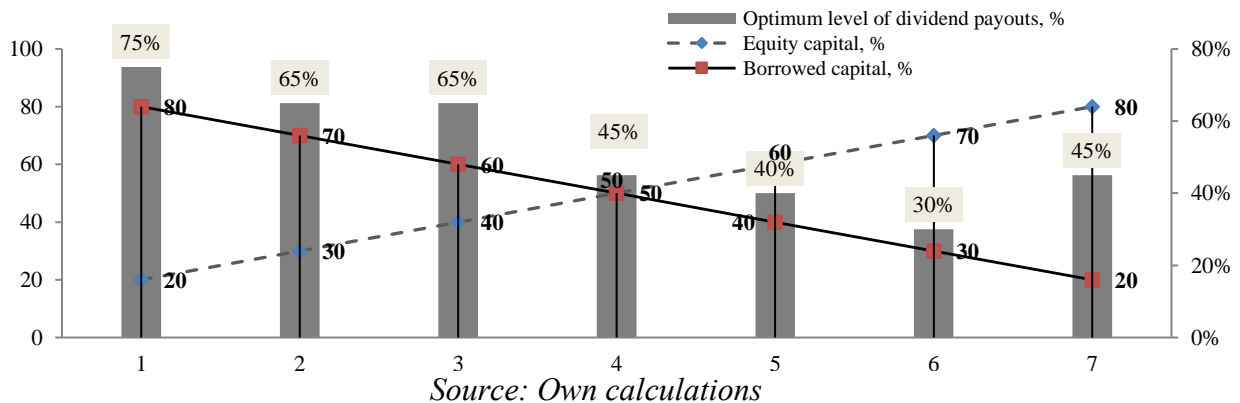
### **3.2. Determining optimum level of dividend payouts subject to the capital structure of a company against maximization of its value**

The target of optimization of the dividend policy of a company is determination of such a level of dividend payouts to minimize the market value of the company, as has been pointed out many times before. Therefore, an optimization model for the market value of Russian oil and gas companies that reflects the dependence of capitalization of the firm on the level of dividend payouts and capital structure has been presented in the following way:

$$f(Rea; Ldp) = -0,3387 * Rea^5 + 0,2427 * Rea^4 + 1,1955 * Rea^3 - 0,8716 * Rea^2 - 0,4322 * Rea - 0,1069 * Ldp^5 + 0,6058 * Ldp^4 - 0,6178 * Ldp^3 - 1,0598 * Ldp^2 + 1,2974 * Ldp + 0,2990 \rightarrow \infty \quad (3.3)$$

While solving the optimization task, based on the developed model and by means of differentiating the capital structure of a company (equity-assets ratio), a level of dividend payouts has been calculated with the model go to infinity, i.e. the market value of the companies go to the maximum value (see Figure 5). For differentiating the capital structure, traditional levels of the correlation between borrowed and equity capital (20/80, 30/70, 40/60, 50/50, 60/40, 70/30, 80/20) have been taken, with regard to maximum and minimum values for international oil and gas companies under consideration for 2010-2014.

Figure 5: Optimum level of dividend payouts subject to capital structure of a company against maximization of market value of the company



#### 4. DETERMINING OPTIMUM TYPE OF DIVIDEND POLICY OF A COMPANY, WITH REGARD TO THE DIFFERENTIATED CAPITAL STRUCTURE

Calculation data obtained on the optimum level of dividend payouts of oil and gas companies under consideration that are differentiated according to the capital structure, were the basis for determining the optimum type of dividend policy of the companies. To determine quantitative levels of various types of dividend policy within the research, the Fibonacci's Law was applied. The level of dividend payouts (coefficient) is specified as a value in the range of [0;1]. Based on the Fibonacci sequence, three ranges of levels of dividend layouts (see Equation 2.3; 2.4) that correspond to the determined type of dividend policy of the company (conservative, moderate, aggressive) have been calculated (see Table 2).

Table 2: Quantitative criteria of a type of dividend policy subject to the level of dividend payouts of a company

Range of values of level of dividend payouts	Type of dividend policy
[0; 0.38]	Conservative
[0.39; 0.62]	Moderate
[0.63; 1]	Aggressive

Source: Own calculations

Conservative dividend policy is a type of dividend policy with primary satisfaction of investment needs of a company, and dividends are paid out in a minimum stable amount or according to the residual principle (Akyildirietal., 2014). Compromise (moderate) dividend policy is a kind of dividend policy providing for a stable level of dividend payout, including a premium at certain periods. This policy is most associated with the financial performance of the company and the level of satisfaction of investment needs of the company (Florackisaetal., 2015).

Aggressive dividend policy is a kind of dividend policy, providing for a stable level of dividend payout, including an 'aggressive' premium at certain periods for market stock 'promoting' of the company. This policy is least associated with the financial performance of the company (Ro, 2014). Based on the quantitative criteria of a type of dividend policy subject to the level of dividend payouts of a company, types of optimum dividend company have been determined in accordance with the capital structure of the company (see Table 3).

Table 3: Optimum type of dividend policy subject to capital structure of a company

Type of dividend policy	Capital structure						
	20/80	30/70	40/60	50/50	60/40	70/30	80/20
	Aggressive	Aggressive	Aggressive	Moderate	Moderate	Conservative	Moderate

Source: Own calculations

In order to verify the reliability of research findings for optimizing the dividend policy of international oil and gas companies under consideration, neural network technologies were used. It has been justified in the process of study, using Statistica SW, that a multi-layer perceptron neural network is optimum for modeling an effective dividend policy of a company. This model is the one that exhibits the lowest levels of learning, control and test errors, as compared to neural networks of other types (see Table 4).

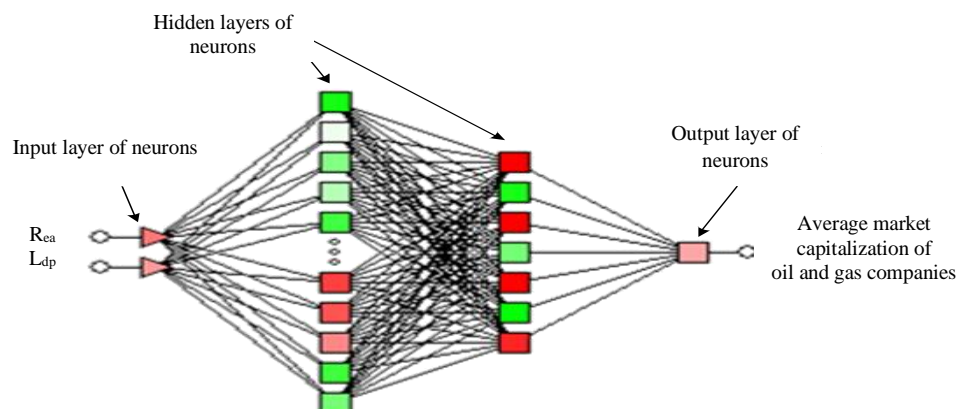
Table 4: Statistical specification of a neural network for determining optimum dividend policy of oil and gas companies under consideration subject to capital structure

Architecture	Learning error	Control error	Test error
MP 2:2-29-7-1:1	0.020880	0.036725	0.050123

Source: Own calculations

Low error levels are indicative of the adequacy of the statistical solution with regard to the selected model of a neural network. Visualization of determination of the optimum dividend policy of oil and gas companies under consideration subject to the capital structure and using the neural network has been presented in Figure 6.

Figure 6: Neural network for determining optimum dividend policy of oil and gas companies under consideration subject to capital structure



Source: Own calculations

The optimum level of dividend payouts and type of company's dividend policy is determined, using a multi-layer perceptron neural network for each capital configuration (see Equations 2.5; 2.6) (see Table 5).

*Table 5: Determining the type of optimum dividend policy structure of oil and gas companies under consideration subject to the capital structure and based on neural networks*

Indicator	Capital structure (correlation between borrowed and equity capital)						
	20/80	30/70	40/60	50/50	60/40	70/30	80/20
Level of dividend payouts [%]	73%	68%	64%	48%	41%	35%	47%
Type of dividend policy	Aggressive	Aggressive	Aggressive	Moderate	Moderate	Conservative	Moderate

*Source: Own calculations*

Based on findings of the optimum level of dividend payouts subject to the capital structure of a company, which were obtained by means of non-linear modeling and application of neural networks, one can point out almost 100% match in the level of dividend payouts. This confirms the accuracy and precision of data that were obtained throughout the research. Thus, one may state that oil and gas companies under consideration must maintain the following proportions of the level of dividend payouts, for optimization of the dividend policy: for the capital structure with the share of equity financial resources no more than 20%, the level of dividend payouts must not exceed 73-75% of the net profit; with an increase in the equity financial resources from 30% to 40% in the capital structure of the company, the level of dividend payouts should constitute 64% to 68% of the net profit; if equity financial resources of the company are available in the amount of 50% in the capital structure, the level of dividend payouts must not exceed 45% to 49% of the net profit; under the conditions of exceedance of equity vs. attracted financial resources in the capital structure within 60%, the target volume of dividend payouts must be 41% of the net profit; with 70% of the equity capital in the capital structure of a company, the optimum level of dividend payouts is 30% to 35% of the net profit of the company; and with 80% of the equity capital of the total volume of financial resources of the company, the level of dividend payouts must not exceed 45 to 47%. Compliance with the proposed ratios of the level of dividend payouts and correlation between the equity and attracted capital of oil and gas companies under consideration will facilitate growth of their investment attractiveness and market value.

## 5. CONCLUSION

Thus, the approach that has been developed within this research is a brand new concept in the paradigm of corporate management. A distinct advantage of this approach is its practical importance, as long as such approach allows for the most accurate determination of the optimum type of dividend policy of oil and gas companies. As opposed to the methods that were presented in theory, this original approach relies on determining the quantitative optimum level of dividend payouts of a company subject to the available capital structure. In its turn, this allows for substantiating the type of optimum corporate policy that corresponds most closely to the current financial condition of the company. The adequacy of using polynomial modeling technologies and neural networks for determining the optimum dividend policy proves the accuracy of research findings, which is indicative of the practical importance and value of the developed approach. It facilitates obtaining objective and reliable data regarding the optimization of dividend policy of oil and gas companies under consideration.

It utilizes the subjectivity and pragmatism of qualitative approaches to maximizing the market value of a company. The conceptual approach to determining the optimum level of dividend policy of companies that has been developed throughout the research is the basis for improving theoretical and methodological grounds of corporate management. It is described by the simplicity and versatility of its application, as long as it is not limited by regional and industrial attachment of the company. It facilitated justified determination of priorities of dividend payouts, capital structure proportions and development of an effective strategy to maximize the market value of companies against the unstable functionality of the global economy.

#### LITERATURE:

1. Borovikov, V. (2008). *Neironnyeseti. STATISTICANeuralNetworks: Metodologia i tekhnologiiisovremennogoanalizadannykh* (Neural networks. STATISTICANeuralNetworks: Methodology and technologies of modern data analysis). Moscow: Goriachaialinia – Telekom, 392 p.
2. Vorobiev, N.N. (1978). *Chisla Fibonacci (The Fibonacci's sequence)*. Moscow: Nauka, Fizmatlit, 144 p.
3. Damodaran, A. (2013). *Investitsionnaiaotsenka. Instrumenty i metodyotsenkilubykhaktivov.* (Investment evaluation. Tools and techniques of evaluating any assets). Moscow: Alpina Publisher, 1324 p.
4. Nizametdinov, Sh.U., Rumiantsev, V.P. (2012). *Analizdannykh (Data analysis)*. Moscow: NIYaU MIFI, 288 p.
5. Yakhiaeva, G.E. (2006). *Nechetkiemnozhestva i neironnyeseti (Fuzzy sets and neural networks)*. Moscow: Binom, 351 p.
6. Aggarwal, R., Kyaw, N. (2010). "Capital structure, dividend policy, and multinationality: Theory versus empirical evidence". *International Review of Financial Analysis*, Vol. 19, Is. 2, pp. 140-150.
7. Akyildirim, E. et al. (2014). "Optimal dividend policy with random interest rates". *Journal of Mathematical Economics* (Vol. 51, pp. 93-101).
8. Al-Malkawi, H.N., Bhatti, M., Magableh, S. (2014). "On the dividend smoothing, signaling and the global financial crisis". *Economic Modelling*, Vol. 42, pp. 159-165.
9. Bäuerle, N., Jaśkiewicz, A. (2015). "Risk-sensitive dividend problems", *European Journal of Operational Research*, Vol. 242, Is. 1, pp. 161-171.
10. Bill Barrett Corporation. (2015). <http://www.billbarrettcorp.com/>.
11. Bloomberg. (2015). <http://www.wtcphila.org/uploads>.
12. Brandmeir, K., Grimm, M., Heise, M., Holzhausen, A. (2015). *Allianz Global Wealth Report 2015. Economic Research. Allianz SE*. 121 p.
13. Caliskan, D., Doukas, J. (2015). "CEO risk preferences and dividend policy decisions". *Journal of Corporate Finance*, Vol. 35, December, pp. 18-42.
14. Chevron Corporation. (2015). <https://www.chevron.com>.
15. ConocoPhillips Company. (2015). <http://www.conocophillips.com>.
16. Denbury Resources Inc. (2015). <http://www.denbury.com/>.
17. Exxon Mobil Corporation. (2015). <http://corporate.exxonmobil.com/>.
18. Fairchild, R., Guney, Y., Thanatawee, Y. (2014). "Corporate dividend policy in Thailand: Theory and evidence", *International Review of Financial Analysis*, Vol. 31, pp. 129-151.
19. Financial Markets. (2015). McKinsey Global Institute. <http://www.mckinsey.com/>
20. Florackisa, C., Kanas, A., Kostakis, A. (2015). "Dividend policy, managerial ownership and debt financing: A non-parametric perspective", *European Journal of Operational Research*, Vol. 241, Is. 3, pp. 783-795.
21. Karpavičius, S. (2014). "Dividends: Relevance, rigidity, and signaling". *Journal of Corporate Finance*, Vol. 25, pp. 289-312.

22. Kaźmierska-Jóźwiak, B. (2015). “Determinants of Dividend Policy: Evidence from Polish Listed Companies”. *Procedia Economics and Finance*, Vol. 23, pp. 473-477.
23. Modigliani, F., Miller, M.H. (1958). “The Cost of Capital, Corporation Finance and the Theory of Investment”. *American Economic Review*, June, pp. 261-297.
24. Modigliani, F., Miller, M.H. (1963). “Taxes and the Cost of Capital: A Correction”. *Ibid*, June, pp. 433-443.
25. Mori, N., Ikeda, N. (2015). “Majority support of shareholders, monitoring incentive, and dividend policy”. *Journal of Corporate Finance* (Vol. 30, pp. 1-10).
26. PwC. (2015). Global Top 100 Companies by market capitalization. [www.pwc.com](http://www.pwc.com)
27. Ro, S. (2014). Credit suisse: This Is What the World Stock Market Will Look Like in 2030. <http://www.businessinsider.co.id/credit-suisse-global-equity-market-2030-2014-7/#.VhmCesFwSKI>.
28. Stone Energy Corporation. (2015). <http://www.stoneenergy.com>.
29. Swift Energy Company. (2015). <http://www.swiftenergy.com>.
30. The Statistics Portal.(2015). <http://www.statista.com>.
31. Zhou, Z., Xiao, H., Deng, Y. (2015). “Markov-dependent risk model with multi-layer dividend strategy”. *Applied Mathematics and Computation*, Vol. 252, pp. 273-286.



**APPENDIX***Table A1: Financial indicators of business activity of international oil and gas companies under consideration*

Indicators	Bill Barrett Corporation					Chevron Corporation				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Equity-assets ratio	0.5597	0.4534	0.4122	0.4223	0.4587	0.5727	0.5833	0.5916	0.5928	0.5871
Dividend payout level (ratio)	0.1759	0.1622	0	0	0	0.2980	0.2282	0.2615	0.3488	0.4123
Median market capitalization [bln. USD]	1.88	1.85	0.97	1.35	0.58	225.68	265.01	271.41	306.92	280.47
Indicators	ConocoPhillips Company					Denbury Resources Inc.				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Equity-assets ratio	0.4422	0.4291	0.4134	0.4446	0.4485	0.4833	0.4719	0.4592	0.4497	0.4481
Dividend payout level (ratio)	0.2799	0.2920	0.3900	0.3634	0.5126	0	0	0.1121	0	0.1374
Median market capitalization [bln. USD]	102.26	102.51	74.19	90.46	88.31	7.45	6.81	6.35	6.18	5.59
Indicators	Exxon Mobil Corporation					Murphy Oil Corporation				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Equity-assets ratio	0.5047	0.4856	0.5143	0.5204	0.5181	0.5761	0.6209	0.5103	0.4909	0.5121
Dividend payout level (ratio)	0.2791	0.2194	0.2248	0.3337	0.3555	0.2542	0.2450	0.2355	0.2104	0.2634
Median market capitalization [bln. USD]	359.98	417.02	418.23	410.61	408.20	14.69	11.06	12.03	12.52	9.26
Indicators	Stone Energy Corporation					Swift Energy Company				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Equity-assets ratio	0.2563	0.3084	0.3141	0.2987	0.3649	0.5064	0.4507	0.4256	0.3948	0.3655
Dividend payout level (ratio)	0.1975	0.2189	0.1182	0.2464	0	0	0	0	0.1111	0
Median market capitalization [bln. USD]	1.13	1.44	1.05	1.02	1.02	1.63	1.38	0.73	0.58	0.21

*Source: Bill Barrett Corporation, 2015; Chevron Corporation, 2015; ConocoPhillips Company, 2015; Denbury Resources Inc., 2015; Exxon Mobil Corporation, 2015; Murphy Oil Corporation, 2015; Stone Energy Corporation, 2015; Swift Energy Company, 2015; Ownresearch*

# GLOBALIZATION OF EDUCATION: THE HUMAN FACTOR IN KNOWLEDGE MANAGEMENT

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## **ABSTRACT**

*The article deals with the globalization of education in the modern age, the international standards used in the development of education, human factor in knowledge and education management. It is noted in the research that one of the most important tasks of the modern education is upbringing of a perfect and worthy person for further humanity's achievements. The XXI century is called high-speed time and it is not accidental at all because the modern world is globalized rapidly and we can compare this inevitable process with " the arrow fired from the bow". Globalization does not manifest itself simply on the basis of removing the economic- geographical, political-cultural boundaries and "Curtains" between the countries, rapid decrease of the world or creation of common standards of lifestyle and behavior, transnationalization of economics. International experience shows that there is also globalization in the society's, people's, nation's educational way towards globalization. There are a lot of global problems of education:determination of the level of educational internationalization or assessment of knowledge and preparation of the scale of its standardization etc. Globalization means convergence of education systems of certain countries and formation of general educational space. Being a part of the active integration and globalization on a world scale this process in education obeys their laws and represents unity with the processes in the other spheres.*

**Keywords:** *Globalization, Education, Knowledge, Management, Human, Capital, Strategy*

## **1. INTRODUCTION**

In any geography of the world, at every stage of social development the society was connected with education organically. In general, the instructive and educational training of the younger generation it is not today's experience, its history belongs to the far ages. It is possible that at different times and in certain areas the general level and indicators of the education are not the same, or some societies do not have the opportunity to mobilize the sufficient resources for the development of the education and the activities of relevant institutions, but everyone accepts unconditionally that the education plays a central role in the public life. The importance of the education is connected with many factors and directs the person from an early age to the right formation. For example, we know that when children begin their first steps to life, they do not know reading, writing and counting, they are unaware of the moral norms and cultural achievements of the community and society they live in. Thanks to the efforts of the professional teachers and education in the family, as well as the opportunities arising from the mass media and the internet the young generation has been studying, writing, calculating, investigating own environment, moral and behavioral norms for just during a few years. Some perceive these skills more deeply than others and as a result, the educational system, in fact, performing the function of social sorting influences very much on the future economic fate of individuals. The scale of the factors contributing to the role and importance of the education in the modern period has expanded. Making clear the essence of the events and innovations appeared in the 21<sup>st</sup> century, we observe two dominant dynamics in the panorama of the modern life: the first is the diffusion of the Information Technology, the second is the economic globalization which is accompanied by the diffusion of capital (Kalbaliyev, 2006: 44).

In the information period in which we live, the new facts and knowledge enter our lives very fast. Even the knowledge that we learned a few years ago loses its importance, the misinformation of the old knowledge that we are sure of its authenticity till nowadays is proven, the new information, that can radically change our worldview, appear. The number of people who have access to new information is also increasing with the geometric series. The diffusion of the knowledge with today's speed of the scientific knowledge creation even puts the traditional concepts such as "knowing", "being competent" and "learning" under the question: "In the 21<sup>st</sup> century no one can be sure of anything. The development of technology once again proves that everyone working in the profession field, especially teachers should work on themselves regularly and be able to keep up with the scientific and pedagogical achievements of the modern world.

## **2. GLOBALIZATION AND ITS INFLUENCE TO THE EDUCATION**

The international experience shows that there is a globalization in education, where the society, people and nation are on their way to civilization. There are many global problems of education: determining the level of education internationalism or preparing a single scale of knowledge evaluation and standardization, etc. But what is the globalization in the education? First of all let's mention that naming the 21<sup>st</sup> century as "the speed century" is not accidental. Because the world we live in is rapidly globalizing and we can compare this irresistible process figuratively with the word combination "the arrow going out of the bow". Globalization does not only show itself in the background of the elimination of economic-geographical, political-cultural borders and "curtains" among countries, the rapid reduction of the world or the formation of the common standards of lifestyle and behavior, the transnational transformation of the economy. The new world order forming the mass culture stereotypes negatively affects the national identity, national and moral values, mental values formed historically, language and spirituality of different peoples. Not depending on the different positions and approaches, the great integration process leading to the globalization is followed by all humanity. Today, it is not possible to order the globalization processes or the scientific and technical progress. It is necessary to take measures in advance to prevent damage to national and moral values by identifying the various problems caused by these processes, which are inevitable and necessary. Now this global problem makes the scientists from all over the world to unite their efforts and focus on the effective measures against the open threats to the normal physical, social and spiritual life (Mehdizade, 1976: 23). Globalization is a problem that appears with the characteristic, deep and mutual processes in the world system. The global problem includes not only the issues that correspond to the scale of the state or regions and their sharp interests in the life, but also similar problems related to the whole of humanity and mankind. Globalization means the convergence of the education systems of different countries and the formation of a single general education space. This process in the education being a part of the global integration and the unification process is under command of its general laws and forms harmony with the processes in other areas. According to the thoughts of some experts, in order to globalize the education system, that is, to adapt it to the requirements of world standards, it is necessary to pay attention to two directions: first of all, it consists in studying and summarizing and analyzing the achievements gained in the field of education within the country, immediately, studying the essence and content of the progress in the field of education it is to determine the current situation, compliance with the requirements and needs of the society. It allows us to reveal what has been achieved in the direction of the formation of society and the potential opportunities will be created for the future. Secondly, to investigate and generalize the motor skills in the work experience of the developed foreign countries and taking into consideration to realize the implementation of the national-moral features (Jabbarov, 2005: 41). At different times the attention has been paid to the problems of globalization and education in

different countries. In 1998 in Canada a large amount of sum was given for the dissemination of the concept of “the international education”. In the European-scale discussions it was said repeatedly that the quota for integration in the field of education was not sufficiently prepared. It is known that the implementation of the solution of the global problems through the international cooperation and consensus was interfered with the diametric conflicts in interest and appreciation. That is why the directive organizations in North America put forward an international concept on the issue of globalization and transformation of the education. Of course, it was necessary for the educational institutions and specialists to come together for their cooperation and exchange of views. It is clear that globalization sets the new complicated tasks before the national education systems. For example: the content of the given knowledge should be determined, the system of formalization of values should be developed, along with the modernization of education, the use of the electronic computing machines in its management, etc. In order to solve these problems the exchange views on the international scale, talk about the gained experience, evaluation of the positive sides and the scientific research works must be carried out.

## **2.1. The new conceptions in the education**

In addition to developing the education globalization has also brought the new terms-conceptions to the pedagogical literature: curriculum, the outcome oriented training, summative and diagnostic evaluations, taxonomies, facilitation, formative, portfolio, mentor, etc. One can divide the globalization of the education into two parts (Mardanov, 2009: 32):

- Globalization of the general secondary education;
- Globalization of the higher education.

### *2.1.1. Globalization of the general secondary education*

The approaches to the globalization of the general secondary education are different. According to the American education system, the researchers working in the field of education the globalization of the education should be in the following directions:

- Humanistization of education;
- Formation of the equal opportunities in education;
- Ensuring justice in education;
- Paying attention to the quality in education.

According to them, the knowledge, skills and habits were given to the education recipients in the various forms and contents in accordance with the educational policy of the state in any historical period and also reflected the characteristics and development of the people in itself, there is no need to globalize them.

### *2.1.2. Globalization of the higher education*

The idea of forming European Higher Education space was a main factor in the globalization of higher education. The idea was put forward by the ministers of education of four major European states - Great Britain, Germany, Italy and France. In 1988, in the city of Bologna, Italy, the 900<sup>th</sup> anniversary of the oldest university in Europe the “Bologna Khartoum” was adopted. Later this name was changed and was called the “Bologna process”. Now about 50 European countries have joined the “Bologna process”. On the 19<sup>th</sup> of May in 2005 Azerbaijan was approved as a full member of the Bologna Process at the conference held in Bergen city of Norway. According to a number of sources the main goal of the Bologna process was to increase the level of education in the institutions and universities and to prevent the influx of the skilled education recipients from the United States and to provide Europe with highly qualified cadres (Bayramov, 1998: 46).

The moral and emotional component of the globalization attains a special importance in Azerbaijan education. As the implementation of modernization of education covers practically all Azerbaijani families, the essence and objectives of the changes in the education should be explained to the population regularly, the results of the public opinion should be carefully studied by the educational institutions managing education and taken into consideration in the modernization of education. Paying attention to the problematic branches such as Azerbaijan education and the development trend of the world, the new social requirements given to the education system of Azerbaijan, the state provision of the qualitative education in Azerbaijan, the formation of effective economic relations in education, provision of education system with highly qualified personnel, its support by the state and the public, promotion of professionalism of the pedagogical cadres and other educational activities should be strengthened. In the period of its historical development the society has always witnessed the disagreements and crises among the new processes and the old infrastructure. It is known that now going from one point of the world to another, establishing the communication with any point of the planet does not create any problems. But getting the normal education at any point in the world is a problem. But what is the reason of it? The scientific researches show that, first of all, it is connected with the very large capital and intellectual capacity of the educational infrastructure. This process requires the high professionalism from its founders, i.e., from the humanitarian technologies. In addition, the activity of the institutional nucleus (center) of the modern education system is changing in connection with the development of science and technology. Before the role of such a nuclear (center) was an educational institution and the education recipient received the standard educational services at school. But now the personal (special) educational programs have begun to organize such institutional education content. Of course, in its centre one can see the person himself. In modern developed countries of the world, the rich families prepare the special education programs for their children from a young age and open the special schools for their implementation. The Dutch experience can be an example for it. In other words, now the process of individualization of education is carried on. But it requires a complete restructuring of the content of the training process and the conduct of the training on its basis. In this case as the process is directed to the concrete person, firstly, the educators must learn the methodological methods of the new content of the training and improve their knowledge in this direction continually.

### **3. THE HUMAN FACTOR IN THE MANAGEMENT OF KNOWLEDGE**

As the necessary factor of the formation of new qualities in society, social sphere the importance of education increases with the influence of human capital. The increase of the role of human beings in the developed countries, which consists of 70-80 per cent of wealth, requires intensification, differentiation and individualization of the education of both the younger and the older generation. After the collapse of the USSR, the entire system of values of the school, which historically acted as a creative and propagandist, began to spread widely in the modern world. The intellectual potential, scientific knowledge, the modern information technology has become an important public-humanitarian activity. Under such circumstances, becoming the global factor of the social development the education and science are also being included into the national priorities. The solution of national, regional and global issues requires the serious changes in the education system in the 21st century to make certain adjustments in its development strategy. The education system beginning from the pre-school education and upbringing includes the various levels of the education such as the academic doctoral programs and lifelong learning forms. According to the International Standard Classification of Education (ISCED 2011), there are formal, un-formal, informal and supplementary forms of education in the national education systems. Formal education, in turn, is divided into levels such as early (pre-school), primary (beginning from the age of 5-7 it lasts 4-6 years), secondary (including

general and vocational education) and higher education (Bachelor degree, Master degree and doctorate). Each form and level of education has an exceptional role and influence in human life and these problems should always be kept in the attention of the human development of the country. The effective implementation of the tasks of the education system within the socio-economic system of any state is carried out in 3 directions (Mammadzade, 2008:56):

- Acquisition of the knowledge: Use and adaptation of the existing knowledge in the international world in accordance with the needs of the state. Such knowledge enters into the country through the open trade regime, the attraction of the foreign investments and the relations of the licensing agreements. In addition, knowledge can be created by carrying out the scientific researches and testing-design works in the country and using local knowledge;
- Absorption of the knowledge: Provision of general education for all, creation of opportunities for lifelong education, the development of higher education system by giving special importance to the fields of science and technology;
- Transmission of the knowledge: Usage of new information and telecommunication technologies based on the competition, development of private sector, providing the comprehensive access to the appropriate legal-standard.

### **3.1. The modern education models during the period of globalization**

The education system carries out the dual duty: on the one hand education must respond the personal and professional requirements of the personality, on the other hand it must strengthen the general and professional potential of society. In this regard, the main functions of the educational system are followings:

- Developing the personality of the learner and his / her personal skills;
- Professional training of the learner;
- Formation of the scientific potential of the society.

Based on this functional classification it is possible to identify 3 models of education (Pashayev, 2002: 16):

- a) In the conception of liberal education characteristic for the English model, formation of the graduates with broad intellectual abilities and special personal qualities (strong character, leadership, creativity, analytical thinking and skills of adaptation to the environment, etc.) is considered as important as their professional training;
- b) The French model is distinguished by the differentiation of scientific and professional activities, as well as the division of the scientific activity into “inside” and “outside” activities of the higher education institution or university;
- c) In the German model the main attention is given to the scientific researches. The results of the research work of the teaching staff are included into the educational program and become the lesson material. Teachers and students work and collaborate as the support researchers.

## **4. CONCLUSION**

In educational systems two types of education are chosen: the first is academic, it means the scientific-theoretical education, but the second is the education oriented to the professional or practical skills. In academic programs along with the transfer of the professional skills in concrete directions the main attention is given to the fundamental theoretical preparation. The application programs are directed to the developing more professional knowledge and skills in concrete areas. Today the realities in the socio-political, economic and cultural life of Azerbaijan Republic and the development trend of the world in order to establish a high level of education system carry out the purposeful work. In order to adapt the education system of Azerbaijan to the world education system and to reconstruct it, it is necessary to rethink the

structure of the education system, to conduct fundamental quality changes in the content of education, to provide information, teaching and scientific-methodical support of the education system, the economy of education, to train qualified pedagogical personnel, in short, educational policy. To become a worthy member of the united world educational space the students should be taught creative thinking and intellectual abilities, the civic responsibility, the legal self-government, the initiative, independence and active adaptation to the labor market must be formed in them. In the process of education globalization the requirements to the professional qualities of the teacher are also changing, it requires the increase in the efficiency of educational activities and the new approach to education. Finally, we consider it necessary to mention the fact. During the last two or three months the “COVID-19” virus, which has become a global disease, has also affected the educational process in Azerbaijan as in the whole world. After the Coronavirus pandemic the serious changes took place in the world education system and against the backdrop of the processes that took place the distance education showed itself as the only and without alternative education” (9). Thus, in order not to spread the disease and prevent infection of people the activities of all educational institutions were stopped. And not to be behind the existing lesson programs during the pandemic period, the mass online classes have been organized in our country. The global disease has put forward another global fact in the education - the need to organize distance education. It showed that the organization of online lessons in Azerbaijan, which has not undergone extensive experience, is one of the priorities in the future. And now “the post-Coronavirus level of the distant higher education should be discussed and the necessary rules should be prepared on the basis of the international experience. The same rules should include all levels of the distance education from the admission to the graduation of the students” (9). Azerbaijan has already taken its first steps in the field of integration into the world education system. Thus, today the content of education in our republic is adapted to the world standards, the educational complexes equipped with the new devices and accessories have started to work. In addition to conducting education at these educational institutions in the Azerbaijani, English, Russian, French and other languages are taught at a high level. Thanks to mastering these languages it is easier to find a way to the world educational space. Of course, the globalization of the education creates difficulties, as it opens up great prospects. And the professional education policy pursued in our country allows us to overcome these obstacles successfully.

#### LITERATURE:

1. Bayramov, H., Kalbaliyev, A. (1998). *Basis of management of education*. Baku: Elm.
2. In UNEC Distant High Education International Forum 2020: “*New opportunities and modern summons*” /<http://news.unec.edu.az/xeber/125-universitet/6365-bold-red-unec-distant-ali-tehsil-beynelxalg-forumu-2020-yeni-imkanlar-ve-muasir-chagirishlar-video-bold-red> (08.05.2020).
3. Jabbarov, R. (2005). *Organization and planning of the methodical service in the management of the educational institutions*. Baku: Nurlan.
4. Kalbaliyev, A. A. (2006). *Basis of the education management (School-study)*. Baku: Nurlan.
5. Mammadzade, R. and others (2008). *Some problems of the education management*. Baku: “Muallim” publishing-house.
6. Mardanov, M. J. (2009). *Azerbaijan education in the new development level*. Baku: Chashoghlu.
7. Mehdizade, M. (1976). *About the scientific basis of the educational system management // “Azerbaijan school” journal, № 11-18.*
8. Mehrabov, A.O., Abbasov, A.N., Huseynov, V., Sh., others (2011). *Pedagogical and psychological problems of management of educational system*. Baku: Muterjim.

9. Pashayev, A.Kh., Mammadov, I. T. (2002). *The structural and functional components of the training technologies* // Journal of scientific articles, Baku, №2-3, p. 15-16.



## CHARACTERISTICS OF DECENT LABOR IN THE CONTEXT OF SUSTAINABLE HUMAN DEVELOPMENT

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### ABSTRACT

*Modern economic relations should be treated as a prerequisite for socio-economic development, effective utilization of their potential, and create a conducive environment for the sustainable development and productive activities of human. Human should be as qualitative and efficient as the other resources, and should be continuously improved and developed. The factors characterizing sustainable human development, the relevance of their evaluation criteria to the performance of decent and productive labor by employees and the study of the interaction of the people of the continuous development of decent labor is very urgent. The concept of “Decent Labor” was first adopted at the 87th session of the International Labor Organization in 1999. According to this concept, decent Labor is an activity enabling employees what they can and love in the context of freedom, security, and respect for human dignity. The relationship between human and economy, human-society, human-nature is ultimately connected to the processes of human development. For achieving sustainable economic growth and improving living standards, decent labor standards should be applied. The essence of decent labor, decent labor standards, the structure of these standards, the indicators needed to assess compliance with the established standards, decent wages, decent employment development, its main indicators, the “Economic Human” model, its essence etc. have been studied in the article. The aim of the research work is consists of substantiate opportunities for decent work of workers in the context of sustainable human development in the Republic of Azerbaijan, and to align the interests of the state, employers and employees with international or national social standards. Comparative and systematic analysis, logical generalization, etc. methods were used. The existing situation of sustainable human development and decent work in the Republic of Azerbaijan and their interrelationship have been revealed and evaluated in the article. The originality and novelty of the research work is that the practical investigations with the study of foreign experience of sustainable human development and decent labor, their interrelationships and activities have been conducted, and as a result, relevant recommendations have been given for ensuring the workers to perform decent labor in Azerbaijan.*

**Keywords:** *Human development, Decent labor, Decent salary, Decent employment, Human potential*

### 1. INTRODUCTION

Four strategic targetss have been selected within the national economic perspective in the “Strategic Roadmap for the National Economic Prospects of the Republic of Azerbaijan” approved by the Decree of the President of the Republic of Azerbaijan dated December 6, 2016. The third of these targets is related to the development of human capital. This has made it an important task to ensure the sustainable development of human beings and the constant growth of human capital in our country. Thus, human capital plays a crucial role in increasing labor productivity, increasing the competitiveness of production and service sectors, sustainable development of the population and the country's integration into global markets. Achieving these goals requires improving the quality of education at all levels, ensuring continuity in the development of knowledge and skills through modern training methods, adapting qualified

personnel to the requirements of the labor market, effective use of existing human capital. It is very important to support the work on ensuring continuity in the development of human capital, sustainable human development, increasing labor productivity and increasing the role of knowledge in economic development as a key component of the measures implemented in transformation of the economy in Azerbaijan. It should be provided on two levels:

1. Improving the quality of education at all levels for the formation and development of human capital;
2. Stimulation of continuous development of human capital, investment in research and development to ensure increased labor productivity (1).

A large part of national wealth in developed countries is human capital, and intellectual labor has a significant share in economic growth. For the provision of the sustainable development of the country in the Republic of Azerbaijan, measures related to sustainable human development and the formation of human capital have been identified, a number of strategies, state programs and concepts have been developed. Development of human capital, knowledge and innovation-based development is a priority in the ongoing implementation of the Development Concept "Azerbaijan 2020: vision for the future" and the State Strategy for the Development of Education in the Republic of Azerbaijan. Also, the laws of the Republic of Azerbaijan "On Education" and "On Science" are important state documents serving to the sustainable development of man in the country. The agreed interests of the state, the employer and the employee are based on international or state social standards, including relevant legislation and regulations in the field of labor. Social and labor standards in the field of international law are determined by the conventions of the International Labor Organization, the European Union, the CIS and other intergovernmental agreements. The analysis of all these acts shows that the concept of "decent work" is inseparable from such parameters as decent (providing comfortable living) wages, fair and safe working conditions, social security, vocational education and vocational guidance, social, medical and pension insurance. Among the distinguishing features of decent work, special attention is paid to the reliability of the income of the employee and the representation of the interests of employees. Without a reliable income, people are deprived of their freedom of choice and cease to be socially responsible, and without collective and individual representation, vulnerable groups are powerless. These parameters are of particular importance in the XXI century.

## **2. SUSTAINABLE HUMAN DEVELOPMENT AND HUMAN CAPITAL**

Human and economy, the connection and harmony between human and society, between human and nature, are ultimately connected with the sustainable development of human. Depending on the level of compliance, situations can affect and adversely affect a population's sustainable development. Thus, when there is a high level of health and education, there is economic development in the country, and sustainable development of people. On the contrary, when the level of poverty and unemployment in the country is high, the ecological balance is disturbed, the level of education and health is low, it has a negative impact on sustainable human development. At the same time, countries do not use their existing natural resources, financial and credit resources in the right direction, the distribution of relations is based on unscientific principles, social tensions in society and labor collectives are factors that adversely affect sustainable human development. At the same time, countries do not use their existing natural resources, financial and credit resources in the right direction, the distribution of relations is based on unscientific principles, social tensions in society and labor collectives are factors that adversely affect sustainable human development. When a person is seen as an economically active population, as a worker, it becomes clearer that his functional activity, in other words, that the economy is a human factor.

This eventually shows itself in the following areas: at the general level of human development; at the professional and intellectual level of the employee; in the employee's attitude to work, production activity, initiative and creativity; in human social activity, national-moral thinking; in his responsibility, employment; in health, physical fitness, spiritual thinking (2). The issues of sustainable human development and its more efficient use are very important in the Republic of Azerbaijan, as well as all over the world. Thus, sustainable human development results in improved quality of human resources, education and health, which are key elements of economic growth in the country. Sustainable human development in Azerbaijan has been in the focus since our country gained independence, especially since the beginning of the 21st century. Our country has joined the UN human resource development process since 1994. Since 1995, the annual report on human development is constantly revealing. After gaining independence, our republic has faced many problems that hinder the formation of human capital for sustainable human development. During this period, decline of living standards, inefficient use of social infrastructure, income inequality, mistrust, war, the presence of more than one million refugees and internally displaced persons, and internal instability led to the economic crisis. Also, in a country rich in natural and labor resources, almost the majority of investments are concentrated in the fuel and energy sector, especially in the oil industry, and in Baku and has led to poor regional development. However, due to the successful legal and economic reforms implemented in our country since 2003, it has led to significant progress in human development. Sociological research shows that this development was stimulated by the socio-economic stability created in the country, the state policy aimed at improving the living standards of the population. Carried out research reveals that the opportunities are very high for human capital development in Azerbaijan. Rich natural resources and the intellectual potential of the people give the reason to say that in the coming years, our country will be able to rise to the level of the world's leading countries in the field of human development. Beginning in 2005, the process of converting "black gold" (oil) into "human gold" (human capital) began in our country. Effective utilization of oil revenues by the State Investment Program to ensure sustainable human development under the State Program on Poverty Reduction and Economic Development and the Millennium Development Goals, sending Azerbaijani youth to study at foreign universities, as well as raising the level of education in the country's universities. Appropriate measures have been taken to significantly increase employment in the non-oil sector. As a result, it is reflected in the growth of GDP in our country, raising the living standards of the population and so on. According to the human capital concept, the main, decisive force in the development of modern societies is human. Thus, human potential is the main reason for sustainable and stable development, economic growth, quality of labor and improving the living standards of the population in each country. Since human capital is creative capital, this theory is based on the "creative human" model and the principle of behavior, which is completely different from the "economic human" model in traditional classical theory. The realization of creative potential and the development of personal qualities are the principles of this model. This reflects the paradigm and principles of the creative economy. In this concept, the person's social position and role is determined not only by the wealth he accumulates and possesses, but by his personal qualities and abilities. Thus, he socializes and becomes a social person. Primary profession, secondary specialization and higher education play an exceptional role in the sustainable development of a person, in the formation of his labor potential. The level of education is the main locomotive of socio-economic development, innovation, raising the technical and technological level of production in all developed countries. On December 29, 2012, the President of the Republic of Azerbaijan, Mr. Ilham Aliyev, approved the Development Concept document "Azerbaijan 2020: Vision for the Future". Paragraph 7.2 of this document is entitled "Formation of a modern education system." It reflects the government's activities for the multifaceted development of the education sector

in the country. Targets covering all areas of education are grouped under 26 headings (3). Education, health and science must serve human and his development. "The history of mankind goes from savagery (40,000 years ago) to modern civilization. However, there are still many people who are far from maturity and inner purity. The difficult path of humanity is through reading ... We can only develop by achieving intellectual, ethical, legal and cultural behavior" (4). In modern economic relations, the correct and efficient use of human capital is considered to be the main means of sustainable economic growth. Many Western economists believe that the quality, education and behavior of human resources in modern times are key elements of economic growth. This makes human development necessary. Indeed, capital resources or modern technologies, which are other factors of production, can be imported from other countries. However, the provision of production processes with sustainable and quality human resources must be at the expense of the existing local labor force in each state. Since 1990, the UNDP has been publishing a global study, the Human Development Report. The report calculates an index called the Human Development Index to compare the levels of socio-economic development between countries. The report states that it is incorrect to calculate the level of development between countries only by the increase in per capita national income, i.e. a high rate of growth of national income in a country is not enough to accept that country as a developed country. Apart from the concept of economic growth, the concept of "socio-economic development" is more accurate in terms of explaining the welfare and standard of living between countries. In the Human Development Report, which is based on these principles, the level of socio-economic development is determined using three main criteria (5):

1. Welfare standard: national income per capita is calculated by adjusting for living expenses, which is also called purchasing power parity;
2. Education standard: the second criterion is the level of education in the country. The index uses two factors to determine the level of education: 1) the level of reading and writing among adults, 2) the duration of secondary education (schooling index). The education standard consists of a reading and writing index and a schooling index. The other has a share in the calculation of the literacy index  $\frac{2}{3}$  and the other  $\frac{1}{3}$ ;
3. Health standard: life expectancy in a country is calculated on its basis.

Countries are grouped into 3 categories in the report, according to the Human Development Index, which is formed within the criteria:

- Countries with high human development;
- Countries with average human development;
- Countries with low human development.

From a regional point of view, the Human Development Index shows sharp differences. Reports show that the countries with the lowest human development are South Asia and Africa, while the countries with the highest levels are the United States, Canada, Japan and Europe. Important conditions that affect the sustainable human development and human development indexes are:

- The ability to realize one's existing abilities and potential and to have equal access to benefits;
- Productive activity and the existence of its preconditions;
- Possibility to have a stable environment for obtaining and mastering the latest achievements of the existing civilization, science, education and culture;
- Availability of appropriate opportunities for sustainable human development (2).

The components of human potential shape his creative energy. It depends on the current situation that a person directs his creative energy to be useful and effective for the benefit of both personal interests and the interests of society.

Everyone can be skilled, educated, creative, but which direction to direct their creative energy - positive or negative, as a rule, depends on the specific environment in which the employee works, the incentives provided by society and the available opportunities.

### **3. CHARACTERISTICS AND INDICATORS OF DECENT WORK**

The Decent Work Concept was adopted by the ILO in 1999. According to this concept, work that is free, fair, safe, socially protected, does not degrade human dignity, opens up equal opportunities for all, and guarantees participation in management decisions and self-development can be called decent work. Decent work is the work allowing an employee to do what he or she loves in the context of freedom, justice, security and respect for human dignity. Decent work is a decent life. The strategic goal of achieving sustainable economic growth should be the application of decent labor standards as the basis for human well-being and the country's development. The structure of a decent work standard is as follows:

- Standard;
- Mechanisms by which a certain standard is obtained;
- Indicators used to assess compliance with the established standard: decent salary; decent employment; effective social partnership.

A decent wage- is a wage providing a wide reproduction of human and labor potential, economic freedom for the working person and his family. Decent employment-is the maximum possible employment in the workplace by ensuring the effective use of knowledge, skills, decent work, professional development and training, employee motivation, proper organization of work and leisure, safe working conditions. Effective social partnership is a system of relations between employees, employers, public authorities, local authorities, allowing to take into account and coordinate the interests of each party equally and fairly, ensuring sustainable socio-economic development of the country. For the first time, the concept of decent work was developed by International Labor Organization Director-General H.A. Somavia's report at the 87th session of the ILO and decent work defined as follows: "Decent work is the work that protects the rights of workers, provides adequate income and provides social protection. Decent work also means enough work in the sense that every individual has full and free access to income and earning opportunities. In addition, adherence to the principles of decent work means new prospects for economic and social development, new opportunities for employment, income and social security without compromising between workers' rights and social standards." The ILO pilot program for the implementation of the concept of decent work provides a broader definition of decent work. In this document, decent work is defined as "work that brings adequate income and at the same time devotes time to other areas of life, ensures the reliability of the family, respects human rights, gives the right to vote and paves the way for social integration." Decent work is a way to combine economic and social goals. According to ILO Regional Director Daniel Martinez, decent work is a priority for America, and decent work is defined as "quality work that respects the rights of workers and provides them with some form of social protection." ILO Director-General H.A. Somavia, in his report on "Decent Work for All in the Global Economy," states that "decent work means freedom, equality, security and respect for human dignity." ILO Director-General H.A. Somavia, in his report on "Decent Work in the Information Economy" states that "decent work" as "productive labor that respects human rights, provides security and protection, and has the opportunity to participate in all decisions that may affect the activities of workers." Without using the term "decent work", the REFA Union talked about labor that "provides conditions for the protection and development of human health and abilities." All of these definitions include the following five key characteristics of decent work:

- Productivity;

- Security;
- Respect for workers' rights and social protection;
- Relevant income;
- Working conditions, labor relations, etc. Ability to influence decision-making through social partnership.

Taking into consideration all of the above mentioned, the following definition of decent work can be proposed: decent work is work that is respected by society, does not harm human health and contributes to the development of its abilities, satisfies the individual in terms of moral, material, qualitative, quantitative and fundamental qualities. Moral characteristics show that while working, the individual should not contradict both generally accepted and their own moral values. Satisfaction with material things means that the reward for labor should be sufficient to meet the needs of the individual and their family. Qualitative characteristics are the characteristics of the organization of the workplace, the quality of the equipment, i.e everything that surrounds the employee during the labor process. Quantitative characteristics of labor - this is the time an individual spends on labor. The individual must work as much as he considers necessary and sufficient to ensure his own health. Everyone should have the opportunity and the right to choose the optimal working hours for themselves. Finally, the basic features of labor are, in fact, the content of the functions and activities performed by the person. Being the indicators of decent work the International Labor Organization recommends the use of the following:

- Share of employed and unemployment;
- Share of wage expenditures in GDP;
- Amount of state expenditures on social security and social insurance.

The most important indicators of economically decent work and the social direction of state economic policy are:

- High expenditures of the society on wages - 40-60% of GDP;
- Developed social security system, the cost of which is at least 20-25% of GDP;
- High share of social expenditures in the state budget for health (7-9% of GDP) and education (4-6% of GDP);
- Vocational education, retraining and advanced employment system, low unemployment.

While analyzing the emergence of decent work conception, it is necessary to distinguish the initial conditions and reasons for the emergence of the use of a complex approach in the development of this conception. Prerequisites determine the time of conception. The reasons explain the complexity of the decent work conception. The following conditions can be distinguished for the formation of the concept. First, the process of globalization, which affects almost all areas of society. Unified opinions were formed on living standards, labor relations and social justice. The development of world trade, the creation of transnational companies, the export of production to other countries required the observance of uniform standards and norms of labor in different countries. There is a growing need for a comprehensive approach to employment, security, social security and social dialogue. The clash of consensus on what should happen has led society to realize not only the formation of common standards in the field of labor relations, but also the need to apply them. Second, changes in economic paradigm. The processes required the creation of a new work ethic that met the new conditions. However, labor ethics is ideologically concentrated - these are only part of the values that determine a person's attitude to work. In addition, there are labor values that may differ from the labor ideologies of the individual and society as a whole.

#### 4. CURRENT SITUATION OF DECENT WORK IN AZERBAIJAN

Within the framework of cooperation between the Government of Azerbaijan and the International Labor Organization, the "Decent Work Country Program for 2016-2020" was adopted. The priorities of this adopted program are the promotion of international labor norms and basic principles and rights in the field of labor, the development of social dialogue, increasing employment through the implementation of active labor market programs in the labor market. At the same time, the expansion of entrepreneurial opportunities, strengthening labor protection and expanding the social protection system are among the priorities of the Program. The Country Program envisages the formation and implementation of a national employment strategy that promotes decent jobs and inclusive growth, the development and implementation of active youth market and self-employment labor market programs with social partners. Improving the social environment in labor collectives is one of the important issues for employees to engage in decent work. For this purpose, it is very important to comprehensively and systematically study the attitude to labor, social problems of labor organization, social organization of collectives, factors influencing social and labor behavior. Improving the social environment in the collectives directly depends on the strengthening of the role of the human factor, a comprehensive analysis of the negative factors that may affect it and the timely elimination of their impact. Research shows that the role of the human factor in specific labor collectives and in society as a whole, their creativity, initiative, activity is often hindered, limited or prevented for various reasons. There should be various reasons for this. Prominent Azerbaijani economist, Professor T.A. Guliyev wrote: "On the one hand, these are the negative aspects of management style, on the other hand, the weakness of social thinking, on the third hand, the shortcomings in the field of stimulation and motivation of labor." Tax incentives for enterprises also have a positive effect on the formation of a healthy social environment in labor collectives. The social effects of tax incentives include "indicators that confirm the social outcome of the tax incentive or the creation of favorable conditions for the development of social infrastructure and the improvement of social protection of the population" (7). Living standards and quality of life are determined by both income (wages, allowance) - a person's wealth, and the availability of social benefits (education, health, social services) for them, as well as the social status of society within the stratification. The concepts of minimum wage, subsistence minimum and minimum consumer basket have been adopted and are in force in Azerbaijan. These concepts do not provide a person's standard of living, but their minimum needs. In general, between 2003 and 2018, salaries in Azerbaijan increased 7 times, pensions 9 times, unemployment fell to 5% and poverty to 5.1%, 2 million new jobs were created against the 1.5 million population growth. The analysis of statistical data indicates that while the average monthly salary of employees in the country's economy in 2018 increased by 4.4 times compared to 2005, the consumer price index increased by 2.45 times, and thus the growth rate of average monthly wages exceeded by about 1.8 times (Table 1).

Years	Calculated average monthly wages		Consumer prices Index	
	Compared to 2005, in percent	Compared to the previous year, in percent	Compared to 2005, in percent	Compared to the previous year, in percent
2005	100,0	124,3	100,0	109,6
2010	268,2	111,2	163,8	105,7
2015	377,8	105,0	192,9	104,0
2016	404,4	107,0	216,9	112,4
2017	427,6	105,7	245,0	112,9
2018	440,6	103,0	250,5	102,3

*Table 1: Average monthly salaries of employees in the Azerbaijani economy and changes in the consumer price index*

*(Source: Statistical Indicators of Azerbaijan. 2019. Baku, 2019, p.130)*

At the same time in the analyzed period, although the average monthly salary of employees of state enterprises increased faster than the average monthly salary of employees of non-state enterprises, the salary of employees of non-state enterprises (690.7 manat) exceeded the salary of employees of state enterprises (435.2 manat) 1.6 times more (Table 2).

Years	Total	Including	
		state	non-state
2005	123,6	89,1	191,9
2010	331,5	276,4	423,9
2015	466,9	360,4	617,4
2016	499,8	375,2	679,0
2017	528,5	395,6	711,1
2018	544,6	435,2	690,7
2018/2005	440,6	488,4	359,9

*Table 2: Average monthly salary of employees, in manats  
(Source: Statistical Indicators of Azerbaijan. 2019. Baku, 2019, pp.131-136)*

The analysis shows that as a result of curbing inflation, its level was reduced by 10% compared to the same period in 2017, social expenditures from the state budget increased by 7.6% in 2018 compared to 2017 and reached 31.7%. By the beginning of 2019, 107 projects have been implemented in our country under the investment promotion programs implemented by the state, and in 2019, 332 projects are planned to be implemented. As a result of all these projects, it is planned to create 12,000 new jobs in our country. The growing role of the self-employment program successfully implemented in our country in ensuring inclusive economic growth is also noteworthy. The program will cover 7,000 people in 2019 and improve their employment. The development of small and medium enterprises is extremely important in ensuring inclusive economic growth in the country. To this end, the establishment of the Easy Family Business Support Center (ABAD) contributes to further increasing employment in the country. According to the Presidential Decree dated February 8, 2019 "On increasing the minimum wage", the minimum wage was increased by 38.5% from 130 to 180 manat, according to the order dated June 18, 2019, it was increased by 38.9% from September 1 to 180 manat from 250 manat. Thus, the level of the minimum wage was fully adjusted to the level of the subsistence minimum. It should be noted that in 2019, the living wage was 180 manat for the country, 191 manat for the working population, 149 manat for pensioners and 160 manat for children. An analysis of the UN Development Program's human development reports for 2000-2018 shows that Azerbaijan rose from 90th place in 2000 to 67th place in 2010. In the years after 2010, our country fell behind in terms of the human development index, falling to 80th place in 2016 and 87th place among 189 countries in 2018 (Table 3).

Year	Ranking	Human Development Index	Life expectancy at birth	Expected years of schooling	Mean years of schooling	Gross national income per capita
		value	years	years	years	PPP \$
2000	90	0.641	66.8	10.4	10.6	4,426
2010	67	0.732	70.9	11.2	10.5	15,425
2013	76	0.741	71.8	11.4	10.5	15,846
2015	78	0.749	72.3	11.9	10.5	16,259
2016	80	0.749	72.5	12.1	10.5	15,146
2017	80	0.752	72.7	12.2	10.5	15,312
2018	87	0.754	72.9	12.4	10.5	15,240

*Table 3: Human Development Index of Azerbaijan for 2000-2018  
(Source: Official website of the United Nations Development Program,  
<http://www.hdr.undp.org/en/data>)*



Access to health care for all groups in the country is important in ensuring inclusive development. Taking this into account, the Presidential Decree dated December 20, 2018 "On a number of measures to ensure the introduction of compulsory health insurance in the Republic of Azerbaijan" envisages the completion and application of all activities related to the introduction of compulsory health insurance in 2020. We would like to emphasize that all the programs, projects, goals and intended measures adopted by the Azerbaijani government in recent years in connection with inclusive economic growth have been implemented in a timely and quality manner. As a result, in the report of the DAVOS Economic Forum for 2017-2018, Azerbaijan ranked 3rd among 80 developing countries in the CIS, according to the Inclusive Development Index, which is calculated on the basis of 12 indicators in addition to the level of GDP and was awarded the 1st place in the CIS countries. As noted in the Strategic Roadmap, by 2025, it is planned to create more than 450,000 new job in the country, including 150,000 additional jobs in the trade and services sector, products, manufacturing and tourism sectors. As a result, it will significantly reduce the dependence of the state budget on oil fund transfers.

## 5. CONCLUSION

Thus, decent work is an urgent need and necessity that determines the future of society as a whole. Each country must set its own goals to ensure decent work in accordance with its developmental shortcomings, conditions, opportunities, levels, historical and cultural traditions. The concept of decent work must ensure that social interests are taken into account in the global economy, both in developed and developing countries. Ensuring employment, compliance with labor standards, social dialogue, gender equality within the framework of the concept of decent work is an important step towards a balanced consideration of economic and social interests and goals. However, it is still important to do a lot to develop human capital at a high level and make it the main tool for sustainable economic growth in the country. It is necessary to increase the level of education in the country, create conditions for young people to study at high-level foreign universities, gain experience, engage in scientific activities, and then create opportunities for these young people to return to Azerbaijan and contribute to the country's development. More funds should be allocated for various scientific projects and inventions and the country must gradually transform from the worlds' oil and sports center into a science and education center. Close coordination of the activities of social partners in ensuring socio-economic stability, addressing a number of important socio-economic issues, taking into account the high level of the position of employees and employers are important for ensuring social balance and sustainability. One of the main directions of building a democratic state is to develop the system of social partnership, involve social partners in the development and implementation of socio-economic policy, consult with social partners to address these issues, formulate policies in the field of social and labor relations with the participation of social partners.

## LITERATURE:

1. Strategic Roadmap for the National Economic Prospects of the Republic of Azerbaijan. Decree of the President of the Republic of Azerbaijan dated December 6, 2016
2. Guliyev, T. (2013). Human resource management. Baku.
3. Azerbaijan 2020: Vision for the Future Development Concept. Decree of the President of the Republic of Azerbaijan. Baku, December 29, 2012
4. Qafarov, Sh. (2014) The dictatorship of money. Baku.
5. Azerbaijan in the UN family. (2005) Baku Publishing House
6. Guliyev, T. (1998) Sociology of labor. Baku.
7. Mayburov, I., Ivanov, Yu. (2014) Tax incentives. Theory and practice of application. Moscow : UNITY DANA

8. Statistical Indicators of Azerbaijan, ConEC. (2019) Baku
9. Official website of the United Nations Development Program.  
<http://www.hdr.undp.org/en/data>

## EXPANSION OF E-SERVICES IN AZERBAIJAN: DIRECTIONS AND PERSPECTIVES

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### ABSTRACT

*The article examines the mutual relationships among e-government, standard-of-living, environment and state services. The paper added some recommendations for the improvement of state e-service quality standards. The article reviewed the available data to develop the concept of “digital economy”, forms for assessing the level of development in the country of the digital economy using international ICT ratings, analyzed their shortcomings.*

**Keywords:** *digital revolution, e-government, e-services, blockchain, robotics, development index, ASAN service, digital economy, Information society, information and communication technology, rating score*

### 1. INTRODUCTION

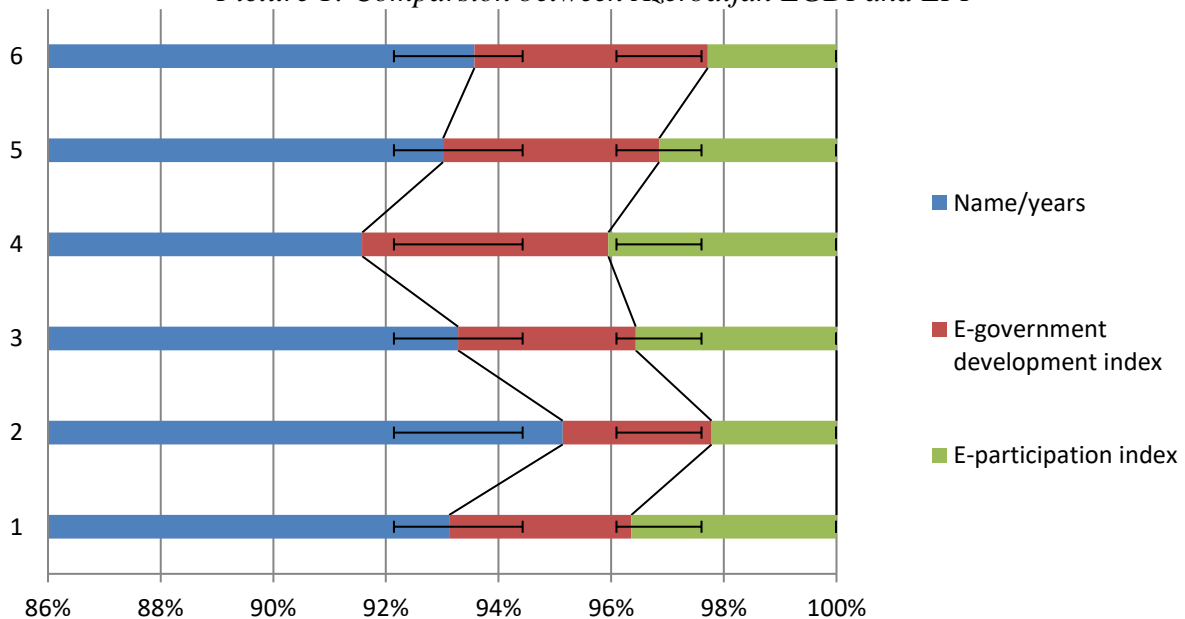
Electronic government is only for electronic citizen. In other words, only electronic citizen can benefit by services presented by electronic government. Electronic citizen – is a citizen who can use electronic services presented by government and on-line communication. Computer skill is an important condition for both sides – official and citizen – for adequate acceptance of electronic government services by society. E-citizen is the first sphere which creates conditions to citizens for using state information services. Electronic citizen is not only an electronic service to citizens. In order to benefit by these services a citizen must be turned into electronic citizen, that is in the environment of formation of information society computer literacy of each citizen must be increased. Digital technologies, biotechnologies, development of communication network, widening of trade – all these present great opportunities for developing of personality. In order to ensure the use of information resources by citizens governments of many countries and international organizations are widening technical infrastructure automating state services and institutions, applying electronic document turnover and are creating mutual relation system. But citizens don't understand how to accept information and communication technologies. If we look through official sites of state organs we shall see that appropriate structure of state organs demands from user high ability and special knowledge. For the first time in the world Singapore realized the tendency “Government portal”. Portal gives information not only about state organs, at the same time it gives an opportunity to eliminate the necessity for citizens to go to state organs. Digital revolution embraces the impact of information and communication technologies on all spheres of society. Society witnesses the simultaneous development of big database, artificial intelligence, data science, blockchain, robotics and other rapidly evolving technologies. These influence on all spheres – from food chain to water supply and sewerage, energy supply, education, health and social care – and strengthen them and determine the directions of economic development. Obviously, integration of automatisations and the involvement of ICT into economic processes has eased e-services and contributed to cut down operation and production costs and burgeoned it shortly. Nowadays, “e-services” are fed by ICT applications a lot. Sustainable development concept of the Republic of Azerbaijan promotes to diffuse the employment of the modern

technologies and international experience. Evidently, “e-service” and “e-government” has been shaped and developed in our country. Grounded on foreign experiments we can say that acceptance of program-electronic citizen in Azerbaijan and creation of e-citizen portal may ensure mutual relation between state organs and citizens and it will be possible to fulfill more quickly the electronic government project. At this time all levels of the people-invalids, the unemployed, immigrants, forced migrants, pensioners, adults, schoolchildren, workers of state organs will derive benefit from possibilities of ICT. We must note that, for normal work of electronic government citizens must have enough knowledge in the sphere of ICT. In the result of applying modern information technologies there will be opportunity for developing of citizen intellect. Each citizen will have a chance for access to global information resources and to use e-mail. A citizen will be able to communicate directly with any state institution or an official. Azerbaijan must have so innovation condition that new knowledge influx production to be founded, development of national knowledge system to be carried out in effective national education. For this, it is necessary to begin from settling the problem of retaining staff. As well as it is required to enlighten the quality of the management apparatus in all levels of the governmental bodies. Recent years, several decrees, such as “State Program on development of communications and information technologies in the Republic of Azerbaijan in 2010-2012 (Electron Azerbaijan)”, “About Some measures for provision of electronic services in public bodies”, “About e-government development and measures related to transition to e-government” and “On Additional Measures to Improve Management in the Field of Employment, Labor, Social Protection and Guarantee”, have been adopted by the President of the Republic of Azerbaijan. The progress of e-government is regularly monitored by EGDI (e-government development index) issued by Social and Economic Development department by UNO. Azerbaijan is in the 70th place among 193 countries in 2018.

Table 1: Comparison between Azerbaijan EGDI and EPI

Name/years	2018	2016	2014	2012	2010	2008
E-government development index	70	56	68	96	83	89
E-participation index	79	47	77	89	68	49

Picture 1: Comparison between Azerbaijan EGDI and EPI



Source: compiled by the authors

The shaping of “e-government” attains great importance in the country and endeavors to minimise the distance in communication between a citizen and a state servant through IT solutions and meantime it serves to eliminate bureaucratic barriers in relationships.

## **2. ELECTRON SERVICES IN AZERBAIJAN**

“E-gov” portal (<https://www.e-gov.az/>) is already active. The access for portal is either via electron or asan signature and all kind of electron services are supported. Asan Imza makes possible using all existing e-services. It should be mentioned that at present more than 650 e-services, rendered to citizens by government and private sector enterprises, use Asan Imza. This technology allows using digital services in the spheres of customs, taxes, finance, education and etc. These services include submission of e-tax declarations, customs declaration of goods and transport means, registration of notifications of labor contracts, registration of admission to high schools, internet and mobile banking and many others.

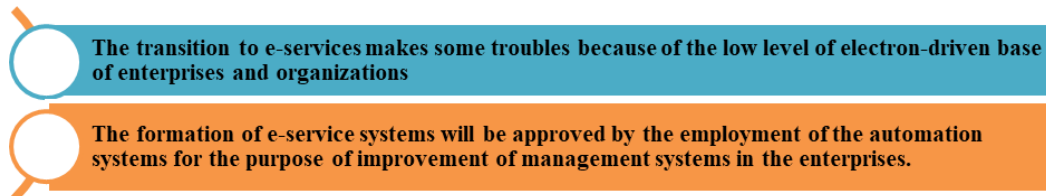
## **3. THE IMPORTANCE OF E-GOVERNMENT**

- Expanding the use of modern technologies in public administration, raising the level of activities carried out and facilitation of access to them;
- Increasing the efficiency of government agencies and local self-government bodies and improving the quality of electronic services ;
- Optimization of the e-services provided to users by government agencies and simplification of their implementation procedures;
- Ensuring free access, the authenticity, completeness and reliability of the information presented to users via e-services;
- Maximum reduction of time spent to find out and obtain information according to user’s request;
- Availability of the electronic services offered throughout the country regardless of the user’s geographical location.

Taking advantage of the opportunities of the virtual space, modern technologies, high level of informatization in government agencies, the e-government provides services offered to citizens in a qualitative and new form. Currently, all e-services of public entities joined to “E-government” are presented to the people based on “single window” principles. Besides, a new state agency named State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan and its affiliated entity “ASAN Service” was established by the decree N685 dated July 13, 2012 in order to organise services in a single place applying new and innovative methods. “ASAN service” centres ensure the mutual integration of public database and accelerate the organisation process of e-service. “ASAN service” is the best example for the improvement of management services and some foreign countries has expressed their interest in it. Asan Imza makes possible using all existing e-services. It should be mentioned that at present more than 650 e-services, rendered to citizens by government and private sector enterprises, use Asan Imza. This technology allows using digital services in the spheres of customs, taxes, finance, education and etc. These services include submission of e-tax declarations, customs declaration of goods and transport means, registration of notifications of labor contracts, registration of admission to high schools, internet and mobile banking and many others. Asan Imza also has been integrated with call centers of public and private organizations. Since 2018, “E-government Development Centre” attached to State Agency for Public Service and Social Innovations under the President of the Republic of Azerbaijan collaborates all government agencies in order to provide e-services both for locals and foreign people: e-visa, state service, digital payment and etc. All these services are done through “e-gov” portal.

It facilitates public awareness and storage of social and economic services and their transfer as well as using other e-services in real time. Moreover, the Ministry of Transport, Communications and High Technologies, the Ministry of Labor and Social Protection of People, The Ministry of Health, The Ministry of Justice, the Ministry of Internal Affairs, State Customs Committee and other authoritative entities provide people with more convenient and easier access to electronic services through their portals. Azerbaijan e-market will have developed based on the following tendencies in the upcoming years:

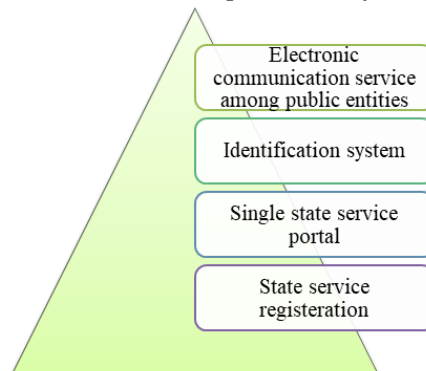
*Picture 2: Tendencies*



*Source: compiled by the authors*

The development tendency of e-services mostly refers to trading, bank, media and distance education. Some of them, for example information services will be encrypted and presented to internet users. The main problem is that people are not ready to use e-services. Azerbaijan has implemented the main components of e-services:

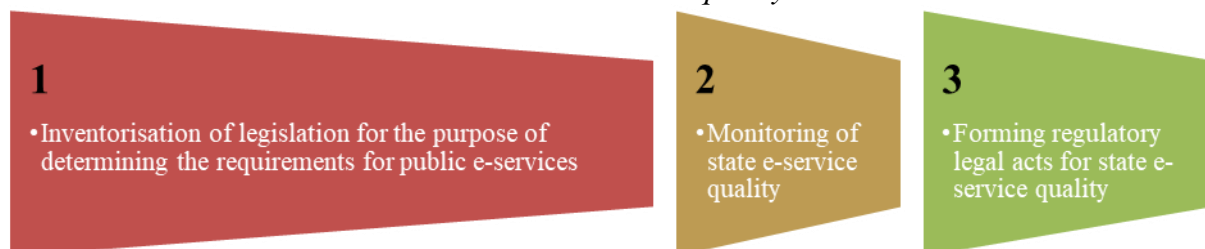
*Picture 3: Componentets of e-services*



*Source: compiled by the authors*

Noteworthy, Azerbaijan has established e-service platform and all public agencies are gradually adapting their services to the platform. Ostensibly, for the qualitative single state e-service, e-government standards must be set. The public e-service quality assessment standard embraces the following phases:

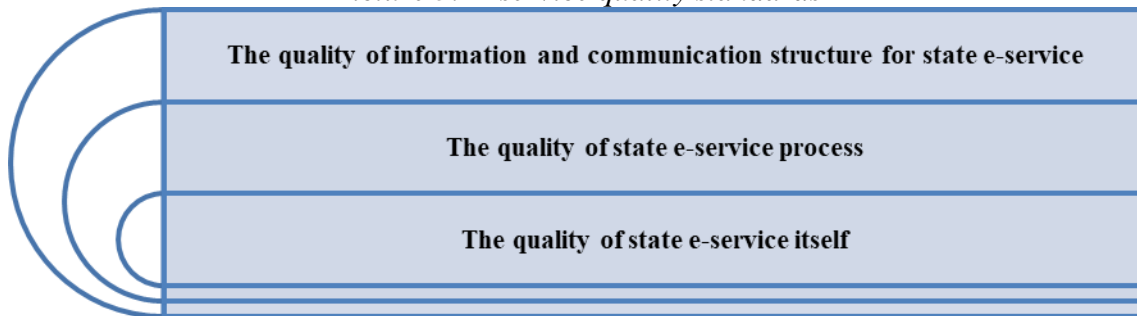
*Picture 4: E-service quality*



*Source: compiled by the authors*

The formation of state e-service quality standards are divided into 3 aspects:

*Picture 5: E-service quality standards*



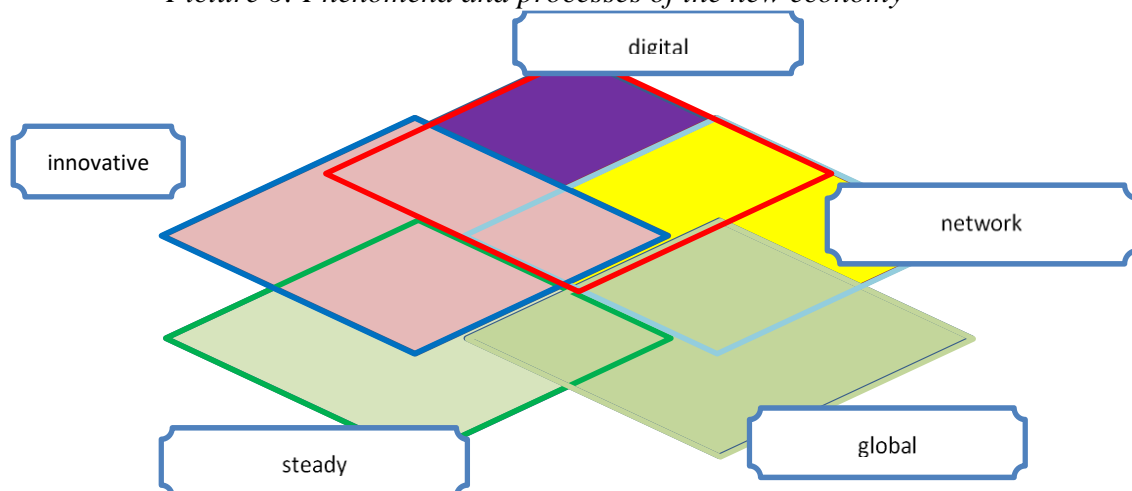
*Source: compiled by the authors*

When establishing a single standard for the quality of public e-services, it is highly likely to consider the relevant specifics of the service process of public entities. The basis of the process and standardization of e-services lies within the demand for support in order to ensure the quality of information and technical maintenance. On the other hand, state e-service standard must include the main demands for the quality of those services. Overall, the structure of the state e-service quality standards was provided in Table 1. The development of the state e-service quality standards must be oriented to the improvement of the processes of e-services and the optimization of budget expenditures of public entities. Undeniably, standard promotes the improvement of quality. Thus, the optimisation of expenditures of public entities must be focused on the solution of important problems of society and the provision of maximum quality of these standards. The new economy means several new economic phenomena and processes. As a rule, each person sticks out the process that is closer to him and takes him as the basis of the new economy.

#### **4. NEW ECONOMY OF THE XXI CENTURY OR DIGITALIZATION OF THE ECONOMY?**

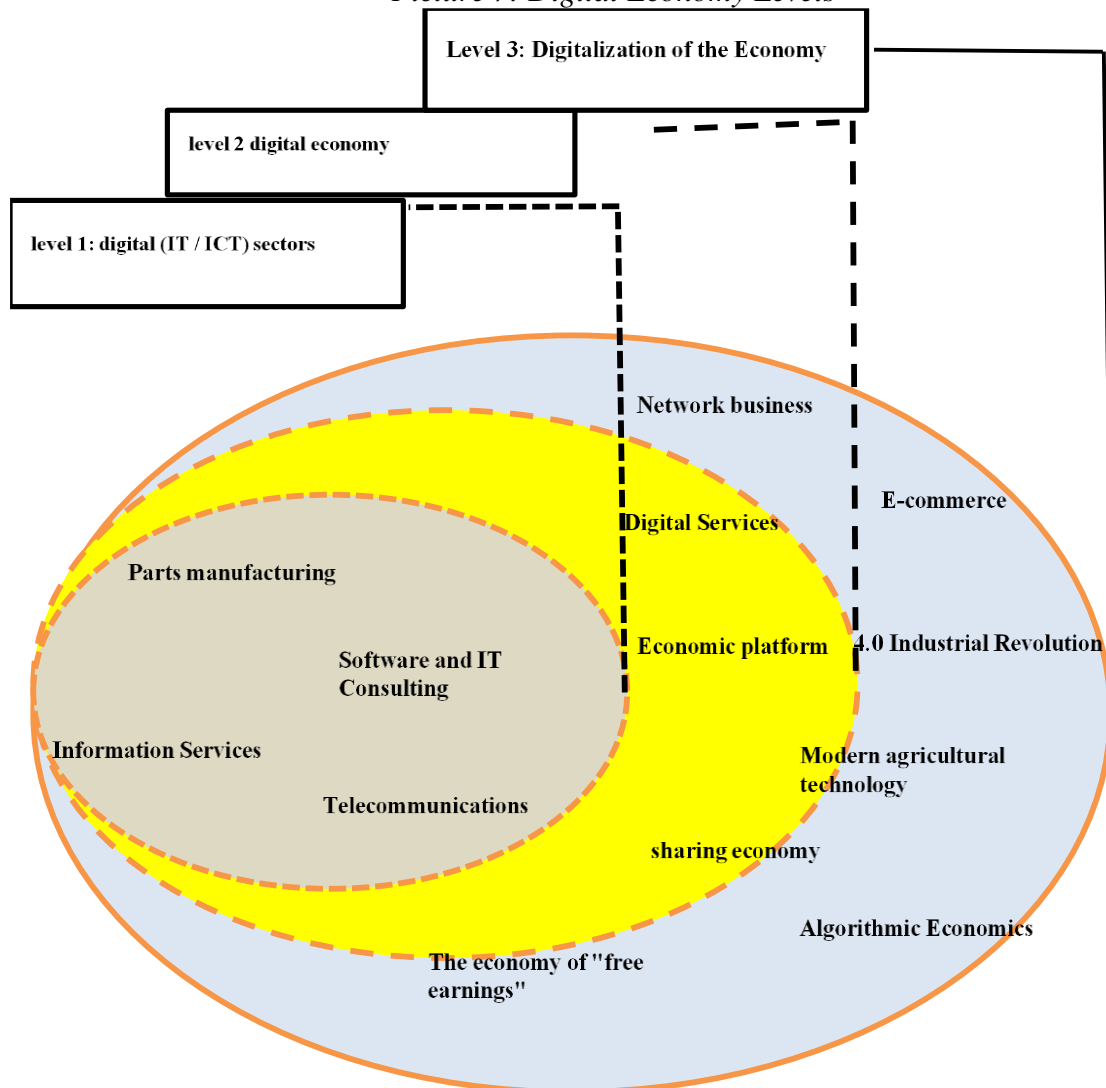
We will adhere to a neutral point of view and present the new economy as equal phenomena and processes characteristic of the modern economy, or, as the Chinese say, a new reality. Thus, under the new economy XXI the following phenomena and processes are taken (Pic.1):

*Picture 6: Phenomena and processes of the new economy*



The digital economy, i.e., the new economic opportunities of the global network infrastructure provided by the Internet, mobile communications and blockchain decentralization. Digital economy: a collection of all examples of the extensive use of ICT and the creation of these technologies. This definition includes the definition of the OECD digital industry, as well as the elements presented in Pic.7: digital services, retail and information activities that are not part of the OECD definition and the accepted codification. In addition, the new definition includes some promising elements of the digital economy: platform economy, gig-economy, sharing-economy - those elements that are completely new types of economic activity that did not exist before the advent of digital technology. For example, we will include here platform companies such as Google and Facebook, which obviously belong to the digital segment; less obvious examples - platform companies selling real-world products like Amazon, eBay and Alibaba also fit our definition; it will also include companies whose activities are at the junction of the traditional and digital economies, that is, companies like Uber and Airbnb. We take these companies into account as part of the digital economy, as they do not engage in real estate or taxi services; these firms are digital platforms based on innovative digital technologies and digital business models.

Picture 7: Digital Economy Levels



Source: compiled by the authors



Thus, in its final form, our definition of the digital economy looks like this: a part of the total production volume, which is entirely or mainly produced on the basis of digital technologies by firms whose business model is based on digital products or services. This definition is rather vague, but it is flexible enough to take into account the development of digital technologies and digital business in the future.

#### **LITERATURE:**

1. Development Concept "Azerbaijan 2020: The View to the Future", 29 December 2012,
2. National Strategy for the Development of Information Society in the Republic of Azerbaijan for 2014-2020. Baku, 02.04.2014.
3. Huseynova, A, Mazanova, O. Model evaluation of an Innovative Capital //2016 IEEE 10th international conference on application of information and communication technologies (AICT), Стр.:607-609
4. Huseynova Arzu, Salifova Tarana, Mazanova Ophelya, Estimation of innovation activity of the regions of the Azerbaijan republic. 37th International Scientific Conference on Economic and Social Development –"Socio Economic Problems of Sustainable Development" - Baku, 14-15 February 2019,41-50; Web of Science.
5. Huseynova Arzu "Analysis of innovation potential in Azerbaijan", "Science and education" Baku, 2013, 224-240.
6. Huseynova Arzu, Mazanova Ofelya Scientific News of Azerbaijan State Economic University (ISSN 2306-8426), JEL Classification Codes O32; Q55, "Theoretical and Methodological Aspects of Innovative Technologies in the Development of Knowledge Economy", Year 1, Volume 1, January-March 2013, 107-112.
7. Huseynova Arzu, Mazanova, Ophelya, Model evaluation of an Innovative Capital, Conference: 10th IEEE International Conference on Application of Information and Communication Technologies (AICT) Place: Baku, AZERBAIJAN Publ.: OCT 12-14, 2016, 607-609 Web of Science.
8. The Digital Economy and Society Index (DESI) [Electronic resource] // 2018 European Commission. - Mode of Access: [https:// http://ec.europa.eu/digital-single-market/en/desi](https://ec.europa.eu/digital-single-market/en/desi).
9. IMD World Digital Competitiveness Ranking 2017. - IMD World Competitiveness Center, 2017. - 180 p.

## THE MAIN DIRECTIONS OF THE DEVELOPMENT OF TOURISM IN THE ECONOMY OF AZERBAIJAN

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### ABSTRACT

*Ensuring sustainable economic development with the growth of non-oil sectors is an important task facing our country in modern times. Numerous studies show that tourism is one of the leading part of non-oil sectors in terms of its prospects. The study evaluates a number of factors and conditions ensuring the sustainable development of the tourism sector, create conditions for the country's progress and competitiveness in the international tourism competitiveness rating. The article reveals that Azerbaijan has a great potential in the sphere of tourism. Tourism products and services having the great potential for earning a high income always require attention and adaptation to consumer desires in the world practice. Support of private initiatives for the development of tourism products in the Republic of Azerbaijan, establishment of favorable coordination at the local and regional levels, focusing on consumer demand, strengthening the regional and thematic goals to the product development, as well as coordinating interesting and attractive products with each other are important points. This includes travel programs that Azerbaijan can offer for adventurers, as well as wine tourism, German or Jewish heritage. These opportunities should be introduced to foreign visitors. The availability of both traditional and modern treatment facilities in Azerbaijan, the country's rich resources such as Naftalan oil and the Salt Mountain in the Nakhchivan Autonomous Republic, and it has been assessed as an opportunity for the development of health tourism, and the private sector has been identified as a target to support the tourism sector through public-private partnerships. In other words, we have an inseparability of the production and consumption of tourist services. This situation allows us to conclude that tourism is a single dynamically functioning system of services that includes different economic entities. The study touches on the SWOT analysis of the tourism sector, that the territory of Azerbaijan has ancient history, rich cultural monuments, favorable geographical location, attractive nature, folklore and is located at the crossroads of different religions. Conference halls, hotels and other relevant service infrastructures have been pointed out as the strong part and it was concluded that the implementation of the measures envisaged in the Strategic Roadmap for the development of tourism is the beginning of new successes.*

**Keywords:** *Activity mechanism of tourism market, Development of international tourism, Internal tourism, Tourism infrastructure, Tourism service*

### 1. INTRODUCTION

Tourism shall not be engaged in paid activities financed from a local source in a place where a citizen, foreigner or stateless person of any state is temporarily outside his / her permanent residence, and at least once in the place of temporary accommodation, recreation, rehabilitation, acquaintance, information, use of historical and cultural resources, work, sports, religion, as well as public morality and public order is a placement they have carried out for at least 24 hours for other purposes that meet their requirements. Development of the tourism sector in Azerbaijan is one of the important priorities.

In most regions of the country, especially in the Northern, Western and Southern regions, tourism infrastructure is being created intensively, large tourist centers are being formed, and tourism facilities are being put into operation. All this creates favorable conditions for the development of most types of tourism in our country (acquaintance, therapeutic, beach, sports, recreation, etc.) Azerbaijan has a very unique complex of natural, cultural, national and ethnographic objects. Favorable geographical position, 9 climatic zones, diversity and richness of flora and fauna, predominance of abundant solar energy, location on the coast, presence of snow-capped mountains, cultural and historical heritage, delicious cuisine, good infrastructure, high hospitality traditions open up great prospects for the development of tourism in our country.

## 2. DEVELOPMENT DIRECTIONS OF INTERNATIONAL TOURISM

Tourism is not allowed to engage in paid activities financed from a local source in a place where a citizen, foreigner or stateless person of any state is temporarily away from the place of permanent residence, and less than once in a temporary accommodation, recreation, health-rehabilitation (sanatorium-resort), acquaintance, information (learning), use of historical and cultural resources, occupation, sports, religion, as well as other purposes that meet the requirements of public morality and public order for at least 24 hours for the purpose of enjoyment. Tourism is becoming one of the real factors of human development. Organized excursions are part of the life of the majority of the population. International tourism has become widespread in the last 30 years.

1. France	82,6
2. Spain	75,6
3. United States	75,6
4. China	59,3
5. Italy	52,4
6. United Kingdom	35,8
7. Germany	35,6
8. Mexico	35,6
9. Thailand	32,6
10. Turkey	30

*Table 1: List of countries receiving the most tourists in 2018 (million people)  
(Source: Milli.Az portal (2019))*

The number of overnight travelers in the world increased by 79% in 2018 compared to 2009. The largest influx of tourists is in the Asia-Pacific region. The growth in this region is equal to 9.4% in 10 years. The flow of tourists to Europe is 5.5%, which makes the continent the second most visited. In general, the rating was compiled due to the increase in popularity among tourists compared to the previous year. The top five in this ranking are: Jerusalem, Chennai, Agra, Delhi, Punta Cana. The second and fourth cities are located in India, the fifth in the Dominican Republic. The development of international tourism is mainly connected with the following factors:

- The level of economic development and social progress has not only increased the number of business trips, but also increased the number of trips for the purpose of learning
- Improvements in all types of transport have made travel cheaper and more accessible to many segments of the population
- Intensification of labor and taking long-term vacation by workers means more meaningful rest

- The development of interstate relations and cultural exchanges has led to the expansion of interpersonal ties both within and between regions.
- The development of the service sector has stimulated technological progress in the field of telecommunications, increased interest in travel to different countries and regions
- In many countries, the weakening of restrictions on the export of currency and the simplification of border clearance also stimulate the development of tourism.

The development of international tourism increases foreign exchange inflows into the host country; improves the structure of balance of payments indicators; enterprises serving the tourism sector; as well as has a strong impact on the development of individual sectors.

The characteristic feature of tourism services is that some of its types are imperceptible and intangible. The conversations of tour guides can have a profound emotional impact on tourists, and it is impossible to explain, anticipate, or feel it materially. Other services of tourism have a material character: tourists are brought, treated, rested. However, in both cases, the specificity of tourist services is that they do not exist before they are presented. In other words, we have an inseparability of the production and consumption of tourist services. This situation allows to conclude that tourism is a single dynamically functioning system of services that includes different economic entities. The modern tourism system is owned by the following economic entities - companies that produce tourist services (treatment facilities, sanatoriums, rest homes, business consulting, etc.):

- tour operator, ie companies engaged in the development and sale of tourist products, mainly on a wholesale basis
- Travel agents formed by tour operators acting as sellers of tourist products
- specialized companies providing accommodation services (boarding houses, rest homes, motels, hotels, etc.)
- specialized food establishments (restaurants, bars, cafes, canteens, etc.)
- specialized transport enterprises (aviation enterprises, automobile enterprises, railway departments, sea and river transport enterprises, etc.)
- Trade enterprises and trade firms specializing in products for tourists
- leisure facilities in tourism (cinema and concert halls, slot machine halls, etc.)
- advertising - information tourist enterprises (advertising agencies, advertising bureaus, tourist information centers, etc.)
- State enterprises (unitary or joint-stock enterprises; national, regional, municipal enterprises engaged in tourism on a commercial or social basis)

In many countries around the world, tourism plays an important role in people's health, in the effective utilization of leisure time, in the economy, promotes the social development of the regions and creates favorable conditions for attracting additional funds to the budget. Today, tourism accounts for 11 percent of the world's gross national product, global investment, working places and global consumer spending.

### **2.1. Development Prospects of tourism in Azerbaijan**

Ensuring sustainable economic development with the growth of non-oil sectors is an important task facing our country in modern times. Numerous studies show that tourism occupies one of the leading positions in the non-oil sectors in terms of its prospects. Azerbaijan has ancient history, rich flora and fauna, healing water sources, mysterious rivers and lakes, forest massifs, location on the shores of the Caspian Sea, richness of historical monuments, the presence of 9 out of 11 climate zones of the world and the hospitality of the people creates ample opportunities for the development of tourism.

There are 12 natural and historical reserves, 17 temporary reserves and hunting farms in our country. More than 6,000 architectural and cultural monuments are preserved in different regions. “Icheri Sheher”, “Maiden Tower”, “Sheki Khan’s Palace”, “Momina Khatun Tomb”, “Gobustan” and other cultural monuments registered by UNESCO are already famous all over the world. Azerbaijan, with its rich cultural and historical heritage and favorable natural conditions, has great prospects for development in the field of tourism. For the development of most types of tourism in our country (rural, treatment health, ecological, cultural, social, commercial, sports, religious, of special interest, etc.) widerange possibilities are available. As a result of the implementation of the State Program on Tourism Development in the Republic of Azerbaijan in 2002-2005, favorable conditions were created for the development of tourism, the basis for integration into the international tourism market was established, and the competitiveness of the national tourism complex have been increased. Since 2002, an international tourism exhibition has been organized in Azerbaijan every year. Over the years, about 2,500 companies from more than 40 countries have participated in the Azerbaijan International Tourism and Travel Exhibitions, and more than 200 companies from 40 countries have participated in the 15th anniversary exhibition in 2016. In 2017, the exhibition brought together 272 companies from 22 countries to re-introduce more than 90 different foreign tourism destinations to the attention of visitors, as well as leisure opportunities within the country. 17 national and regional stands were represented at the exhibition. Represented at the 18th Azerbaijan International Tourism and Travel Fair AITF 2019, which took place at the Baku Expo Center on April 4-6, the Reserve Department provided detailed information about the Dastan brand of the Icheri Sheher Traditional Arts Center, the Baku Photography House and, of course, tourism services. One of the main innovations, of course, was a new application called "Icheri Sheher". Undoubtedly, one of the main innovations was a new application program called "Icherisheher". It should be noted that Icheri Sheher “State Historical and Architectural Reserve Administration” was awarded by the organizing team of the exhibition in the nomination "Best Corporate Style Presentation". In order to increase the importance of tourism in the country, to promote the potential of tourism, to promote local traditions, national cuisine, cultural and historical heritage, thematic publications (books, booklets, CDs and DVDs, etc.) are developed and distributed on various television channels around the world. The commercial is shown, advertisements and announcements are given about the implemented projects, internet opportunities and other electronic media are widely used in this direction. In addition, the materials about the richness of Azerbaijan's tourism potential and the wide range of opportunities in this field have been published in a number of major cities around the world - Istanbul, Berlin, Moscow, London, Al-Kuwait, Tel Aviv, Kiev, Tbilisi, Tashkent, Minsk and others. has been demonstrated at exhibitions. In order to increase the professional training of employees in the field of tourism, the Institute of Tourism was established in 2006, opened permanent courses in various professions, and various training programs are being implemented with the support of the World Tourism Organization and the Turkish Ministry of Culture and Tourism. At the same time, the development of tourism and the transformation of the tourism sector into one of the leading sectors of the country's economy remains the most important task in Azerbaijan today. The socio-economic progress achieved in Azerbaijan in recent years creates conditions for the solution of this task at an adequate level to new opportunities.

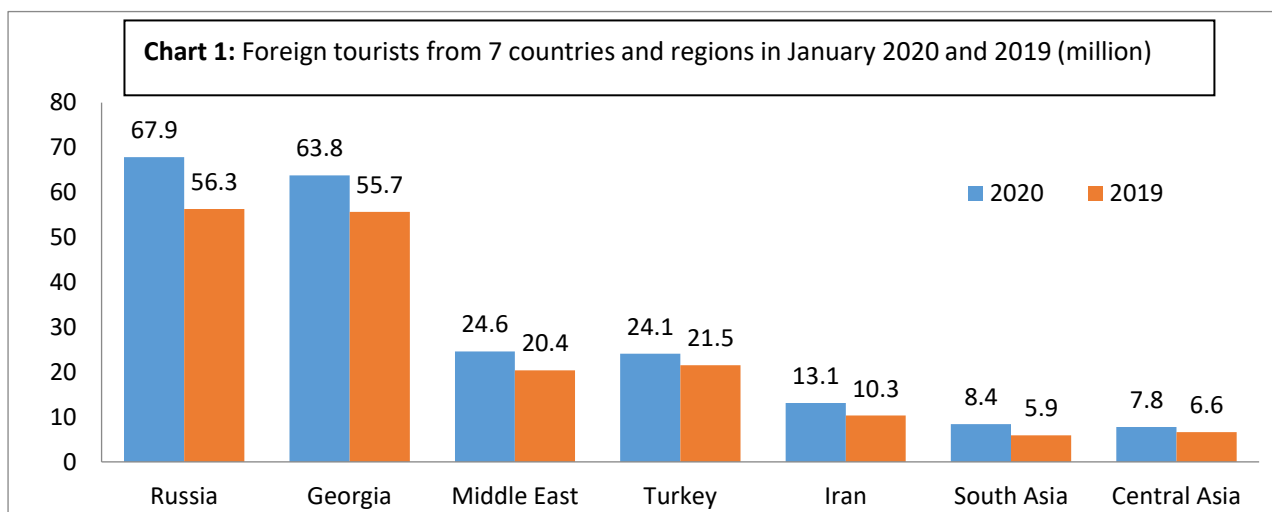
*Table following on the next page*

	2013	2014	2015	2016	2017	2018
Number of employees working in tourism-specific areas, (people)	40892	41866	49499	43477	46837	53222
The amount of value added in the typical areas for tourism, (million manats)	2080,2	2404,2	2437,3	2746,1	3151	3464,3
The share of value added in the country's gross domestic product,%, created in the areas characteristic of tourism.	3,6	4,1	4,5	4,3	4,5	4,3
Volume of investments in tourism-specific areas, million manat.	1371,0	2204,0	1063,9	363,0	267,3	229,7

*Table 2: Key indicators for tourism-specific areas.*

*(Source: State Statistical Committee of the Republic of Azerbaijan (2018))*

In order to ensure the sustainable development of the tourism sector in the Republic of Azerbaijan and to make tourism one of the leading sectors of the country's economy, President of the Republic of Azerbaijan Ilham Aliyev signed a decree on April 6, 2010. signed an order on the approval of the "State Program for the Development of Tourism in 2010-2014". The main goal of the State Program was to form a modern tourism industry in Azerbaijan that meets high economic, social and environmental requirements and to become one of the main support of the country's economic development. Because ensuring sustainable economic development with the rise of non-oil sectors is an important task ahead in our country. Numerous studies show that tourism is one of the leading non-oil sectors in terms of its prospects. Measures envisaged in the State Program were financed from the state budget of the Republic of Azerbaijan, including the funds provided for in the state budget for the Ministry of Culture and Tourism of the Republic of Azerbaijan, as well as other sources funded by law. The measures envisaged in the State Program were financed from the state budget of the Republic of Azerbaijan, as well as from the state budget for the Ministry of Culture and Tourism of the Republic of Azerbaijan, as well as other sources provided by law. As a result of the complex work, the number of tourists visiting the country is growing every year. The network of tourism companies operating in the country is expanding. Number of foreigners visiting Azerbaijan increased by 35 thousands or by 18.1% in January 2020 in comparison with January 2019 and reached 226 thousands. Chart 1 shows the number of foreign tourists coming from 7 countries/regions.



*Chart 1: Foreign tourists from 7 countries and regions in January 2020 and 2019 (million)*

*(Source: Tourism Agency of the Republic of Azerbaijan (2020: 1))*

### 3. MODERN TOURISM AS AN ECONOMIC EVENT

Modern tourism as an economic event:

- has an industrial form
- Participates as a tourist product and service without the ability to collect and transport
- creates new jobs and often acts as a pioneer and catalyst for the rapid development of the national economy in the utilization of new territories
- Participates as a mechanism for redistribution of national income in favor of countries specializing in tourism
- is a multiplier of employment and development of local infrastructure and improvement of living standards of the local population
- It is characterized by a high level of efficiency and rapid return on investment
- acts as an effective tool for the protection of nature and cultural heritage, as these elements form the basis of its resource base
- Practically adapts to all sectors of the economy and human activities, because it is their differentiation and discreteness that creates the difference in the potential of the recreational environment for the needs of human displacement and perception.

Thus, tourism can actively influence the economy of the region (or country) in which it is developed, as well as its economic, social and humanitarian foundations. P. Rothou, an American economist, was one of the first to pay attention to tourism as an economic phenomenon, who identified the correlation between the stages of economic development of countries and the characteristics of tourism development in them. At present, the model of economic impact on the economic sphere of tourism is extremely complex and is based on statistical data, not theoretical concepts and considerations. As for P. Rotow's model, it is still considered a classic model by the most respected figures in the tourism economy. As shown in Volume 5 of the Great Economic Encyclopedia (2012, p. 196), indeed, despite the fundamental changes in world tourism and the economy since 1959, P. Roto's opinion has not only become obsolete, but even continues to be confirmed by new statistics and current trends. As P. Rotow predicted, domestic tourism is developing rapidly in developing countries as a means of multiplying income in the field of services, employment of the local population and the development of infrastructure. Foreign tourism is developing in the presence of foreign investment. WTO experts characterize the dynamics of the world tourism market as follows:

- The volume of services will continue to increase
- The growth will be mainly due to the travel market in Asia, the Middle East, Central and South America and Europe
- More favorable conditions for tourists will be in Asia, but all other regions also have moderate growth prospects.
- Domestic tourism will continue to grow faster
- Long-term international tourism will grow faster than short-term tourism
- The impact of external factors on tourism: economic situation, political environment and the level of travel safety will increase

#### 3.1. State regulation of tourism activities

The priority areas of state regulation of tourism are: the support and development of domestic, inbound, social and personal tourism. In recent years, a great deal of work has been done in the country in connection with specific areas of state regulation of tourism. Thus, the relevant normative-legal acts aimed at improving relations in the field of tourism have been created; concrete measures have been taken to protect the rights and interests of tourists and ensure their safety; licensing, standardization, certification of tourism products in the field of tourism have

been significantly improved; the rules of entry, departure and stay in the country have been simplified, taking into account the interests of tourism development; targeted programs funded from the budget for the development of tourism have been developed. At the same time, the provision of soft loans for tourism development, assistance in staffing tourism activities, assistance in the participation of tourists, tour operators, travel agents and their associations in international tourism programs, the provision of cartographic products have been significantly improved. State support for the development of tourism in the country is growing every year. Expansion of tourism resources, expansion of the range of services, excursions and other cultural events necessary to meet the needs of tourists and their adaptation to modern standards, study and sustainable use of sanatorium-resort resources, expansion of construction of hotels and other tourist facilities, increase of tourist routes, development, strengthening of state regulation in the field of cultural tourism, ecological tourism and rural green tourism, recreational tourism as a priority type of tourism, use of religious objects for tourism purposes, national traditions, the publication and dissemination of materials reflecting the historical and cultural heritage of the Azerbaijani people, the history of individual regions and cities, the expansion of production and sale of national handicrafts and souvenirs are among the main goals. At the same time, in order to promote Azerbaijan in the world as a country with favorable conditions for tourism development, one of the priorities is to revive the advertising and information activities of Azerbaijani brands, create and develop regional cultural tourism routes within international programs and expand international cooperation in tourism development. Landscape, climatological, balneological, historical-cultural and other factors of rural areas are invaluable forces influencing the physical and spiritual recovery of people. People from the major industrial centers of our country and abroad have a great desire to live and relax in an ordinary village house. In addition to tasting rural life, tourists also want to have an appropriate level of service: in our rural homes, in most cases, such conditions do not exist. It is true that the creation of conditions conducive to the needs of tourists, the provision of appropriate services to them requires certain material costs. However, these costs can be returned to the landlord in excess. The owner of the village house provides tourists with all kinds of comfortable housing and food, as well as short-term guidance, translation, transportation services, feeding pets and birds. may receive an additional service fee by enabling. In our opinion, it is necessary to help the rural population in the development of this type of tourism in the provinces, to make speeches on local TV and in the press to move them away from certain stereotypes, to regularly explain that rural tourism is materially and ecologically beneficial to them and their areas. Homeowners' annoyance, interior, non-irritating paint color of the rooms, tidiness of the yard, cleanliness of the living space, especially the utility rooms are very important. Additional bedding, towels, etc. are available in the rooms where tourists will stay. Their rest should be in peace. The stability factor also applies to the price policy of the guest house. It is highly undesirable to change the prices of services in the middle of the season. This poses significant challenges for tour operators who can reliably carry out tours in advance. In order to achieve the desired result in the development of rural tourism, it is especially important to educate the rural population in this direction. In this regard, it is advisable to use the experience of European countries. Rural tourism conferences and seminars are regularly held in developed countries in order to determine the development directions of rural tourism, ensure the diversity of services, overcome obstacles and exchange experiences. It is important to conduct trainings to show homeowners how to receive tourists, how to properly organize the services provided to them, how to provide additional services and how to ensure a quiet and comfortable rest for tourists. Changes were observed in our villages in 2016-2020. For the development of rural tourism in Azerbaijan, it is recommended to hold regular awareness-raising events in all regions. In our opinion, the provision of targeted small loans by the state can have a positive impact on stimulating the organization of guest houses in rural areas, as



well as improving the infrastructure of villages. Rural tourism is not only a type of business, but also a means of public diplomacy. People do not want to stay indoors in hotels, they want to interact with local people, get acquainted with local life and traditions. For this reason, homeowners should promote the good image of the country for foreign tourists, and establish close internal ties with visitors from other regions. Tourism product is a complex service provided to people by tourism-excursion organizations. The system of complex organization of production of this product is called tourism industry. The tourism industry is a system of interaction of enterprises and entrepreneurs that provide the tourist with everything necessary (services, products, etc.) in the process of travel. The tourism industry is a set of organizations providing accommodation and transport, catering, entertainment, awareness, business, health, sports and other facilities, tour operators, travel agents, excursions and guide-interpreter services. The rapid development of mass tourism has led to the adequate development of the tourism industry and mixed sectors of the economy, science and culture, and the education system around the world. The tourism industry, which has a solid material and technical base, interacts with almost all sectors of the economy, providing employment for millions of people. The tourism industry is understood in a broader sense:

- 1) Joint operation with a multidisciplinary network of passenger transport (air, water, road, rail way) maintenance
- 2) Interaction with enterprises specializing in various fields, mainly enterprises that do not directly reflect the nature of tourism and are considered "secondary" for tourism (including transport engineering, fuel, food, many areas of agriculture, etc.). Thus, the tourism industry is an economic complex that combines a wide range of services used by tourists. As the country's economy develops, tourism is also in its development stage, new tourist complexes are opened, new routes are developed, new types of services are emerging. On the contrary, when for some reason the country's economy declines (political crisis, inflation, natural disasters, etc.), the tourism industry also declines. The tourism industry includes many sectors of the country's economy.

By the Decree of the President of the Republic of Azerbaijan dated December 6, 2016, the Strategic Roadmap for the development of the specialized tourism industry in the Republic of Azerbaijan was approved. In order to form a modern tourism sector in Azerbaijan that meets high economic, social and environmental requirements and to make it one of the main support of the country's economy, the map identifies strategic vision and target indicators, which are as follows:

- 1) Strategic vision for 2020 to turn Baku into a completely major tourist destination, to realize the tourism potential of the country, to create a favorable environment and infrastructure for the development of the tourism industry, as well as to increase tourist satisfaction (Strategic Roadmap for the development of specialized tourism industry in Azerbaijan 2016)
- 2) Long-term vision for the period up to 2025, transformation of Azerbaijan into one of the most attractive tourist destinations both in the region and among other countries of the world (Strategic Roadmap for the development of the specialized tourism industry in the Republic of Azerbaijan 2016)
- 3) Target vision for the period after 2025 ; to turn Azerbaijan into one of the 20 most popular tourist destinations in the world and maximize the efficient use of existing tourism resources (Strategic Roadmap for the development of the specialized tourism industry in the Republic of Azerbaijan 2016)

The Strategic Roadmap for the Development of the Specialized Tourism Industry in the Republic of Azerbaijan also identified the strengths and weaknesses of the tourism sector by

conducting a SWOT analysis, assessing opportunities and identifying threats. Referring to the statistics, we can say that in the first 6 months of 2019, there was a deficit in the balance of services, in nominal terms 1244.3 mln. Compared to the same period last year, it increased by 30.5% against the US dollar. A significant part of the deficit on the balance of services, about 71.8%, fell to the deficit in the oil and gas sector. Imports of services in the oil and gas sector were mostly registered in the construction sector - 510.2 mln. USD. In terms of services, only a positive balance was observed for tourism services, services rendered by residents to non-residents exceeded services provided by non-residents by \$ 29.8 million. This is 86.7% less compared to the same period last year. Tourism services provided by residents accounted for 60% of service exports in the first half of last year, but accounted for 45.5% of total service exports during the period under review and exports of these services decreased by 47.3% compared to the same period last year. It is no coincidence that the Strategic Roadmap envisages the creation of 150,000 additional jobs by 2025 in the commercial goods and services sector, such as manufacturing or tourism. According to the employment indicators, the number of employed people in 2018 increased by 57.2 thousand people in 2018 compared to 2017. In 2023, it is expected to increase by 281.7 thousand people compared to 2018. The analysis of the data shows that the growth in employment indicators is mainly due to agriculture, forestry and fisheries, processing industry, trade, tourist accommodation and catering and other services of economy, which increases the chances of achieving the relevant target indicator set out in the Strategic Roadmap for the national economy. "Gilan Tourism" currently belongs to "GILAN" LTD, which contributes to the economic development of Azerbaijan. The beautiful nature, pleasant climate and hospitality of Azerbaijanians attract tourists from many countries of the world to rest in this place. "Gilan Tourism" is doing great work in the development of tourism in Azerbaijan. The company has the opportunity to invest heavily in tourism and train high-level personnel. The projects implemented by "Gilan Tourism" help Azerbaijani youth to acquire professional education in the field of tourism and grow as new tourism and management staff. The company consists of a Travel Agency, Hotels and Complexes. "Gilan Tourism" travel agency, domestic and foreign tourism activities provide local and foreign tourists with the opportunity to spend quality recreation. With different tours and extensive leisure programs, the travel agency guarantees guests unforgettable moments. "Gilan Tourism" has a Congress Center named after Heydar Aliyev, 10 hotels, 1 Istisu sanatorium and an Olympic complex. "PASHA Travel" was established in 2003 as part of the "PASHA Group", one of the largest holdings in Azerbaijan in the real estate and construction, insurance and banking sectors. During this time, the agency has established itself as a reliable and professional partner. "PASHA Travel" has a strong reputation as one of the most well-known corporate travel agencies in Azerbaijan. The company offers its customers pre-booked flights, hotels, transfers and tours, as well as visa services and corporate events. It is a range of travel services anywhere in the world. The company's professional team provides high quality services focused on the individual standards and corporate policy of each specific customer. "PASHA Travel" is a member of the International Air Transport Association (IATA) and the American Travel Agencies Association (ASTA). SW Travel is a company operating on the organization of local and foreign companies, as well as for tourists to travel anywhere in the world, air tickets, hotels, transfers, tours, visa services, etc. The high level of professional staff service is aimed at meeting the requirements and standards of each corporate and customer. SW Travel's business principles: sincerity towards business partners, responsibility for obligations to customers; professional, reliable, quality service in the field of tourism; to provide customers with affordable travel options based on the highest international standards. Azerbaijan's ranking among 140 countries in the 2019 International Tourism Competitiveness Rankings has been announced. Our country ranks 71st, ahead of many well-known leaders in the tourism sector.

The final version of the rankings is posted on the official website of the International Economic Forum. Mainly this forum analyzes the markets of different countries every two years. In the overall list, Azerbaijan lags behind Jordan, Tunisia, the Dominican Republic, the Philippines, as well as many countries in the region - Iran, Kazakhstan, Ukraine, Armenia and others. Spain and France are at the top of the rankings, followed by Chad and Yemen. The international tourism competitiveness rating assesses a number of factors and conditions that ensure the sustainable development of the tourism sector and create conditions for the country's progress and competitiveness. Along with the general classification, ratings by specialized areas are also presented. For example, in the "Business Environment" list, Azerbaijan ranked 28th with 5.1 out of 7 possible points, and according to this indicator, our country is ahead of Austria, Spain, Turkey, Russia and left behind most countries in the region. He left his country behind. At the top of the list is Hong Kong, and at the bottom is Venezuela. Azerbaijan ranks 38th in the "Security" rating. Finland tops the list, followed by El Salvador in 140th place. Azerbaijan ranks 23rd in the "Price Competitiveness" rating. Iran is the leader in the list, followed by the United Kingdom. The results of the rating provide stakeholders with an opportunity to assess opportunities and forecast problems in the tourism sector. It should be noted that the index, within the framework of the International Economic Forum's Platform for Determining Future Mobility, has been developed in the context of the aviation, travel and tourism applications industry. It is implemented in cooperation with organizations such as Bloom Consulting, STR Global, the International Air Transport Association (IATA), the International Union for Conservation of Nature (IUCN), the World Tourism Organization (WTO) and the World Travel and Tourism Council (WTTC). In January-October 2019, the number of visitors to Azerbaijan increased by 10.9% or 264,000 people compared to the same period last year and reached about 2.7 million. This means that the number of foreigners coming to Azerbaijan in 2019 will exceed 3 million. Coming from Russia (about 800,000 people) and Georgia (about 600,000 people), visitors from these two countries accounted for 51.9% of visitors to Azerbaijan. (Modern.az News Agency 2019) The number of foreigners from Central and South Asia increased by 47.9% and 37.8%, respectively. The highest growth was recorded among Iran with 74.3% and Central Asia with 65.1%.

#### 4. CONCLUSION

The tourism sector is considered a national economic priority in many countries around the world as the main driving force of socio-economic development. In general, the impact of tourism is divided into three main categories:

- 1) In addition to the direct impact of the tourism sub-sectors, such as air transport, hotels and car rental companies, on GDP, the indirect impact of other sectors also increases the importance of tourism. In addition to the direct and indirect effects of the tourism sector, there are induced impacts that affect the services, construction and manufacturing sectors and increase GDP through them.
- 2) The impact of the development of the tourism sector on employment and socio-economic development of the regions. Thus, the desired development in this sector stimulates the creation of employment opportunities not only in cities, but also in the regions and rural areas through the development of many types of tourism, such as ecotourism, rural tourism, beach and religious tourism.
- 3) The development of tourism leads to the development of infrastructure in various regions, including rural areas, with the creation of a strong infrastructure in the country. Tourism also plays an important role as a marketing tool for countries, as a successful tourism strategy helps to improve the image of countries internationally.

The tourism sector also supports efforts to ensure environmental sustainability, cultural heritage, protection and development of local values. The Kovid 19 pandemic has had a negative impact on the development of tourism in Azerbaijan, as well as around the world. At present, the prospects for the development of domestic tourism in our country are being determined.

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**LITERATURE:**

1. 2019 will set a record for the number of tourists visiting Azerbaijan (2019) Retrieved: 20.11.2019 from <https://modern.az/az/news/218105>
2. Law of the Republic of Azerbaijan on Tourism (1999) № 674-IQ. Retrieved: 17.10.2014 from <http://e-qanun.az/framework/28823>
3. List of countries receiving the most tourists in 2018 (2019) Retrived: 30.11.2019 from <https://news.milli.az/interest/738112.html>
4. State Tourism Agency of the Republic of Azerbaijan (2020) Tourism Research and Statistics. Available at: [https://mcusercontent.com/3a15b7aec331f7f07478da8b0/files/d1bdefd5-347a-4a60-8f25-626420b20f1a/Infographic\\_Arrivals\\_January\\_2020\\_AZ.pdf](https://mcusercontent.com/3a15b7aec331f7f07478da8b0/files/d1bdefd5-347a-4a60-8f25-626420b20f1a/Infographic_Arrivals_January_2020_AZ.pdf)
5. State Program on Tourism Development in the Republic of Azerbaijan for 2010-2014. (2010) Order of the President of the Republic of Azerbaijan on approval of the “State Program on tourism development in the Republic of Azerbaijan for 2010-2014”, № 838
6. 6. Strategic Road Map for the development of the specialized tourism industry in the Republic of Azerbaijan (2016) Available at: [https://mida.gov.az/documents/Turizm\\_s%C9%99nayesinin\\_inki%C5%9Faf%C4%B1na\\_dair\\_strateji\\_yol\\_xeritesi.pdf](https://mida.gov.az/documents/Turizm_s%C9%99nayesinin_inki%C5%9Faf%C4%B1na_dair_strateji_yol_xeritesi.pdf)
7. The State Statistics Committee of the Republic of Azerbaijan (2018) The main indicators on the characteristic areas for tourism. Available at: <https://www.stat.gov.az/source/tourism/>

## POSTULATES AND PRINCIPLES IN ACCOUNTING

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### **ABSTRACT**

*The thesis studies the conceptual and methodological approaches formed around postulates and principles, analyzes and evaluates their methodological and practical significance in terms of forming useful information about assets, financial accounting and other elements of reporting, explains the logical relationship and dependence between the postulate, axiom and principal concepts. It is substantiated that the postulates do not provide for specific frameworks for record keeping and reporting; their application is not normative. It is determined that there are no sharp differences between the concepts of postulate and axiom, and the axiom does not need to be proved as a postulate, however the postulate may not be accepted, but non-acceptance of the axiom is impossible, i.e. the first can be denied, the second is undeniable. The differences between the concepts of postulate and principle, axiom and principle are disclosed, it is shown that postulate is a broader concept than principle, principle or principles cannot be based on the most general provisions, principles have a stricter framework, they are directly normative and mandatory. In the presented thesis, the principles are defined as the most common rules that are generally accepted and applied arising from the objective necessity for the formation of information in accounting and reporting as well as act as the basis of developed standards, methods and procedures. The criteria have been devised according to this definition. Acceptance of any proposed provision as a methodological principle for accounting and reporting can be determined under the mentioned criteria.*

**Keywords:** *Accounting, Information, Methodology, Postulates, Principles*

### **1. INTRODUCTION**

Gnosiology and Epistemology in Accounting science form theoretical knowledge to achieve the set goals (what information to create), on one hand, and pave the way for methodological knowledge for realization of theoretical knowledge on the other hand. Methodology is established in accordance with the provisions, assertions and theses of the theory, it [methodology] removes the categories and concepts created by the theory from abstraction, converts them into information with specific quantities, certain content and structure. The methodology forms the information about the concepts (for example, assets, liabilities, etc.) created by the theory based on a deductive approach under the inductive basis. In addition, the methodology itself represents a set of postulates, paradigms, axioms, principles and methods. The conducted studies on the nature, functions, place and role of the mentioned concepts and their results have been important for harmonization; unification of different accounting models and for the rational development of the global accounting system. However, the study and analysis of research and studies conducted by individual authors and various accounting

organizations on postulates and principles show that it has not been possible to form a single conceptual approach to their nature, content and methodological functions that they should bear. Numerous postulates and principles suggested and substantiated in different contexts could not reach the level of methodology, did not bring any innovations in the development of accounting, and were only a procedural interpretation. This idea is more about the studies conducted on the concept of postulate. The results of the studies and discussions in the field of postulates in accounting, which started mainly in the 1920s and lasted till the 1960s in the last century, confirm this idea. As in other sciences, postulates in the accounting system are such general provisions, requirements and proposals substantiated and suggested by various individuals and organizations, that there is no need to prove them. It can be confirmed that postulates do not provide specific frameworks for record keeping and reporting, their application is not normative, and substantiating as proof is sufficient in postulate. There are no sharp differences seen between the concepts of postulate and axiom; the axiom does not need to be proved as a postulate, but the postulate may not be accepted, the axiom cannot be rejected, i.e. the first can be denied, but the second cannot be denied. For example, it is possible to take the double-entry rule applied in accounting as an axiom. It is also important to accept that there are differences between the concepts of postulate and principle, axiom and principle. A postulate is a broader concept than a principle, a principle or principles cannot be established on the most general provisions, the principles have a more serious framework, they bear a direct normative character. A postulate may take the form of a principle, and principle the form of an axiom. However, this thesis is invalid in spite of any postulate. Principles are substantive elements of the information formation methodology of accounting.

## 2. RESEARCH

The concept “postulate” is taken from the word “postulate”, which means demand. The philosophy dictionary defines the concept of postulate as follows: “Postulate is a principle, a provision that is the basis for the implementation of judgments and conclusions” (Рогалевич Н. Н. (2008), p. 514). In another source, the postulate is interpreted as “a demand, a proposal (conditional admission, rule)” “accepted” as a result of some considerations without proof..., but is usually justified; it is just this justification that is evidence for “acceptance” of the postulate” (Большая Советская Энциклопедия (1975). p. 423). The postulates of the AICPA (American Institute of Certified Public Accountants) were devised as follows: “Postulates are the basic provisions on which principles are based” (Хендриксен Э. С., Ван Бреда М. Ф. (1997), p. 69). V. Paton and P.M. Munits understood the postulates as the main provisions of accounting in the whole. Many scientists have clarified the concept of “postulate” through the concept of “principle”. These include I. Sheri, E. Shmalenbakh, D. Cherbonini and others (Агафонова М. Ю., Бенедиктова В. И. Савинская О. В. (1999), p.330-331). According to E.S. Hendriksen and M.F. Van Brade, “accounting mainly accepts general provisions as postulates” (Хендриксен Э. С., Ван Бреда М. Ф. (1997), p. 20). Based on the grammar and semantics of the concept of postulate, let us consider which postulates are offered in accounting and which of them correspond to the level of the application requirements. Based on the grammar and semantics of the concept of postulate, let us consider which postulates are offered in accounting and which of them correspond to the level of the application requirements. According to the American scientists E.S. Hendriksen and M.F. Van Brade, the postulates in the accounting system was first devised by V. Paton in 1922: 1. presence of specific objects of economic activity; 2. continuity of the economic unit’s activity; 3. equality of balance; 4. cash postulate; 5. postulate about expenses; 6. recognition of income obtaining (Хендриксен Э. С., Ван Бреда М. Ф. (1997), p. 65). Another source shows that V. Paton suggested 11 accounting postulates instead of 6: 1. independent economic entity; 2. operating enterprise and continuity; 3. equality of the total aggregate value of the property with the total value of the capital;

4.balance sheet as a means of presenting the financial position of an enterprise; 5.constant monetary unit size; 6.costs as the primary basis for valuation; 7.costs as product evaluation; 8.calculations; 9.priority of deduction of loss from accumulated profit; 10.profit as a source of dividends to shareholders; 11.FIFO as a method for evaluating material resources (МЭТЬЮС М. Р., Перера М. Х. (1997). p. 45). In the report (Accounting Research Study - ARS 1) at the AIA (American Institute of Accountants) under control by Maurice Munitz, at the University of California, the postulates are divided into three groups:

- the first group of postulates: postulates arising from the general economic and political conditions of the surrounding reality (five postulates: quantification, exchange, enterprises, period, the unit of measure);
- the second group of postulates: postulates arising from the nature and essence of accounting itself (four postulates: financial statements, market prices, enterprises, hypotheticals);
- the third group of postulates (five postulates: continuity, objectivity, consistency, stability of the monetary unit used, analytical presentation (Maurice Moonitz (1961), p. 51–53).

V.V.Kovalyov and V.V.Patrov include the following to postulates: 1.separation of the organization's assets and liabilities from the assets and liabilities of owners and other organizations; 2.continuity of activity; 3.consistency of implementation of accounting policy; 4.quantification; 5.periodic formation of information on the results and efficiency of the organization's activity during activity; 6.determination of the facts of economic life on time (Ковалев В. В. , Патров В. В. (2002), pp. 379–380). before commenting on the relevance of the said provisions suggested by authors to the postulates, we can say decisively that their definition of postulates is, in fact, the listing of the conditions under which accounting operates, rather than postulates or the essence of the postulates. Numerous provisions suggested by V. Paton and M. Munits as postulates reflected the most general rules, such as the equality of the aggregate value of a property to the total value of capital, measuring in cash, calculation, that already known and applied in accounting since the time of L. Pachioli. Some provisions suggested by V. Paton as accounting postulates, such as “the priority of deducting losses from accumulated profits, the fact that profits are a source of payments to shareholders” (МЭТЬЮС М. Р., Перера М. Х. (1997), p. 45) did not carry a theoretical and methodological burden. Certain disputable points were also characteristic of the postulates prepared under the control of M. Munits. Thus, the requirements for quantification (i.e., measuring and calculating the quantity of economic activity) attributed by him to the first group, market prices attributed to the second group, objectivity and analytical presentation attributed to the third group could not be accepted at the level of postulate. Accounting mainly uses the measure of value, which is not a postulate, but a historically known methodological principle. The concept of market prices also cannot be accepted as the most general provisions, because not all accounting items are measured only by market prices. Market prices usually reflect current prices. However, many objects are first or should be recognized by historical value (IFRS Foundation (2018), p. 58). Since the concept of “analyst” is indefinite, it cannot be accepted as a postulate. For example, it is impossible to provide analyticity at the reporting level, furthermore, ensuring analyticity at the high level depends on the specific need. In the cases not needed, the requirement for a high level of analyticity would cause an increase in the costs of accounting works, complication of the information and making its interpretation difficult. In general, there is no unilateral position of professional accountants and scientists on disclosing postulates in the accounting system, the number of components and other issues, many also raise ordinary rules and methods to the postulated level, although they may not be necessary for accounting. For example, suggesting the FIFO method to evaluate material resources by W. Paton as one of the postulates is incorrect because there are also other methods to evaluate material resources, then these methods also have the right to receive the status of postulate.

We also consider that it is necessary to briefly comment on the claim that postulates come from the political, economic, social, business environment and way of thinking. Of course, no one can completely deny the influence of relevant conditions on appearance and formation of certain postulates. However, at the same time, explaining the nature of the postulates completely and entirely under the said condition means that the modern accounting system can only be built on the basis of empirical experiments. Nevertheless, the theory and methodology of accounting has been formed mainly as a product of scientific thinking. Considering the postulates only as an obvious embodiment of political, economic, social and other conditions would mean that as these conditions change, the basic (general) provisions of accounting should do so. We think, the basic provisions of accounting cannot be based on the postulates devised by someone, or changes in political, economic and social conditions do not change the basic provisions of accounting. In modern time, the political, economic and social conditions are changing rapidly, but the double entry rule, monetary measurement, the principles of accounting by the method of calculation, etc. remain unchanged. Thus, it was clear that both scientists - researchers and professional accounting institutes had to focus on principles, not on postulates. Not the postulates, but the principles play a primary role in the accounting system and act as working “tools” and “mechanisms” in realizing the purpose of accounting. If we take the methodology as a whole information-forming system, we can say that the principles are the substantive element of that system, its beginning, its reference point. Undoubtedly, the etymology of this concept also influenced the concept of “principle” taken as a starting element of the methodology. The mentioned term should always be used mostly together with those words in plural and other words: general accepted principles of accounting; basic principles of accounting; principles of accounting; methodological principles of accounting, etc. Long disputes, discussions and debates were and are conducted on the nature, content and aim of the mentioned word combinations. Therefore, the questions like the following in the process of study of the principles have not been answered yet: Why should the principles be accepted as a beginning? What does the combination of general acceptance of the principles mean? Who or which organizations have developed the principles? What is the difference between the principles and standards, procedures and methods and what is the relationship and dependence between them? It is impossible to provide unequivocal and decisive answers to all these questions and to allow subjectivity in this case. In addition, this is completely clear, therefore, the acceptance of this or other provision or provisions as a principle or principles cannot be implemented without rational discussion and criticism and convention. Maybe this or other provision, requirement, or principle does not fully reflect the reality, however this does not mean that there can't rules or principles that may be accepted by all. The history of the development of accounting and reporting proves and allows saying that some principles have become prior approaches, their existence, the information forming functions have been unconditionally accepted by all. However, there are different opinions and judgments about the content, nature and pragmatic significance of the principles. We think it is necessary to consider some of them. The Conceptual Framework for Financial Accounting and Reporting, developed by the FASB (Financial Accounting Standards Board) established in the United States in 1974, sets out the principles as follows: “Principles are such provisions based on the determination of number of the facts of economic life (evaluations) that disclose the said facts (evaluations) in a form that is important for the users of the accounting information” (Хендриксен Э. С., Ван Бреда М. Ф. (1997), p. 83). However, there is no specific asserted a list of principles on the basis of the Conceptual Framework developed by the FASB. The same words may be applied on the ASC (Accounting Standards Committee) that developed accounting standards in England and Wales. It turns out that FASB and ASC have avoided determining and asserting particular methodological principles of accounting.



Unlike the FASB and ASC, the IASC (International Accounting Standards Committee) identified two permissions that could be accepted as methodological principles in “Principles for Preparation and Drawing of Financial Statements” published in 1989 (ACCA (1999), p. 38)):

- 1) Continuity of activity;
- 2) Cash method.

The IASB (International Accounting Standards Board) accepted only the continuity of activity as permission in the “Conceptual Framework for Submitting of Financial Statements” approved in 2018 (IFRS Foundation. (2018), p. 25–26). The studies show that the positions of individual authors do not coincide in terms of the number and content of principles, they do not show a unified approach to the application of the same methodological element to the principles or requirements. The English Economist D. Middleton shows that there are four principles and four basic conditions in accounting:

- a) Principles: continuously operating enterprise; calculation; continuous application of accounting methods; conservatism.
- b) Main conditions: the distribution of economic objects; double entry; monetary measurement; initial value (Миддлтон Д. (1997), p. 36).

D. Middleton refers to double entry and monetary measurement to the basic conditions/methods, not to the basic principles. We think, such a division cannot be considered logically correct because both monetary measurement and double entry should be applied to the basic principles, not to the methods from historical establishment, as well as the functions they perform. Another disputable point is that D. Middleton considers monetary measurement and measurement in the initial value as separate methods, although it is clear that the measurement in the initial value is one of the methods arising from the principle of monetary measurement. It is also difficult to agree with Middleton’s idea of the continuous application of accounting methods because the methods can not remain constant as the requirements for the quantity and quality of information change. R.N. Anthony shows that there are only principles in accounting but does not accept the existence of basic conditions or requirements. The clauses accepted by D. Middleton as the main conditions refer to the following principles: the principle of reciprocity; the principle of monetary measurement; the principle of continuity; cost principle; the principle of conservatism; the principle of materialism; the principle of conformity (Антони Р. Н. (1993), p. 130-131). However, like Middleton, he shows the presence of the difference between the principle of monetary measurement and the cost principle. Some controversial points are also specific to the principles set by R.N. Anthony. For example, R.N. Anthony indicates the monetary measurement and the cost determination as separate principles. The question is - is not the cost formed as a result of monetary measurement? The cost principle can not be included in the list of principles as an indicator, it is the result of the application of the principle of monetary measurement. Cost is a specific economic indicator, through which financial results and other efficiency indicators are determined, while no principle directly determines the effectiveness or ineffectiveness of an activity and its results, the Principles serve as a methodological basis for their definition and calculation. E.S. Hendriksen and M.F. van Breda emphasizes that the number of basic principles is too long and interpret only the following principles: the principle of economic unit; the principle of operating enterprise; the periodicity principle; the principle of uncertainty and conservatism; the principle of monetary size (Хендриксен Э. С., Ван Бредда М. Ф. (1997), p. 100–103). The authors explain the positive and negative aspects of these principles in detail, commenting on the approaches of various authors and organizations to these principles.

Commenting on the arguments for the adoption of the provision of conservatism as a principle, they conclude that conservatism should have no place in the theory of accounting (Хендриксен Э. С., Ван Бреда М. Ф. (1997), p. 103). Note that their firm position is precious despite the principles as a whole, and in particular the principle of conservatism. We also consider the arguments of the authors to be completely sound and are against acceptance of conservatism as a principle or a requirement. The point is that the adoption of conservatism as a principle leads to either artificially reducing (taking the lowest possible value of assets and income) or increasing (taking the highest possible value of liabilities and expenses) accounting records, which leads reduction of the importance of information in decision-making. Many authors say that a change in the purpose of accounting has also changed its principles. Changes in purposes, of course, occur and stem from the requirements of economic development. However, the question arises - does change in the purposes of accounting really change its principles, First, the basic principle? If we take the principles accepted by the most authors, including E.S. Hendriksen and M.F. Van Breda (the principle of the economic subject, the principle of monetary measurement, the accounting principle by the cash method, etc.) and compare them with the stages of changing purposes, we would see that changing of purposes has not caused changing or abolishing any of those basic principles or uncreated any additional principle. There is another provision that may cause dispute and objection suggested in the literature – as if, the principles of accounting make one model of accounting different from other one (АНТОНИ Р. Н. (1993), p. 169). We think, this provision has no theoretical and practical basis. If we compare any accounting model with the basic principles, we will see that it is not the principles that change the accounting model or differentiate one model from another, but the goals set for accounting, the normative and legal features of its regulation. Accounting and reporting more based on the legal framework (continental model) or on traditions, considerations, judgments and ethical behavior of disputes (Anglo-American model) or building it according to the economy with high inflation (South American model) is not a fundamental principle of accounting, but arises and is formed from various and numerous objective and subjective conditions. Russian scientist Y.V. Sokolov shows that many initial provisions are adopted in the accounting system; they form a general approach, regardless of the methodology of accounting. Y.V. Sokolov has critical approach to some permissions and requirements created on the basis of these initial provisions and general approaches and established. For example, he criticizes the principle of continuity of activity and shows that this principle contradicts healthy thinking. Later on, he mentioned the shortcomings of accounting with accrual method and shows that its application leads to the fact that an enterprise with high profitability can be recognized as bankrupt at the same time. We find a relatively broad explanation of the principles as a theoretical and methodological concept in the textbook “Бухгалтерский учет в зарубежных странах” (Accounting in Foreign Countries), edited by F.F. Butinets and published in Russian. The authors of the book rightly consider the principles as one of the elements of the conceptual basis of accounting and show that they are the basis for the assessment of the facts of economic activity (Соколов Я.В., Бутынец Ф. Ф. (2007), p. 168). The most interesting issue in the book is the criteria for general recognition of accounting principles. Note that in the post-Soviet space, for the first time, they proposed specific criteria for selection and universal recognition of the principles - appropriateness, objectivity and implementation (Figure 1) (Соколов Я.В., Бутынец Ф.Ф. (2007), p. 169).

*Figure following on the next page*

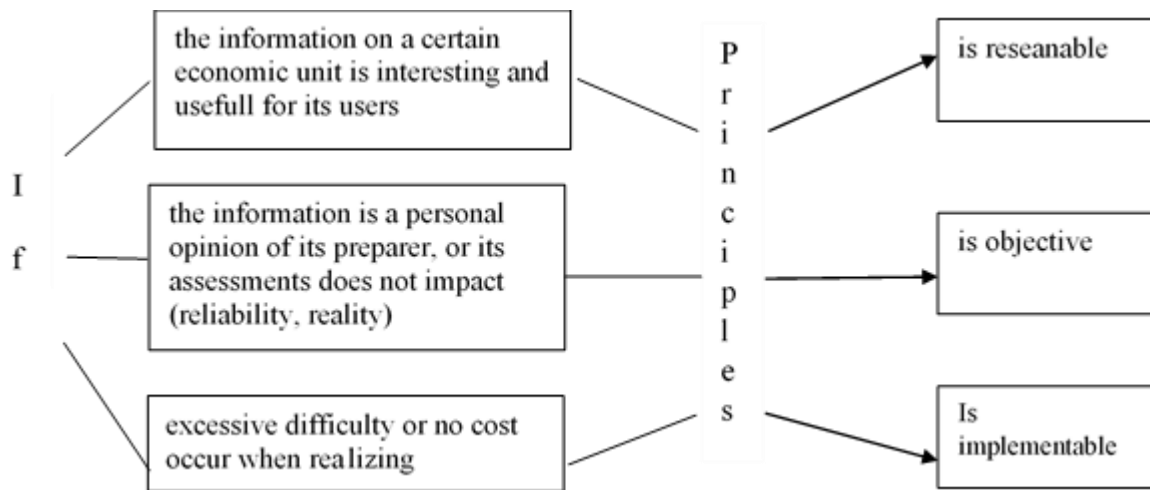


Figure 1: Criteria of the Accounting Principles

Based on the content of the Figure, the following conclusion can be made: if the information is inappropriate, unformed on an objective basis, and caused excessive difficulty or required extra costs in realizing the information or principle, then they cannot be accepted as a principle. If we do not misunderstand the opinion of the authors, we can say that the theses they substantiate are absurd. Let's try explaining it. Principles can not determine whether information is useful, it is not part of their function; it does not apply to the principles if the formation of information is influenced by someone's personal opinion or the opinions of those who prepare it. Then, if the application of the principle creates difficulties or requires extra costs, it does not give us a reason to reject the principles. We criticize the principle of accounting with cash method, which is one of the fundamental principles; this criticism is justified because if the application of this principle makes the enterprise profitable, the enterprise may in fact be on the verge of bankruptcy. However, this principle allows users to decide in any case, even if the decision is negative. Objectivity should be sought not in the principles, but in the thoughts and intentions of those who apply those principles. The principle of accounting by the cash method cannot be objective in one case and nonobjective in another, otherwise its universality and common recognition would not be confirmed. Opinion variety on the content, nature and functions of the accounting principles are due to many reasons, but also to the fact that the theoretical, methodological and pragmatic similarities and differences between the generally accepted principles in the literature and the requirements and established procedures are not properly understood or explained. The same situation exists in understanding the relationships and dependence between principles and standards, principles and methods, or standards and methods. Thus, it can be concluded that the principles should include those methodological requirements, allowances, which are the initial beginning of that methodology, are irreplaceable and universal rules for the formation of information. As a universal rule, first, it is necessary to accept the principle of monetary measurement. The principle of monetary measurement is based on the form of exchange in value. Even it can be asserted that this principle is the beginning of accounting as a whole, especially financial accounting and reporting, and is based on other fundamental principles. For example, without monetary measurement, neither cash method accounting nor double entry can be made. The principle of monetary measurement arose as a result of a deductive approach and cannot be changed in space or time. Without monetary measurement, it is impossible to conduct and recognize the second and subsequent evaluation of assets and other elements, to determine and assess the financial condition of an enterprise, its changes, financial results. There is no need to prove that the principle of monetary measurement and the principle of cash method accounting was not created by anyone or any organization, they emerged as a result of the emergence of money and formation and evolution

of its functions at a certain historical stage of economic development. One of the fundamental principles in accounting is the principle of double entry. Nevertheless, its name is rarely mentioned among the fundamental principles. In the Soviet accounting system, double entry was unequivocally accepted and established as one of the elements of the method of accounting; this position remains unchanged in many books on the theory of accounting. Obviously, this seems to be explained more by the fact that its application is obvious and therefore in some normative documents (Conceptual Framework, etc.) do not need to be fixed. This principle is such a law or a rule without which accounting and reporting cannot be kept. Without double entry, the equation  $A=C+O +I-C$  (Assets, Capital, Obligations, Income, Costs) can not exist, and accordingly no reporting form can be compiled. Like the principles of monetary measurement and cash basis accounting, the principle of double entry also cannot be fair or unfair, bad or good, true or false, in or beyond anyone's interest. The double entry, like the other two principles, is universal. The double entry in itself does not form the amount of information, classifies the initial data and information, groups and summarizes them in different directions and purposes, allowing you to constantly remember their economic and legal aspects. One of the main conditions or reasons for the emergence of double entry was the formation of economic entities. The emergence of economic entities necessitated double-entry, because the existence and movement of assets under the control and use of [economic entities] had to be reflected from both economic and legal aspects. In other words, in parallel to the formation of information on economic content (assets), the formation of information on property rights (capital and liabilities) was mandatory. As noted, the principle of economic entity necessitates the application of not only the double entry, but also two other principles - the principle of monetary measurement and the principle of measurement by the cash method. Thus, these principles can exist in interaction and dependence. Based on the above, we consider it expedient to define the principles as follows. Principles are the most general rules that form the basis of the procedures of the standards that are generally accepted and used to formulate information about objects/elements of accounting and reporting as well as the developed standards. Any suggested provision, allowance, or requirement can be accepted as a general methodological principle if it:

- is the same for all accounting models and systems, and its application is an absolute necessity;
- is permanent and unchanging in terms of time and space;
- is not affected by various objective and subjective factors and conditions;
- is the methodological substance that forms information regardless of the purposes of accounting and reporting;
- exists in interaction and unity with other principles;
- does not depend on the fact that standards and methods are different and change in terms of time and space.

We think, the followings meet the given definition and suggested criteria:

- 1) The principle of economic entity;
- 2) Monetary measurement;
- 3) The principle of cash basis accounting;
- 4) The principle of double entry.

The interaction and dependence between the mentioned principles can be easily understood in the following simple example. Example. Company A purchased fabric material of 5000 square meters from Company B, the price is USD 30 per square meter of fabric, the total debt, including VAT (Value Added Tax) is USD 177 000, and USD 27,000 VAT.

Despite this operation, let us try to explain the above reviewed principles:

- 1) The principle of economic entity. Company A as a legal entity received material in the amount of USD 177,000 from Company B. A and B entered into an economic and legal relationship. The transaction increased both A's assets and liabilities, that is, the inflow of assets (economic content) and the creation of a liability (legal requirement) occurred within the entity. If there were economic entities A and B, economic content and legal requirements would not have arisen. The legal requirement is the object of accounting because both A and B are economic entities;
- 2) Monetary measurement. In what amount should the debt of the Company A against the Company B recognized:  $5000 \times 30 = 150000$ ;  $150\,000 \times 1,18 = 177000$  dollars;
- 3) The principle of cash basis accounting. A's acquisition of material from B, but his failure to pay for it yet created an account payable of USD 177000. A's account payable to B is due to nonpayment of the value of the received asset. Receiving of the asset has led to a duality of the transaction in the form of economic content as well as legal requirements. This dualism is the principle of accounting by the cash method. Realization of this principle will change the financial position of A and B.
- 4) The principle of double entry. As a result of the interrelation of the previous principles on the transaction occurred, the known amounts are determined by double entry in the balance sheet of Company A: debit Asset – USD 150000, debit VAT – USD 27000, credit Liability – USD 177000.

Without any of these principles, the transaction, its quantity, economic and legal aspects could not be recognized. If there were not the principle of economic entity, the legal basis of quantity could not be realized. The lack of a legal basis would not allow the creation of economic quantity. If the acquired assets were not measured in cash, we would not be able to determine how it affects the financial condition of Company A, as well as Company B. such, the main principle affecting the financial situation is the principle of monetary measurement. Other principles are the main conditions for realization of this principle. All three principles (the accounting principles of economic entity, monetary measurement and cash method) are the basis for the implementation of the principle of double entry. The principle of double entry creates the structure for registration and classification of the three previous principles.

### 3. CONCLUSION

Discussions and debates on the nature, content and binding functions of the postulates were more rhetorical and did not allow the formation of any single concept or approach in this area. The requirements suggested as postulates were almost not adapted with the purpose and objectives of accounting and financial reporting. Attempts to raise the suggested postulates to the level of a normative approach have been unsuccessful and have not brought innovation to the development of accounting, its theory and methodology. The vast majority of them [the suggested postulates] did not deviate from the usual procedural rules that arose from practice or have long been applied in practice. The inductive method was preferred in substantiating the postulates, which meant that the theory and methodology of accounting could be based only on empirical bases. Although many of the suggested postulates are reminiscent of principles from a theoretical, methodological, and practical point, they did not fully correspond to the concept of "principle". Although a large number of principles with varying content have been substantiated and proposed in the accounting literature, most of them have not been reflected in the methodology of accounting and reporting. The suggested provisions, allowances, or requirements can be accepted as general general methodological principles, when they are the same for all accounting models and systems, universal, not positive, but reflect a more normative approach.

Such principles, in general, cannot be within the interests of a party, but contrary to the interests of the other party. Principles are objective, neutral in the context of economic, social, political and ideological relations. Despite the suggested criteria, the following may be accepted as substantive principles:

- 1) The principle of economic entity;
- 2) The principle of monetary measurement;
- 3) The principle of cash basis accounting;
- 4) The principle of double entry.

These methodological principles are based on the standards; as the economy and business develop and the forms of ownership change, the principles do not change. The principles can only be international, humane. The standards can be national, regional, international, and therefore may reflect national, regional and international interests. Principles cannot be national or regional, they cannot be based on national and regional interests.

#### LITERATURE:

1. Агафонова М. Ю., Бенедиктова В. И. Савинская О. В. и др. (1999). *Большой бухгалтерский словарь* / М.: Институт новой экономики. 574 с.
2. Антони Р. Н. (1993). *Основы бухгалтерского учета*. Перевод. Борис Херсонский и Марина Шнейдерман. С. П. “Триада НТТ” совместно с центром внедрения рыночных отношений, корпорации “Монтажспецстрой”. Москва, 318с.;
3. *Большая Советская Энциклопедия* (1975). Т.20, Изд. 3, 604 с.;
4. Ковалев В. В., Патров В. В. (2002). *Как читать баланс*. 4-е изд., перераб. и доп. М.: Финансы и статистика, 520 с.
5. *Концептуальные основы представления финансовых отчетов*. (2018): IFRS Foundation. 99 с. [https://www.minfin.ru/ru/document/?id\\_4=125979](https://www.minfin.ru/ru/document/?id_4=125979);
6. Мэтьюс М. Р., Перера М. Х. (1997). *Теория бухгалтерского учета: Учебник* / Пер. с англ. под ред. Я. В. Соколова, И. А. Смирновой. М.: Аудит, ЮНИТИ, 408 с.;
7. Maurice Moonitz (1961). “*The Basic Postulates of Accounting Research Study*”. No.1 (New York: AICRA), p.51-53
8. *Международные стандарты финансовой отчетности* (1999): издание на русском языке. М.: Аскери. АССА, 1135 с.
9. Миддлтон Д. (1997). *Бухгалтерский учет и принятие финансовых решений* / Пер с англ.; Под ред. И. И. Елисейевой. М.: Аудит, ЮНИТИ. 408 с.
10. Рогалевич Н. Н. (2008). *Краткий словарь по философии*. Минск: Харвест, 832 с.;
11. Соколов Я.В., Бутынец Ф. Ф., Горещкая Л. Л., Панков Д.А. (2007). *Бухгалтерский учет в зарубежных странах: учеб. /; отв. ред. Ф. Ф. Бутынец*. М.: Велби, Изд-во Проспект, 672 с.
12. Хендриксен Э. С., Ван Бреда М. Ф. (1997). *Теории бухгалтерского учета: Пер. с англ./Под ред. проф. Я. В. Соколова*. - М.: Финансы и статистика, 576 с.
13. Vagif Guliyev, Nazim Hajiyev, Fariz Guliyev (2019). “*Factors Affecting Audit Quality in Corporate Sector*”. 37th International Scientific Conference on Economic and Social Development “Socio Economic Problems of Sustainable Development” Book of Proceedings. FEB 14-15, pp: 813-821

## HEALTH FINANCING REFORMS: GEORGIA AND AZERBAIJAN

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### **ABSTRACT**

*In article "Health care financing reforms: Georgia and Azerbaijan" is spread out short history of reforms of systems of financing of health care of two neighboring countries. After disintegration of the Soviet Union all republics appeared in the crisis situation which affected all spheres. In order to reduce the gap between state guarantees and their financing, it was necessary either to improve financing or to reduce the guaranteed package of services, but it was necessary to ensure a more efficient distribution of funds. The purposes facing the governments concerning health care were identical. However, the differing economic and political situation in the countries predetermined their health care systems, and also financing of these systems. Along with it, the developed systems of financing of health care constantly changed and enhanced, using various sources and funding mechanisms. It should be noted that the process of establishing a health financing system was multi-stage, complex, given that the healthcare sector is characterized by the involvement of several sources of financing at the same time. Moreover, all this happened in the conditions of war, economic crisis. Sometimes the situation sometimes required radical decisions, for example, a sharp reduction in the package of state-guaranteed medical care in Georgia. In both states, government policy includes the inclusion of the private sector in financing the sphere: through the development of private health insurance, paid medical services. The main goal in this case should be the shift of private expenses from the informal to the official format, as well as an increase in the share of private medical insurance in the general structure of private payments to the population. At the same time, public spending on health is also constantly growing.*

**Keywords:** *compulsory health insurance, health financing, health financing reforms, voluntary health insurance*

### **1. INTRODUCTION**

The economic recession in the 90s caused a health crisis in the former USSR countries. As a result, in some countries, out-of-pocket payments became the main way to finance health care. According to some data, the part of cash payments in the general structure of health care expenditures was 87% in Georgia, 82% in Azerbaijan, 60% in Kyrgyzstan and 46% in Moldova (Mossialos E., Dikson A., Figeyras Zh., Kuttin D., 2002, p. 102)[2]. The situation was exacerbated by a lack of accountability and a slight chance of exposure. Although grants and subsidies from non-governmental organizations, transfers from donor institutions and loans provided by international banks have played a role in keeping the situation afloat, the depth of the health crisis and the spontaneous switch to paid medicine has forced most governments to reform decision. A certain role was played by the democratization of society, which could already express its reaction. The main issue of the reformers was improving health financing. The former tax-based financing system could not fully satisfy all health needs. One of the reasons was also the fact that the tax base was decreasing: the number of elderly and unemployed people increased, real incomes decreased, the number of bankrupt enterprises grew, as well as, increased cases of tax evasion in the formal and expanding informal sectors of the economy. On the other hand, the principle of residual health financing made it possible to informally cross-subsidize other sectors. In order to reduce the gap between state guarantees and their financing, it was necessary either to improve financing or to reduce the guaranteed

package of services but must be obligatorily ensured a more efficient distribution of funds. Therefore, for the health care of Georgia and Azerbaijan, also for other CIS countries, the following features were characteristic during the transition period:

- government spending on health is extremely low;
- widespread private payments;
- the vast majority of informal payments in the structure of private payments;
- tax base reduction.

Based on this, financial policy should have developed in the following areas:

- coordination of all sources of financing;
- minimization of duplication elements;
- ensuring the availability of medical care and financial security for vulnerable groups of the population;
- maximum attraction of legal private capital;
- choosing the right incentives.

## **2. MAIN DIRECTIONS OF REFORMS IN HEALTH FINANCING SYSTEM**

### **2.1. Reforms in Georgia**

After the Revolution of Roses, health care costs, calculated as a percentage of GDP, were constantly growing and reached 8.2% in 2007. At the same time, the share of state financing made up only 18.4% of total health expenditures, that is an extremely low indicator according to European standards. In 2007, the share of personal expenses of citizens on payment of medical care accounted for 70.9% of all health care costs (Sistemy zdravookhraneniya: vremya peremen. Gruziya.(2010) , p. 2)) [7]. In order to improve health financing, targeted taxes on tobacco and alcohol have been introduced. It was decided to introduce health insurance with the intention of reducing deficit of financing in Georgia. Moreover, it should not be forgotten that we are talking about countries with transitional economy, where the initial position of health protection, as well as the economics in general, left much to be desired, and the reforms were adopted and carried out in a short time and under strong opposition. The introduction of health insurance premiums has been associated with several problems. The first issue is related to the identification and registration of individuals, the second is to assess the size of contributions, and finally, the third problem is related to collection. M. Cichon proposed a scenario for the consistent introduction of a health insurance system in accordance with the needs of Central and Eastern Europe in his work on the development of health insurance. The key point of M. Cichon's proposals is impossibility of introduction of health insurance in less than 5 years, because it requires significant financial investments, technical support and economic stability. (Cichon M. 1992 , p. 11)[1]. As a result of the large-scale economic crisis in 2008, the government was forced to reduce guaranteed medical care. In Georgia, the volume of medical services guaranteed by the state amounted to only 10-15% of the total volume of provided services (Saltman R.B., Figeyras Dzh.(2000) , p. 174)[6]. The ineffective MHI (Mandatory Health Insurance) system introduced in the 1990s was canceled and replaced by the VHI (Voluntary Health Insurance) system. Since 2008, families below the poverty threshold have been provided with vouchers that can be used to purchase VHI policies. Policies can be issued with one of the private companies of your choice. Then the government signs a contract with the insurer, purchasing the acquired VHI program at the expense of state funds. The remaining categories of citizens are forced to purchase VHI policies at their own expense or to pay directly when services are received. In order to increase the usage of prepayment schemes for these population groups, government developed limited VHI programs that were subsidized by the state and were considered as a tool to expand the available coverage (Sistemy zdravookhraneniya: vremya peremen. Gruziya.(2010) , p. 2-4)[7].



This insurance covered the cost of urgent help needed in emergency cases, half the cost of medical care in non-emergency cases, unlimited visits to a primary care physician, as well as a limited number of laboratory tests and diagnostic examinations. Each individual citizen could receive a voucher or get it collectively, for example, as a family. For the poor, special vouchers were created that were subsidized by the state and calculated according to the financial situation and needs of the citizen. A pilot subsidy project was launched in 2007 in two cities: Tbilisi and Imereti. The experiment was successful, and 180 thousand people received the necessary insurance worth \$ 4 billion. The procedure was able to attract people to purchase insurance, also create a successful health insurance market. Now the number of citizens, who are subject to state insurance has reached 900 thousand people. Between 2007 and 2011, soldiers, police officers, retired people, students, children under 6 years and people under 18 with disabilities received free medical insurance. By the summer of 2013, medicine became completely free for retired people, the disabled, the poor, children under six years of age, students and military personnel. Furthermore, a year later, another innovation appeared - all Georgian citizens aged 6 to 60 years should pay only 30% of the treatment cost. The remaining 70% is covered by the state. The healthcare system of Georgia is characterized by the absence of significant pooling of financial resources, since most of the medical services are directly paid by patients without the use of prepayment schemes. As part of the implementation of state programs for the provision of medical care, organizational ties are shifting from an integrated to a contractual model. Since 1996, medical personnel are hired directly by medical institutions. All medical institutions received the status of independent manufacturers. An exception is the rural practice of primary care doctors, including a doctor and a nurse. Currently, they are financed on a fund basis. Within the framework of financing state programs of medical care, various payment mechanisms are used depending on the type of provided services ( *Sistemy zdravookhraneniya: vremya peremen. Gruziya.*(2010), p. 2)) [7]. The problem of the shortage of doctors in rural areas was resolved as follows: the development principle of hospital infrastructure: "the hospital is in 45-minute access to any populated locality", as well as the allocation of state grants in the amount of \$ 1,200 to each rural doctor to equip the workplace. Another attempt to improve health financing is to increase the number of officially paid services. The privatization of medical facilities is widely practiced. The process is supported by both medical personnel and the population, interested in obtaining better services at their own expense.

## **2.2. Reforms in the Republic of Azerbaijan**

Concerning Azerbaijan Republic, it should be mentioned that the analysis shows less funds allocation for financing the health sector in our country than in all other Soviet republics (tab. 1). The collapse of the Soviet Union exacerbated the economic and political situation in the country. Reduced government revenue has affected health financing. In the 1990s. and early 2000s. there was a significant decrease in government expenditures on health care in real terms, and the share of expenditures in percentage of GDP decreased (tab. 2).

*Table following on the next page*

<b>Soviet republics</b>	<b>1985 y.</b>	<b>1990 y.</b>
Russian SFSR	60,2	80,7
Ukrainian SSR	52,6	69,6
Belorussian SSR	55,3	75,3
Uzbek SSR	45,2	62,0
Kazakh SSR	52,4	69,2
Kirghiz SSR	44,3	58,0
Tajik SSR	41,8	56,5
Turkmen SSR	44,5	60,4
Latvian SSR	70,0	88,7
Lithuanian SSR	65,3	81,8
Estonian SSR	66,9	87,8
Armenian SSR	49,3	61,7
Georgian SSR	53,6	74,1
<b>Azerbaijan SSR</b>	<b>39,4</b>	<b>54,2</b>

*Table 1: Expenditures on health by state budgets of the Soviet republics per capita (without centralized capital investments, in rubles)*

*Source: Ivanova N.1991, p. 10, [4]*

But the reality was that even these funds were not completely spent. According to the data provided by Ministry of Health, only 66.4% of the allocated funds was spent in 1998, and almost 83% in 1999 [10]. The point is that the Ministry of Finance set a strict budget for expenditure items, which is not subject to redistribution. Thereby, part of the funds that remained unused was returned to the Ministry of Finance. Azerbaijan has entered a period of reforms with a double burden of disease, characterized for both developed and developing countries. In 1994, a ceasefire was signed in Nagorno-Karabakh.

	1990	1995	1998	2000	2002	2003	2004	2005	2010	2015	2018
Government spending on health care, % of GDP	2,8	1,4	0,9	0,8	0,8	0,8	0,9	0,9	1	1.3	0.9
Government spending on health care, % of total government spending	8,8	6,9	5,8	5,3	4,8	4,4	4,8	5,3	3.6	3.9	3.1

*Table 2: Dynamics of government spending on health care in Azerbaijan*

*Source: data of the Azerbaijan State Statistical Committee [11]*

It was the beginning of a fundamental economic transformation. The growth rate of the economy in country increased gradually, inflation fell from 1600% in 1994 to 2-3% in 2002 (Kholli D., Akhundov O., Nolte E.,(2004), p. 8) [5]. Reforms adopted in various sectors, including healthcare. The constitution, adopted in 1995, guaranteed citizens the right to access to medical care; medical care was provided by state medical institutions free of charge (except for some services). The health system during that time and still has not changed very much. Medical facilities are almost entirely owned by the Ministry of Health and local authorities (excluding a small number of private medical facilities). There is still departmental medicine serving about 5% of the population. Funding and management issues are delineated. The Ministry of Health is responsible for managing the health system without the necessary tools to impact, and until 2001 even without the necessary and useful information for this.

Starting from this year, district health departments give report to the Ministry of Health on budgets and expenditures. However, reports are presented once a year and contain incomplete information. On the other hand, the serious problems with accountability are the consequences of such a system. At the same time, should be mentioned a positive trend in the distribution of centralized and local health care budgets, based on an increase in the share of centralized expenses, which will enable the Ministry of Health to more rationally and purposefully use of available funds, in particular, for centralized procurement and systematic distribution of free medicines for population. Since 1994, according to decree of president, in order to form an additional source of financing, some specialized services have been declared paid. The presidential decree of January 27, 1997 allowed private entrepreneurship in the field of medicament, traditional and alternative medicine. Privatization mainly affected small dental clinics, as well as the pharmaceutical industry. During the same year, a law was adopted on the protection of public health, which, particularly determined the financing system and the list of medical services included in the guarantee package. All other services became paid (excluding some categories of the population). The patient had the right to choose a primary care physician. Reforms carried out in the health sector of Azerbaijan have determined the system of its financing. According to the law of 1997 "On the protection of the population" there are the following sources of financing:

- the state budget;
- compulsory health insurance;
- voluntary health insurance;
- donations from legal entities and individuals;
- other sources that do not contradict the law.

Until 2020, the state budget represented by the central (republican) and local budgets was the official source of healthcare financing. However, low funding, still based on Soviet mechanisms, created a gap between guarantees and reality, created a lot of problems in the healthcare system and contributed to the development of the private sector (see table 2). The official payment for medical services in state medical institutions was introduced in 1998 in order to reduce the shadow market, also as an additional source of funding. The funds from official payment for services were mainly spent on additional salaries for doctors, as well as on the purchase of medicines and in 2004 amounted to about 10% of the local health budget (Kholli D., Akhundov O., Nolte E..(2004) , p. 22)[5]. However, 18% of the earned funds were transferred to the Ministry of Finance as a value-added tax on the medical institutions, and therefore, this money was lost for the health budget. It was intended to increase the health budget by 10% introducing service charges. However, this funding policy was unsuccessful. First, release planning was not well-planned. Thereby, exemption from payment was granted to the majority of the population (approximately 75% of the population) (State Programme on Poverty Reduction and Economic Development.2003-2005. (2003) , p. 74)[9]. Secondly, the introduction of paid services was incorrectly organized and significant portion of the funds flowed into the pockets of doctors, bypassing the general treasury. Thirdly, the introduction of paid services was accompanied by a decrease in government funding. Since February 2008, by order of the Minister of Health, paid medical services were canceled in all state institutions, which are the part of the Ministry of Health and financed from the state budget. The decision was caused by "an increase in the healthcare budget, which amounted to 385 million AZN in 2008 (\$ 1 = 0.81 AZN)" (for comparison, health care expenses made up 257.2 million AZN in 2007). Nowadays, Azerbaijan has a wide network of private medical institutions, which have a crucial impact on providing the middle and upper-middle class with both medical and preventive services. Since 2020, the country has begun the phased introduction of compulsory health insurance.

The law on compulsory health insurance was signed in 1999. During the years 2000 and 2001, 2.2 million US dollars were allocated from the budget for these purposes. However, taking into account that there were many inaccuracies and gaps in the law, money was returned to the Ministry of Finance, since it was not clear how exactly to use this money. Contemporaneously, pilot projects were carried out in the regions of the country using medical insurance mechanisms. A number of successful pilot projects were carried out, which were introduced in certain regions of the country and aimed to develop primary care, providing the population with affordable and high-quality medical services, as well as acquiring appropriate skills and knowledge for their further use on a larger scale. For performance evaluation, control areas outside the scope of the project were used. The followings were foreseen:

- rationalization of medical services with the active participation of the public;
- Introduction of primary health care models with the support of consultants and assistants;
- improving the quality and accessibility of primary health care in about eight medical facilities in each district;
- training of managerial personnel in the health care system of districts using a modern management method;
- advanced training of medical personnel at the workplace according to existing adapted programs, as well as new programs in various fields of clinical medicine (State Programme on Poverty Reduction and Economic Development. Annual progress report 2003 ) [8].

The first project began in 1997 in Guba, and then spread to Lankaran, Masalli, Neftchala and Jalilabad. The project was supported by UNICEF and lasted three years. The second project was during 2001-2004 years in such cities as Gekchay, Khachmaz, Shamkir, Sharur and Salyan with the support of the World Bank. The total cost of the project was estimated at 5.5 million dollars, out of which 4 million dollars were provided by the World Bank, and insignificant portion of the total cost was provided by Azerbaijani government. The implemented reforms have had a positive impact on public health in terms of improving accessibility and quality of health services (especially for the poor). The main issue was the lack of doctors provided with appropriate training. Many other similar pilot projects were funded by UNICEF, the United States Agency for International Development, “Unocl” and a non-profit organization Mercy Corps, and the World Bank. An interesting model is presented, introduced by the humanitarian organization Oxfam. The implementation of the primary link implies a contribution of 1 manat with each family. The explosions of this participant suggest the occurrence of disease, diagnosis, basic laboratory tests, treatment, vaccination, care for pregnant women, as well as public education. The population actively participated in making various decisions. As a result, 95.7% of the population received pilot testimony regarding the full provision of drugs for outpatient treatment, and 63.3% were satisfied with the services provided (İqtisadi Tedqiqatlar Merkezi.(2006), p 27)) [3]. The State Agency for Compulsory Medical Insurance under the Cabinet of Ministers of the Republic of Azerbaijan was established by order of the President of the Republic of Azerbaijan in 2007 and started its activities in 2016. The Agency is a legal entity that provides the implementation of compulsory medical insurance, accumulating funds to finance medical services included in base package. The agency is also a purchaser of medical services and pays for all necessary medical expenses. The most crucial point in establishing an agency is an attempt to differentiate the buyer from the supplier. The main functions of the agency, as a purchaser of health services, are to take the financial risk of using medical care and act as an agent for patients and consumers. Being a consumer agent, the agency should act as a prudent purchaser of medical care on behalf of the consumer, providing the consumer with information on the quality of care and thereby contributing to a more informed choice of medical provider by consumer. It will be a serious step towards the formation of a competitive environment, and accordingly, rationalization of costs, improvement of the quality of medical

services, and ultimately lead to an increase in the effectiveness of healthcare financing. Mandatory health insurance (MHI) services will consist of basic and additional parts. Medical services in the basic part (preliminary medical examination, urgent care and ambulance) will be provided from the state budget. Therefore, funds from the state budget of next year will be 900 million AZN, allocated for 10 million population (90 AZN per person). In order to take advantage of specialized medical care related to the additional part, mandatory health insurance must be paid. For this purpose, a two percent from the salary and two percent from the salary fund of the employer will be deducted as a contribution from the salaries of persons employed in the state and oil sectors. For the rest (persons employed in the private sector; individuals performing work (services) based on contracts) monthly fixed payments is 10 AZN. For the privileged population, which accounts for 45% of the country's population (retired people, pregnant women, children, people receiving social benefits, etc.), insurance contributions will be paid from the state budget. VHI was introduced in 1995. Nowadays, any self-respecting insurance company considers it a duty to provide voluntary health insurance services, among them the followings: Paşa Insurance, MBASK, Standard Insurance, International Insurance Company, Xalq Insurance, Ateshgah, Most Insurance, Thames Insurance Group, Atasigorta, Garant Insurance, A-GROUP. Services are provided through a network of private and public hospitals. In 2003, approximately 15,000 people, or less than 0.1% of the country's population, were covered by voluntary medical insurance (Kholli D., Akhundov O., Nolte E.(2004) , p. 23)[5]. According to 2006 data, 0.2% of the population is covered by voluntary medical insurance (Zoidze A., Mekhtiev F.(2006) , p. 1)0[12]. In the first quarter of 2008, health insurance was one of the main types of insurance services, occupying 12, 1 percent of market.

### 3. CONCLUSION

Therefore, in both countries, the financing system has experience certain changes, which vary in mechanisms, areas, however, both are aimed to improve access to medical services and expanding their coverage of the population. In both countries, mechanisms have been applied to protect vulnerable people. In both cases, an additional source of financing was attracted in the form of private funds of the population: either at the time of the provision of medical services, or tentatively in the form of voluntary medical insurance policies. The scale of the crisis in Georgia forced the government to take more radical steps than in Azerbaijan, where the economic situation was more successful: the package of free medical services guaranteed by the state was greatly reduced. The introduction of Compulsory Health Insurance in Azerbaijan is still at the initial stage, however, a number of pilot projects were implemented in certain regions of the country, which allowed us to make certain conclusions for the further extension of the process throughout the country. At the same time, in Georgia, the introduction of compulsory medical insurance is completed and not very successful in the chain of health care reform.

### LITERATURE:

1. Cichon M.(1992) Development of health insurance. Copenhagen: WHO.
2. Finansirovanie zdravookhraneniya: al'ternativy dlya Evropy(2002)/ Pod. red. Mossialos E., Dikson A., Figeyras Zh., Kuttsin D./ Per. s angl. M.: Izdatel'stvo «Ves' Mir», 352 s.
3. İqtisadi Tedqiqatlar Merkezi.(2006) İlkin shiyye xidmetlerinin teşkili və maliyyeleşdirilməsi 3 cildde, 1 cild: Azərbaycanda movcud veziyyet ve islahatlar konsepsiyası. Birinci kitab. Bakı,, 151 s.
4. Ivanova N. G.(1991) Finansirovanie zdravookhraneniya na regional'nom urovne. Avtoreferat dissertatsii na soiskanie uchenoy stepeni kandidata ekonomicheskikh nauk, Leningrad, 17 s

5. Kholli D., Akhundov O., Nolte E..(2004) Sistemy zdravookhraneniya: vremya peremen - Azerbaydzhan. Evropeyskoe regional'noe byuro VOZ ot imeni Evropeyskoy observatorii po sistemam zdravookhraneniya, 76 s.
6. Saltman R.B., Figeyras Dzh.(2000) Reformy sistemy zdravookhraneniya v Evrope. Analiz sovremennykh strategiy. Per. s angl. M., “GEOTAR MEDITsINA”, 431 p.
7. Sistemy zdravookhraneniya: vremya peremen. Gruzija.(2010) Referat obzora. Evropeyskaya observatoriya po sistemam i politike zdravookhraneniya, , 5 s.
8. State Programme on Poverty Reduction and Economic Development. Annual progress report 2003. [http:// www.povlibrary. Worldbank.org/files/Azerbaijan\\_ PRSP.pdf](http://www.povlibrary.org/files/Azerbaijan_PRSP.pdf)
9. State Programme on Poverty Reduction and Economic Development.2003-2005. (2003) Baku,, 190p.
10. The official websayt of Department of Informatics and Statistics of Ministry of Health of Azerbaijan Republic: [www.mednet.az](http://www.mednet.az)
11. The official website of the State Committee for Statistical Azerbaijan Republic, <http://www.stat.gov.az/>
12. Zoidze A., Mekhtiev F.(2006) Predlozheniya po Programme Finansirovaniya Zdravookhraneniya v Azerbaydzhan. USAID, IMC, Abt, CIF., 35 s.

## SUSTAINABLE ECONOMIC DEVELOPMENT AND PROVISION OF SOCIAL WELFARE OF THE POPULATION

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### **ABSTRACT**

*Sustainable economies are considered to meet the needs of the economy and the population as a whole, without interruption, and as a result of its steady growth. As long as the stable and balanced growth of different sectors of the economy is sustained, its sustainability will be as long as it is. Economic sustainability is a complex and multifaceted process that serves to achieve economic and social stability in the country. The economic prosperity and progress of any country is complemented by social policy, and the generalized indicator of sustainable growth is the social welfare of the population. The concept of 'sustainability' is controversial when it is used in a number of meanings (sustainable growth, sustainable economic growth, sustainable economics, etc.) in the economic literature. The main challenge facing sustainable development is to address existing problems first and foremost at the national level. The philosophical essence is the rational and economical use of the planet's natural resources, the environment protection, preservation, social and economic well-being of the population, improvement of the quality of life of present and future generations. At the same time, sustainable development is the criterion for socio-economic and environmental development that is focused on meeting the needs of people and protecting peace around the world. As we know, the economic development, progress of each country is complemented by social policies and the globalized population index 20. - Priorities for sustainable development until the end of the year are the elimination of social problems, the strengthening of social protection, and the provision of sustainable economic development that will enhance the welfare of every citizen. Decision-making and implementation are the means of realizing the sustainability of the economy in order to create an enabling environment for improving the welfare and quality of life of the country. Sustainable development is primarily intended for economic growth, the elimination of all forms and dimensions of society, the environment, and poverty, as the formation of a socially oriented economic system based on free market relations - independent economics, natural and technical production, as well as active involvement of scientific and technical potential into economic turnover, efficient integration of national economy into world economy system, strategic directions of sustainable sustainable economic development model of Azerbaijan, determination of economic, social and humanitarian development path of the country, social problems and social problems and fulfilling their desires is the main task of this model.*

**Keywords:** *Sustainable economy, Durable development, Social economic, Social welfare, Social politics*

### **1. INTRODUCTION**

Sustainability of the economy as a whole is considered to be the continuous satisfaction of economic development and the growing needs of the population and its sustainable growth. The more sustainable and stable the development of many sectors of the economy, the longer its sustainability. A sustainable economy is a complex and multifaceted process that maintains both social and economic stability in the country. Let us take into account that the economic development and progress of each country is complemented by social policy, and the generalized indicator of sustainable development is mainly the social welfare of the population.

The concept of sustainable development was first introduced in 1987 by the United Nations Commission to ensure a balance between the solution of socio-economic problems and the preservation of the environment in order to overcome the negative effects of scientific and technological progress. The main goal here is to ensure balanced and uninterrupted economic growth, both within the country and at the global level, without going beyond environmental opportunities. The Republic of Azerbaijan has also joined the commitments of the member states of the United Nations, which include 17 sustainable development and 169 goals from the "Transformation of the World: Agenda for Sustainable Development until 2030" [1] and implements it through the National Coordinating Council. These commitments are human health, improving the environment, eradicating poverty, and so on. The concept of sustainable economic development was adopted in 1992 at the 24th International Conference of the United Nations. It is taken into account that its main idea is the sustainable development of the world economy, taking into account the needs of present and future generations. It should be noted that if sustainable economic development is the continuous satisfaction of the growing needs of the economy and the population as a whole, the result of this continuous and sustainable economic growth is a sustainable economy. The sustainability of the economy reflects the stable, balanced and uninterrupted growth of its individual sectors.

## **2. GOALS OF SUSTAINABLE ECONOMIC DEVELOPMENT**

The future of independent Azerbaijan depends on the effective use of the achievements of scientific and technological progress. Experts are well aware that sustainable economic development cannot be achieved without ensuring the effectiveness of scientific and technological progress. There is a legitimacy of such a methodological principle of the effective use of scientific and technical progress that its economic and social consequences must be considered in unison. Socio-economic problems of scientific and technical progress include demographic processes, social infrastructure, living standards, labor efficiency, labor relief, reduction of injuries and illnesses, their impact on labor productivity growth, as well as structural changes under the influence of scientific and technological progress. Historical experience shows that a country that gathers its national strength in advanced fields of science and technology can lead the world market. The main goal of the economic and social policy of each state is to ensure employment, reduce unemployment and poverty, and organize social protection for those in need. Therefore, in the current situation, serious problems can arise if the issues of labor market, employment and unemployment are not analyzed in a scientific and theoretical way, and the directions of formation based on the experience of developed countries in this field are not correctly identified. It is also important to note that scientific achievements are materialized not only in techniques and technologies, but also in the minds and habits of people. Any change in the techniques and technologies used in various fields can lead to psychological and organizational retraining and improvement of personnel, labor management, normalization, remuneration, etc. requires changes [2]. The problem of developing a mechanism for resolving social tensions, which leads to the improvement of living conditions of the population in the context of the development of market relations, is very relevant. The emergence of social protection is conditioned by the necessity of resolving the important contradiction between the natural needs and real possibilities of each individual in order to ensure his personal well-being. This requires the development and large-scale implementation of social protection programs. The importance of addressing the issues raised in order to further improve the social welfare of the population is as follows:

- To generalize the historical, political, ideological and economic preconditions for the formation of social protection of the population;
- To ensure the essence of social protection as a form of protection of social risks of the population;



- To disclose the systemic nature of social welfare and social protection of the population;
- Generalize methodological approaches to assessing the living standards of the population and the effectiveness of the social protection system;
- To assess the effectiveness of social protection of the population both at the national and regional levels;
- To propose the main directions aimed at increasing the effectiveness of social welfare aimed at improving the social welfare of the population and the social protection system.

There is an urgent need for scientifically based approaches to the development and application of new methods of social mechanisms, models to increase the effectiveness of the management of any area relevant to the socio-economic development of society. As we have noted in the course of work in this direction, technological progress and the development of human capital always attract attention. The profitability of the knowledge economy and the rapid technological advancement are not possible without a highly skilled workforce. This approach is based on such an idea. The economy is for human development. Human beings are not for economic development [3]. It is known that the social welfare and protection of the population reflects various aspects of the relationship between the state and the population based on historical, political, economic and ideological conditions. Social risks (unemployment, labor injury or occupational disease, disability, temporary disability, motherhood, loss of head of household, old age) in order to maintain social standards set by society for any group of the population, such as social welfare, social protection, socio-economic category ) was found to be a management system.

### **3. REALIZATION OF SOCIAL WELFARE OF THE POPULATION IN SUSTAINABLE ECONOMIC DEVELOPMENT**

At the level of sustainable economic development, it is important to monitor the key issues that ensure the social welfare of the population. For example: factors that lead to a decline in living standards, protection from the negative effects of industrial production, providing members of society with a minimum subsistence level, financial assistance to those in need for objective reasons, creating conditions for citizens to live and work as much as possible an example can be given. The assessment of the effectiveness of sustainable economic development and the social protection of the population as a whole should be multilevel and comprehensive, and should include an analysis of economic, social and environmental outcomes, as well as funding from financial sources. The analysis shows that in the context of reforming economic relations, it is important to make some recommendations for its improvement:

- To take into account the strengthening of self-defense of the able-bodied population;
- To prevent the deformation of its basic principles in the field of pension provision (the principle of direct connection with the savings earned during the period of work);
- To give the status of poverty benefits to the balances given to children and to increase them and ensure that they are given only to needy citizens;
- Creation of an innovative system of social protection of the population with the application of new social and information technologies in the activity of the service;
- Development of long-term strategic social programs;
- Development of social partnership and volunteerism;
- Improving the staff training system;
- Development of philanthropy, volunteerism and field interaction;
- Educating the population about the activities of the fields and social programs, etc.

The economic development and progress of each country is complemented by social policy, and the generalized indicator of sustainable development is the social welfare of the population. The commitments arising from the "Global Transformation Agenda for Sustainable Development until 2030" include the elimination of social problems, ensuring sustainable economic development that will increase the welfare of every citizen, and so on. The adoption and implementation of decrees and decisions in order to create an environment that allows to increase the level of welfare and quality of life of the country's population is a means to achieve economic sustainability. Ensuring the stability of the economy and solving social problems depends on the socio-economic policy pursued by the state and targeted programs. Such an economic strategy is defined in the "12 Strategic Roadmaps for the National Economy and Sector II of the Economy" dated 2016 [4]. The Strategic Roadmap states that in the context of low oil prices, building a new economy and identifying new sources of economic growth by creating its optimal structure, improving the structure of the national economy, ensuring balance between the real and financial sectors to ensure sustainable development of Sector II. With the sustainable implementation of economic reforms, the elimination of the country's dependence on oil and the creation of a diversified economy, increasing productivity and efficiency in these areas will ensure the sustainable development of the national economy. It is an inevitable fact that the development of the republic's economy also comes at the expense of rich natural resources. It is necessary to balance these rich natural resources with the balanced development of the regions, the formation of specialization parameters, industrialization, employment, the motives of the economically active population, the expansion and deepening of the innovative base. This need related to the social policy of the state is characterized by the identification of alternatives to improve the living standards of the population, which is the main economic factor of society, the labor force and its reproduction and efficiency. Along with the population growth rate, in some countries socio-economic, ethnic, family, environmental, etc. problems of human significance occur as a result of the effects of events. For these reasons, the improvement of human and quality of life is solved through the joint efforts of influential, official, international, public, non-governmental organizations and institutions. It should be noted that economic growth, which is also an economic factor of social policy, is formed by the distribution system and the mechanisms of state regulation in the organization of the market. Social policy is a state policy, strategic goals, conceptual directions are formulated and forecasted in accordance with the theory of sustainable systems. The task of sustainable economic development and further improvement of the welfare of the population is the main goal of social policy, as well as the comprehensive development of man, his system of needs and the methodology and means of organizing effective forms of meeting demand. The level of development in a country is characterized by the living standards of its population, the poverty line and the subsistence level. The welfare of the population is expressed in the priority of socially oriented measures in the economic development of the state, the main tasks and implementation mechanisms in the involvement of other areas in social goals. The economic power of the state and the problems of economic growth. The strategy of sustainable development is perceived as the relationship between social policy and economic growth. Note that the need to further improve the welfare of the population is perceived as the relationship between social policy and economic growth, as well as living standards and economic activity, the regulation of supply and demand, and the law of balanced development. In the formation of social policy in order to further improve the welfare of the population:

- Demographic composition of the population;
- Level of employment;
- Field of labor activity;
- Level of material security of the population;
- Priorities in life activities, etc.

There are differences in Therefore, inequality in the formation of welfare and social policy, security policy is formed taking into account the causes of their emergence. It should be noted that social polarization is formed by objective and subjective factors in the direction of market-type development. That is why the policy of differentiation and the main ways of its staging, taking into account the provision of material and moral values for social welfare and the diversity of social choices, covers the implementation of social policy. Material inequality is also shaped by income levels, distribution, social status, and economic routes. It reflects the income of the population, its consumer behavior, purchasing power and needs for social goods in market selection. Social welfare, social policy represents the global economy, all social strata of society. Thus, it covers a wide range of issues such as material well-being, poverty, social security, lifestyle, quality of life and ways to solve them. The formation of social policy combines the main parameters and directions of democracy and stability of the state. Minimum norms for human survival are used to measure the objective reasons for the regulation and polarization of social policy. It should be noted that the minimum social norms can be applied as follows: social norms of quality of life and pension norms, minimum wage and state regulation; development of a housing reform program based on housing and communal services norms; system of benefits and assistance, improvement of lifestyle and formation of normative-legal base, norms of analysis and social norms of regulation of quality of life, socio-economic norms in regulation of business activity and their improvement, etc. Although the standard of living in Azerbaijan has historical roots, it lags behind the advanced, developed countries of the world, today the gradual increase in the social policy of the state is carried out on a constantly rising line. The main directions of the social policy of the Azerbaijani state in a market economy are as follows:

- Determination of the minimum consumption budget and development and implementation of the mechanism of protection of the population from inflation;
- Linking the social situation of the population with the development of the country's economy;
- Strengthening social assistance to the disabled, etc.

We must take into account that the most important and important conditions for improving the welfare of the population are:

- Creation of new jobs;
- Strengthening the social protection of the unemployed population;
- Regulation of labor markets, etc.

All this is a key component of the socio-economic policy of our state. It is known that in order to improve the living standards and social welfare of the population, it is necessary to develop the economy, increase the sustainable development of the non-oil sector by focusing on the non-oil sector, and ensure its sustainability. This is possible with the sustainable and rapid development of the economy and opens up opportunities for solving the main social problems of society. Thus, ensuring sustainable and sustainable development is a source of improving the social situation of the population, ensuring welfare. Therefore, our state has set as its most important task the control over the adoption and timely implementation of social programs to prevent the processes taking place in the world, to prevent negative situations, to strengthen the social protection of the population. We know that employment is an important part of social policy and a factor that further improves the level of welfare by increasing its real income. Employment, ie employment of the population, allows a certain part of the population to solve their social problems at the expense of their own labor. The more people are employed, the more the state can spend on the poor, the unemployed, pensioners and the disabled. Ensuring employment would also prevent the influx of people from rural to urban areas, including to

foreign countries. In this regard, the implementation of measures to accelerate the development of the economy in the regions in the state programs on socio-economic development of the regions in recent years, the commissioning of new production facilities to increase competitive, productive local production, the creation of service areas have created conditions for balanced development. The developed labor market in each society allows to fully and effectively use the production, scientific and potential of the country, to eliminate the main problems in the field of employment. The Strategic Roadmap states that human capital plays a crucial role in increasing labor productivity, sustainable economic growth, increasing the competitiveness of the manufacturing and service sectors, and the country's integration into global markets. To achieve this, improve the quality in all sectors of the economy, including education, ensure continuity in the development of knowledge and skills of employees through training, adapt qualified training to the requirements of the labor market, stimulate investment in research and development, efficient use of existing human capital is required. The Strategic Roadmap also envisages the improvement and development of human resource skills in manufacturing enterprises in the country, the continuation of the process of training and retraining of the workforce for cluster development, and the implementation of various incentives and incentives to improve the recruitment and training mechanism [5].

#### **4. CONCLUSION**

The main directions of social policy implemented in the Republic of Azerbaijan in recent years are the implementation of employment policy and efficient use of labor, development of quality indicators in employment, creation of decent jobs, inclusion in employment and increasing participation of socially vulnerable groups in the labor market. In order to ensure effective employment based on the existing demographic trends and development prospects in Azerbaijan, the identified economic priorities of the country, the "Employment Strategy of the Republic of Azerbaijan for 2019-2030" was approved by the President of the Republic of Azerbaijan on October 30, 2018. This strategy aims to improve the legal framework and institutional structure for regulating the labor market in Azerbaijan, which will promote employment and decent work, increase labor force capacity, increase labor productivity, expand the scope of active employment measures and strengthen the integration of vulnerable groups into the labor market. , will ensure the transition of employment policy from an extensive to an intensive phase, reflecting the issues of sustainable social dialogue, updating labor standards, development of the labor market monitoring and forecasting system. [6] Reforms in the country's labor market have led to fundamental qualitative changes in the economy, and dynamic economic development has been ensured. The main goal is to ensure a regional balance of economic development, further improve the social welfare and living standards of the population in the regions, the consistent and consistent implementation of measures aimed at the dynamic development of the country's economy, especially the non-oil sector. In regulating the labor market, it is equally important to provide employment for every potentially able-bodied member of society. From this point of view, speaking about the problems of employment, the adaptation of creative people with limited physical activity to the society remains relevant. From the moment of birth, every human being is considered an equal member of the state and society, and from this it is determined what he will receive and give. The conditions and opportunities for all this are not the same for everyone. When a person is free and in the center of attention, it is easier to meet all the necessary requirements. However, since everything is the result of physical and mental activity, mental work complements physical activity. Man, on the other hand, may be deprived of physical activity for one reason or another because he was a physiological being. Today, many of our citizens with disabilities want to become active members of society. The intellectual level of some of them can be envied. In developed countries, such as the United States, one of the guiding principles in the development

of society is that the poverty of people with disabilities is considered unacceptable by society and the state. [7] In general, the basis of future economic development, both globally and in our country, which is part of it, is the use of quality labor - human capital. Human capital is the sum of a person's knowledge, skills, connections and professionalism in order for each individual to realize himself in society and use his opportunities. This requires the constant renewal of the mechanism of education in the country and its directing to the development of the economy. With the sustainable and sustainable development of the economy, the expansion of entrepreneurial activity remains a priority and has a special role in improving the welfare of the population. As a result of structural reforms, as the number of entrepreneurs increases, so does the employment of others, while increasing their incomes, the number of state shareholders gradually decreases, and the budget receives additional funds, which contributes to the welfare of the population. Also, the continuation of entrepreneurial activity and the expansion of state support to improve the investment and business environment provides dynamic and balanced growth, which creates conditions for sustainable economic development. At the same time, the balanced and dynamic development of agricultural sectors, which produce daily necessities to improve the welfare of the population in agriculture, plays an important role in ensuring sustainable development. The analysis of the development of the agricultural sector in the world shows that the implementation of effective and preventive measures to ensure the sustainability of production in this area is with the support and regulation of the state. It is intended to increase the export of traditional industries, fruits and vegetables, hazelnuts, almonds, olive oil, sugar beet, silk, cotton, tobacco, carpet weaving, winemaking, and the fishing industry, which have great export potential and the ability to bring currency to the country. Continuation of state support for the implementation of works accelerates the provision of economic stability. Finally, it can be concluded that ensuring sustainable and dynamic development depends significantly on the ability of national economic entities to penetrate and benefit from the world market. The expansion of Azerbaijan's international relations has made it an important part of the world economy. Thus, our country has foreign trade turnover with Turkey, Iran, Russia, Germany, China, Taiwan, France, Great Britain, the United States, Israel, India, Georgia, the Czech Republic, Bulgaria, Ukraine and other countries. The main goal of our state's social policy is to prevent negative developments in the world today, to adopt and implement social programs to strengthen the social protection of the population, and to exercise control over them.

#### **LITERATURE:**

1. Transformation of the world: a diary in the field of sustainable development until 2030. UN, 2015
2. Isgandarov R.K. Scientific and technical progress: socio-economic aspects. Baku. Science, 2010, 656 p.
3. [http: /www.azerbaijan-news.az/view - 121274 / Effective - founder of social protection strategy](http://www.azerbaijan-news.az/view - 121274 / Effective - founder of social protection strategy)
4. Decree of the President of the Republic of Azerbaijan "On approval of the Strategic Road Map for the national economy and key sectors of the economy". December 6, 2016. [http: // economic reform.org//](http://economicreform.org//)
5. Strategic Road Map for the perspective of the national economy of the Republic of Azerbaijan. Baku 2016
6. "Employment Strategy of the Republic of Azerbaijan for 2019-2030". Baku 2019
7. Rasulova M., Heydarov P. World experience in the field of integration of people with disabilities into society. Scientific-practical journal "Problems of international law and integration". Baku 2019

## REFORMING UNIVERSITY FINANCE: EMERGING TRENDS, CHALLENGES AND PROSPECTS

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### ABSTRACT

*Priority development of science and education is the most important task of Azerbaijan economy. The topic of financing higher education and improving its effectiveness has been discussed for the last 10 years, after the global financial crisis. The article demonstrates the experience of international financing of higher educational institutions, as well as highlights those models that can be reasonably applied for Azerbaijan practices to ensure the development of both the universities themselves and the educational system as a whole. The article deals with Azerbaijan and foreign experience in the financing of higher education. Marked the most significant trends and circumstances that led to organizational restructuring of higher education and the formation of new financing mechanisms.*

**Keywords:** *University, Higher professional education, modernization of the education system economy of education, reforms, experience, efficiency, state education policy, education funding*

### 1. INTRODUCTION

In the context of global information integration, which has radically increased in the last decade in connection with the accelerated development of information and communication technologies, an important task for Azerbaijani state bodies is to increase the international competitiveness of domestic higher education. The key condition here is the improvement of financial support systems for educational activities. Reforms of higher education in Azerbaijan are carried out in the framework of cooperation with the European structures, the European Union and the European Commission. Azerbaijan's accession to the Bologna Process plays a special role in the reform of higher education. In 2005 Azerbaijan joined the process begun in 1999 and implying the creation of a single higher education space in Europe. This accession revealed the need to create in Azerbaijan a higher education sphere in line with European standards. Since 2005, Azerbaijan has been implementing a number of reforms in this direction. The most important stage in the reforms of the higher education system is the adoption of the state program approved by the President of the Republic of Azerbaijan on May 22, 2009. The main goal of the "State Program of Reforms in the Higher Education System of the Republic of Azerbaijan in 2009-2013" is the formation of a socially and economically rational higher education system for integrating the country's higher education system into the European educational space, building a system in accordance with the principles of the Bologna Process, ensuring attractiveness and competitiveness, meeting the needs of the country's economy in personnel with higher education according to the requirements of development, as well as creating the human resources in accordance with the requirements of the information society and based on knowledge of the economy, and providing the population with the opportunity to receive higher education that meets modern requirements (Mamedov, Z.F., 2019). To implement the policy of expanding educational reforms in Azerbaijan and to bring the education

system in line with world standards, a need for the formation of a new legislative base arose. To this end, on June 19, 2009, after extensive public discussions in the country's parliament, a new Education Act was adopted and its application began. On 10-02-2010, Decree 295 of the President of Azerbaijan approved state program on reforming the country's higher education system. The principles of state payment of educational services are also laid down in the Decree 120 of the Government of Azerbaijan on June 25, 2010, according to which, non-state educational institutions accredited by the state can receive financing of educational activities from budgetary funds. The normative per capita funding basis is considered one of the central measures in the declared reform. The law establishes almost the same principles for financing public and private institutions. At present, there are 52 universities in Azerbaijan (20 state ones, 18 state ones of special purpose, 11 private and 2 branches of Russian universities). Formation of a competitive environment in Azerbaijan is carried out through the introduction of normative-per capita financing, in which budgetary allocations to universities are provided in proportion to the number of budgetary students.

## **2. CHALLENGES REQUIRING REFORMATION AND MODERNIZATION IN THE HIGHER EDUCATION SYSTEM**

Most researchers agree that over the past decades, knowledge and competencies have become an active commodity in the market, the struggle between countries and regions is in the plane of struggle for human resources, for carriers of unique competencies. Hence, educational organizations become active participants in the economic process, moving from the model of "a safe of knowledge" to the model of "a provider of knowledge and competencies", and become more influential players in the market, determining the country's competitiveness.

Problems of higher education and science are increasingly occupying a key place on the agendas of various meetings and forums around the world. The socio-political, demographic and cultural face of the world is rapidly changing, the pace of the technological revolution is accelerating and all this certainly affects the global educational landscape. It is noted in the UNESCO Declaration 1998 (UNESCO, 1998) that the higher education system is facing serious difficulties in many areas, this applies to:

1. Financing,
2. Ensuring the relevance of educational programs, equal access to them,
3. Promoting development of professional qualification,
4. Learning specific skills, ensuring a high level of teaching,
5. Research and services, employment opportunities for graduates,
6. Signing of partnership agreements and building mutually beneficial international cooperation (Klyachko, T.L., 2017)

These problems remain relevant, despite the fact that more than 20 years have passed since the adoption of the declaration. Currently, only 10 countries account for 80% of global research and development costs: the United States, China, Japan, Germany, Korea, France, India, Russia, the UK, and Brazil. The top ten countries which account for most of the research and development include the Republic of Korea (4.3%), Israel (4.1%), Japan (3.6%), Finland (3.2%), Sweden (3.2%), Denmark (3.1%), Austria (3%), Switzerland (3%), Germany (2.9%) and the USA (2.7%) (Abankina, I.V., 2019, 222). Like any sector, education needs significant funding to realize its goals and objectives. In recent years, there have been significant changes in the financing of state higher education systems in different countries, as well as in the mechanisms for distributing budget funds between higher education institutions. This is due to the sharp increase in the number of students in the education system and the limited budget resources, which requires increasing the efficiency of using state (budget) funds and attracting various extra-budgetary (non-state) sources.

Changes in the forms and mechanisms of financing are affected extensively by changes in the nature and content of higher education in connection with the need to form individual educational programs and diversify them according to the content, terms and forms of delivery of educational service to consumers. These trends are characteristic of many countries. Currently, in the context of the ongoing recession in the global economy, the problem of financing education is becoming more acute in most countries. In terms of resource constraints, a clear goal setting is necessary that will ensure validity and can increase the effectiveness of public investment in education. The size and objects of state financing can vary significantly both due to cyclical fluctuations in the economy and because of changes in the priorities of economic policy put forward in a particular period. Depending on the task set by the state, there may be different approaches to budget financing of state, municipal and non-state universities. As a rule, the objectives of changing the financing policy are to achieve high quality of the services provided, the need of the economy for a specific list of specialists, or the solution of one or another social problems. If the task is to provide specified sectors of the economy with highly qualified specialists, target point (including per capita) funding differentiated by specialties and universities is preferable. If the task is to increase the competition of educational institutions the funding should be aimed at establishing emulative relations between all market participants for the right to provide educational services under state order. When solving social problems: access to education and providing employment for students and teachers, the financial flows can have different addresses. First of all, ensuring the accessibility of education is solved through the mechanism of student financing. The task of employment of the population (students, teachers, employees) requires financing of universities in general, regardless of their form of ownership, specialties and areas of training. The challenges faced by the system of higher professional education required its reformation and modernization in the financing system. One of the most important issues is the issue of financing higher education, which represent, in fact, an investment in the future. An innovative breakthrough in the search for organizational structures and financing mechanisms that ensure the competitiveness of Azerbaijani higher education is recognized at all levels and by all participants in the educational services market. This is dictated by the fact that the higher education system is an integral part of the national innovation system, and investments in education, when effective, provide conditions for the emergence of innovative enterprises, the foundation of an innovative national economy. The need to modernize the financial mechanism of the Azerbaijani higher education system is fixed in government documents on the modern educational policy of Azerbaijan.

### **3. A NEW SEARCH FOR A HIGHER EDUCATION FINANCING MODEL: GLOBAL CHALLENGES AND NATIONAL RESPONSES**

In addition, the challenges that the higher education system must give adequate answers have become increasingly persistent in recent decades. In this regard, we note the most significant circumstances that directly determined the statement of the problem of organizational restructuring of the higher education system and forming of new financing mechanisms. Firstly, a new technological wave expected in the very near future, and acceleration of the global innovation process reduces the time of moral aging of human capital causing the need to increase and update education throughout human life. If the knowledge and skills of workers do not begin to be updated in time, then certain workers and national economies will begin to lose competitiveness. Secondly, the growing demand for high standards of quality of life in developed countries accompanied by significant investments in the social sphere has led to an increase in life span, in particular, its active, labour, phase. Thirdly, it is expected that innovation activity will shift to new sectors of the economy: the service sector (primarily information), in the field of energy conservation and the environment, that is industries that are directly related to improving the quality of life.



Fourthly, a new type of competition, in the field of innovation, does not reject competition at the level of cost savings, in particular, labour ones. One of the ways in this direction becomes the use of outsourcing opportunities and remote employment (for example, during the pandemic many citizens of the planet were isolated from the labour market) (Rozina, N.M., Zuev, V.M., 2015). Diversification of organizational forms of educational activity which forms competencies that are practically significant and in demand by the labour market, is reflected in the expansion of the practice of formal recognition (nostrification) of acquired skills and competencies regardless of where they are received. The labour market takes on a global character when national boundaries no longer exist for many professional cohorts, and human resources are characterized only by a set of knowledge, skills and competencies. These trends lead to changes in the sources and structure of investments in the education sector, increase competition in the educational services market, and require organizational restructuring of the higher education system and formation of new mechanisms for financing educational activities. An increase in the demand for higher education services is accompanied by an increase in the price of obtaining an educational product which led to a change in the sources and structure of investments in the education sector: with a decrease in the share of government spending, private sector costs (enterprises and households) increase, a multi-channel system of financing costs, in particular, lending, is developing. Increased competition in the market of educational services was also facilitated by the fact that the globalization of economic life with a tendency towards the infrastructural homogeneity of the world required mutually clear, “transparent” educational results and opened up access for citizens of different countries to educational resources around the world. Fundamental importance is attached not only to increasing autonomy in spending money, managing own resources, but also to stimulating universities in the direction of developing their development strategies. Budgetary funds are funds allocated to a university to ensure its core educational activities. The current economic state of the education system is usually characterized from the standpoint of insufficient budgetary funds allocated by the state to ensure its functioning. In most European countries, the share of state allocations dominates in the amount of funding for universities. Despite the growing trend towards financial independence, the share of public funds in the budgets of most universities in Western Europe remains at 70% and at 55.8% in Azerbaijan. The carried out analysis shows that today there are four models of Higher Education Financing in the world (Klyachko, T.L., Sinelnikov-Murylev, S.G., 2013):

1. Needs-oriented financing, budgetary funds come directly from the state to the university (Germany, England, and France). In the framework of this model, higher education institutions that have signed an agreement with the relevant state body undertake to train specialists necessary from a public point of view at predetermined agreed prices. The advantages of this model are that efficiency is increased and government costs are minimized at the same time. However, in this case, the compliance of the planned personnel training to the real needs of the labour market is determined by the degree of accuracy of the corresponding forecast estimates of the state.
2. Acquisition of educational services by the state from a university for specific purposes (Norway). An integral part of monitoring the effectiveness of the spending of funds allocated under the agreement was the annual internal audit of universities conducted under the supervision of the National Audit Office. This higher education financing system is market oriented. Universities participate in competitions for the state order on the training of specialists. The amount of funding is determined by such indicators of university activity as the number of graduates, the number of students admitted to the first year, the results of students’ knowledge control, the complexity of the courses taught, the number of theses defended, etc.

3. Financing universities based on the results of their work (Sweden, Romania and the Netherlands). The amount of funding is determined by such indicators of the university's activity as the number of graduates, the number of students enrolled in the first year, the results of student knowledge control, the complexity of the courses taught, the number of theses defended, etc. The contract system and the strengthening of the financial independence of universities in Sweden contribute to the transformation of the funding mechanism into a transparent, simple and fair system. The basis for differentiation is the difference in the areas of study and educational programs, taking into account the accumulated credits. However, there is no direct connection between the contract and financing: the contract, rather, serves as an instrument of the general system of regulation and financing of education, as a "development contract". Much attention is paid to improving the quality of teaching and research in general, and higher education is evaluated not only using internal procedures, but also with the help of external organizations involved in assessing quality in the scope of higher education based on international principles and methodologies.
4. Financing provided by direct consumers of educational services and focused on the demand and internal needs of the institution (Australia, China, Great Britain, and Finland). This financing system uses government obligations transferred in the form of certain coupons or certificates (vouchers) to the direct consumers of educational services. The only significant limitation for a student is the validity period of the voucher issued. As in other models of financing higher education, funding based on vouchers can be supplemented by a surcharge on the part of the student. Universities in Finland are financed from the state budget in the form of single grants that cover the costs of ongoing university activities and capital costs. The main indicator for determining the size of the grant is the number of students.

Different countries have their own characteristics in organizing the financing of higher education. In general, it is rather difficult to assess which exactly financing mechanism is used in one or another country, since, as a rule, the state uses several financing methods, one of which may dominate. In the context of global information integration which has radically increased in the last decade in connection with the accelerated development of information and communication technologies, an important task for Azerbaijani state bodies is to increase the international competitiveness of domestic higher education. The key condition here is the improvement of financial support systems for educational activities. The need to modernize the financial mechanism of the Azerbaijani higher education system is fixed in government documents on the modern educational policy of Azerbaijan. Among the market mechanisms for financing the education system, normative per capita financing is used. With normative per capita funding, the state is obliged to provide the educational institution with budgetary funds for training this citizen there during the entire period of study in accordance with the state educational standard. Financing of universities using normative per capita financing should provide differentiated normative financing of educational activities of universities. Educational loans are not widespread in Azerbaijan due to the strict requirements of the banking system to both parents (due to the fact that entrants have not reached the age of majority) for guarantees of repayment of the loan, the absence of flexible mechanisms for paying interest after graduation in a situation of job loss, maternity leave or military service. For the successful implementation of the credit form of higher education financing, the stability of the banking system and the confidence of households in future earnings for the long term are required. So, educational activities are financed in modern conditions from the following sources: budgetary allocations (federal and municipal); proceeds from provision of paid educational services and services related to the educational process (sale of teaching aids, accommodation); financing received from companies: payment for organization and conduct of continuing education

programs and individual trainings for existing and future employees; personalized scholarships for students which may include student obligations to work for the company for some time after graduation; donations, sponsorship, personal professorships and other forms of non-repayable investment of companies and individuals in education; a system of vouchers and other mechanisms of state support for obtaining a paid education (maternity capital and tax deduction can serve as examples of such mechanisms in Russia); other external sources of financing, such as subsidies from non-profit organizations and loans; self-financing (funds received from the provision of non-core services: publishing, telecommunications, etc.); student loans.

#### 4. CONCLUSION

The challenges faced by the system of higher professional education required its reformation and modernization in the financing system. Summarized estimates of changes in funding for higher education indicate that many countries are more focused on returns in research than in education. Researchers note a direct correlation between the level of development of the higher education system, the amount of funding for research and development activities and the level of development of the state as a whole on a global scale. Higher education also has a social function: people who receive higher education will have some advantages over people who do not have it. In other words, it improves the quality of life of the population and provides the country's economy with more qualified personnel. Consequently, the demand for higher education is growing globally. Since the state is interested in training qualified personnel, it is the main source of funding for higher education and presents the main demand for training specialists. Currently, one of the main discussed issues is the issue of financing higher education: should it be fully financed by the state, private capital (funds of students, corporations, foundations) or should there be some kind of "golden mean" of financial support for educational activities. Note that a single solution to the question has not yet been found. Finally, the specificity of the Azerbaijani higher education system is that there are two markets there: the market where the state purchases the services of universities, and the market where the educational services are bought by the population. The state has its own priorities, and the population has its own. Quite often they do not match. But since the state operates in a larger market in terms of the number of students, it is this market that will largely determine the final results of education and the effectiveness of the higher education system - in quality, in the structure of training personnel with higher education, and in response to requests from the labour market. About 12,300 places are allocated annually in Azerbaijan for admission under the state order. In the 2019-2020 academic year, they plan to increase to 20,400 which means an increase of about 65 per cent. This will provide an opportunity for approximately another 8 thousand students to get higher education at the expense of the state budget (<https://www.trend.az/azerbaijan/society/3057188.html>). At present, improvement of financing the higher education system is carried out in four main areas: creation of a system of normative financing; financing using state registered financial obligations; educational subsidies; educational loans.

#### LITERATURE:

1. Azərbaycan Respublikası Prezidentinin "Ali təhsil müəssisələrində yeniməliyyəşmə mexanizminin tətbiq edilməsi barədə" 2010-cu il 10 fevral tarixli 220 nömrəli Fərmanı.
2. Azərbaycan Respublikası Nazirlər Kabinetinin "Ali təhsil müəssisələrində yeni məliyyəşmə mexanizminin tətbiq edilməsi haqqında" 25 iyun 2010-cu il tarixli 120 nömrəli Qərarı
3. Абанкина И.В.(2019).Финансирование образования:тренд на персонализацию Журнал НЭА, № 1 (41), 2019 с. 216–225

4. Клячко, Т.Л., Синельников-Мурылев, С. Г.(2013) О новых тенденциях и проблемах в реформировании системы финансирования вузов. М.: Издательский дом «Дело» РАНХиГС, 2013. — 64 с. — (Научные доклады : образование).
5. Клячко, Т. Л. (2017) Последствия и риски реформ в российском высшем образовании . М. : Издательский дом .Дело. РАНХиГС, 2017. — 52 с. — (Научные доклады: образование)
6. Мамедов З.Ф (2019). Концептуальная дискуссия о формировании "треугольника знаний" в условиях вызовов современности: мировой опыт и реалии Азербайджана // Региональная специфика и российский опыт развития бизнеса и экономики. Материалы X юбилейной Международной научно-практической конференции. Издательство: Астраханский государственный университет, Издательский дом «Астраханский университет». 2019. -700 с.
7. Розина Н. М. Зуев В. М.(2015) Нормативно-подушевое финансирование высшего образование: концепции и реалии // Вестник Финансового университета. 2015. № 3.

# **ANALYSIS OF THE APPLICATION OF SOCIAL RESPONSIBILITY BY DOMESTIC BUSINESSES IN AZERBAIJAN AND ITS INFLUENCE ON THE COMPETITIVENESS OF THE COUNTRY**

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## **ABSTRACT**

*Nowadays when competition has been worldwide increased as a result of globalization, countries try their best to improve their competitiveness to get more space in the world market. Competitiveness is related with raising life standards, employment opportunities or capabilities of a country to fulfill its international obligations. After gaining its independence in 1991 and transforming its economy from state sponsored planned one to free-market, development, support and empowerment of private sector and economic growth of the country is essential in terms of the improvement of competitiveness in Azerbaijan. Today, increasing importance of domestic businesses and their formation as an integral part of the society in Azerbaijan creates some responsibilities. The world has started experiencing significant transformations in all fields of life from the beginning of the 21<sup>st</sup> century. Business and its basic actors have also been intensively subject to the influence of these transformations. All endeavors of business actors are focused on building their strategies of improving their competitiveness on the basis of proper visions. Moreover, importance of business for society has become as much as productivity of business is important for the power of influence of the business. For this reason, it is necessary for businesses to develop their proper strategies in accordance with modern conditions in order to fulfill their undertaken obligations regarding their social responsibilities and to institutionalize themselves. That is why, sensitive attitude of domestic businesses working in Azerbaijan to the will and needs of the society and their environmentally friendly and ethical behavior is important for the power of competitiveness of the country. The aim of this research is to study the state and way of application and implementation of UN Global Compact rules and social responsibility by domestic businesses working in Azerbaijan that is in transition from soviet economy to free market after the collapse of USSR. Within this framework we are going to research the scale of social responsibility of domestic companies, the level or scale of the responsibility that they target to reach and its influence on the competitiveness of Azerbaijan. To collect necessary information, taking specific domestic features of Azerbaijan into consideration, as a research method we will conduct interviews and hold surveys with government officials (bureaucrats), businessmen, scholars and managers of professional unions (non-governmental organizations).*

**Keywords:** *Social Responsibility, Domestic Business, Competitiveness*

## **1. INTRODUCTION**

Responsibility is the milestone of philosophy of ethics and it's considered as a ethics problem. On this aspect it's accepted that responsibility has completely ethics features. Behaving as depending on ethos or justice depending on ethos, legal restrictions and ethics hopes are considered in responsibility. Social responsibility could be identified as: an enterprise causes some positive and negative effects because of business in community life. So considering these positive and negative effects deliberately and taking measures for negative effects is social responsibility (Rondinelli and Berry, 2000).

Countries' developments and living in welfare can possible with responsibility. Every person has some duties individual or in diverse groups and also has some responsibilities about these duties. Today there are lots of positive or negative opinions about businesses' social responsibilities. Classic approach supporters restrict businesses' responsibilities with economic responsibilities. On the other hand modern approach supporters state that businesses should have social responsibilities in addition to economic responsibilities (Ogston and Yuthas, 1997). Businesses that want to increase their profit and keep on their presence prefer to modern approach more than classic approach. Because today's world behaving direction of social responsibilities is like an obligation. So they should care society's wills and needs. Society has started to press to businesses about taking social responsibility ever increasing rate. In that case businesses' success change that focus on benefit and regardless about social responsibility has decreased. Obviously making business beneficial for society has become more important than making benefit to business for organizational activity (Kotler and Armstrong, 2004). Today, corporate social responsibility and ethical governance are perceived as the indicator and guarantee of a company's sustainable development and successful performance. As we mentioned above, the requirements regarding the social responsibilities of businesses become more serious, regardless of the size and scope of businesses, their way of ownership, their geographical location, culture and the national traditions of the country in which they operate. Review some of the benefits of having social responsibility. A socially responsible company:

- Due to their responsible approach to environmental problems, they can demand premium prices and gain brand loyalty;
- Thanks to the reliability shown, it can establish permanent relationships with suppliers and distributors;
- It can attract skilled workforce as its positive reputation makes it easier to hire talents. Higher retention is a stronger factor in being an ethical business that helps reduce recruitment and retraining costs while increasing motivation and efficiency;
- Can count on government support in difficult times;
- If a company has a positive CSR reputation, it is more likely to be accepted into a foreign country;
- Strategic investors are more likely to attract investors with social responsibility, as they evaluate the business from different perspectives before making an investment decision. In recent years, we would like to note that the international ranking charts of the most successful companies have been managed by companies that respect CSR. Forbes can be seen from the list of the World's Most Respected Companies of 2018: The world's most respected companies such as Google, BMW Group, Microsoft, Bosch, Walt Disney Company, CISCO and others lead the list of Forbes' socially responsible companies.

Creates greater lasting social impact than traditional donation-based corporate social responsibility programs (Ahmadov, 2019). For developing countries basic economic purpose is making progress. After U.S.S.R. was dissolved in 1991, Azerbaijan gained independence at 18 October 1991 and preferred market economy rather than planned economy. So in Azerbaijan to develop, support and strengthen private sector is very important for developing country's national competitive power. Thereby in this survey developing process of private sector, history of social responsibility and practices of domestic businesses corporate social responsibilities in Azerbaijan were examined. At last part there are some suggestions about problems at corporate social responsibilities area in Azerbaijan and effects of these problems to country's national competitive power. Although in Azerbaijan social responsibility has a deep historical culture, today domestic businesses care working only with their own business' legal norms. And this affects on a negative way to developing of corporate social responsibility understanding. For this reason Corporate Social Responsibility (CSR) has been a new concept in Azerbaijan like

all the other countries. In Azerbaijan businesses have practices on CSR. But these practices couldn't institutionalized and formulated like as multinational businesses. CSR can be seen such as the basic level of charity in Azerbaijan. Although concept of charity came from Western culture, also in Turkish culture pious foundation undertakes same mission of charity. Besides in Azerbaijan it's observed that while academical works have been increasing, empirical works have been still insufficient level. This situation causes to businesses and managers become aware of importance of social responsibility in a slowly way unlike developments on the world. For this survey we made an interview face to face with 20 national company's managers who are dutied for social responsibility. One difficulty that had been lived on the survey was managers' positions at the company affected interview's quality and feature. And some companies had assigned for interview managers who hadn't got sufficient information about social responsibility. So we couldn't had enough opportunity to discuss social responsibility with them.

## **2. DEVELOPMENT AND GENERAL SITUATION OF DOMESTIC BUSINESS IN AZERBAIJAN**

Azerbaijan preferred market economy rather than planned economy. So for Azerbaijan to develop, support and strengthen private sector is very important for developing country's national competitive power. In the period of U.S.S.R. there had been only government property under the title of public property. For this reason there must be wide privatization on property relations' transformation. After independence firstly privatization practices in the content of liberalisation had started in Azerbaijan. Lack of information and experience on a new economic system caused frequently problems about privatization practices. In Azerbaijan first judicial base of practices of passing to free market economy was law of privatization government property which entered into force at 7 January 1993 with 27 piece of items. But due to the effects of existed crisis atmosphere in that period privatization practices couldn't implemented except some necessary area (Ahmadov, 2010). In Republic of Azerbaijan's privatization plans there were accomodating law legislations for standards of free market economy, removing the obstacles and problems on this aim and preventing monopolies and unfair competition. And those privatization policies were followed by the Republic. In that way government's role on the economy was reduced. And in the earlier of 2001 government accelerated the privatization and declared that 100 big public financial enterprises that were active on manufacture, energy and chemistry would be privatized. In the process of privatization many important developments were obtained in Azerbaijan. Today private sector is producing %73 of Gross Proceeds (GP) and has an important role on the solution of social and economical problems. Tags which are provided from private sector constitutes the budget's real income resource. Private sector's share in the budget was %10 in 1995, %26,5 in 1997 and after the year of 2007 this share arised over %75. Today %70 of workers are working at private sector, %30 are working at public sector. Also government is preapering special support programmes to improve enterprising of private sector. This case appeared the process of passing market economy by wide privatization on public enterprises at old east countries block. In Azerbaijan executing privatization programmes and supporting enterprises programmes at the same time causes to improve the atmosphere of competition in the country. This situation affects improving of country's national competitive power in a positive way, then conduces improving of domestic enterprising and also provides way of country's sustainable development. Sustainable development focuses on reducing inessential use of world's natural sources, redoubling life standards of world's citizens and serving economical improvement. The country's achievements in the socio-economic field are also reflected in the evolving assessments of the Azerbaijani economy by international rating agencies (Fitch Ratings, Moody', Standard & Poors). In the "Doing Business" report prepared by the World Bank and the International Finance Corporation, the position of

Azerbaijan improved and the country became the leader among the CIS and regional countries in the Global Competitiveness Report of the World Economic Forum. In the World Bank GDP per capita classification, Azerbaijan has previously entered the "high average income" countries group1 than other CIS countries. However, in 2010, according to the UN Development Program's human development program report, Azerbaijan left the countries with "average human development" and entered the group with "high human development" ([https://president.az/files/future\\_en.pdf](https://president.az/files/future_en.pdf)).

### **3. GENERAL HISTORY OF SOCIAL RESPONSIBILITY IN AZERBAIJAN**

Opinions about social responsibility have been discussed for the early times of history and these opinions have been changed within the periods (Lits, 1996). This period which was started with civilization and religions and continued up to the B.C. 1100 is called also "pre-business period". In this period which was including first civilization like Mesopotamia, China, Archaic Greek and Rome there hadn't been important practical changes. But it's stated about this civilizations that on people's individual ideas, religious beliefs, ethnic opinions there had been a social responsibility which had been directing unconsciously by different laws. Practicing and formulizing of social responsibility has a deep and general history in Azerbaijan. National wealthy class that occurred as a result of developing oil industries at end of XIX century supported to improving social situations of country's citizens; receiving education of talented teenagers; constructing of schools, hospitals; repairing of roads and founding of cultural places and theaters. In 1901 Hacı Zeynalabidin Tağıyev who was one of well known benevolent in Azerbaijan constructed a school for Azerbaijani ladies that was the first ladies school in Muslim world. This school dissolved the women's lack of education problem and caused a change of women's social status in a positive way. Again same period Ağa Musa Nağıyev who was one of oil barons in Azerbaijan made some hospitals financial supports. One of those hospitals is emergency medicine hospital that was built in 1912. Also he got built the most beautiful and gorgeous mosque of Azerbaijan and gave to benevolent Muslim society as a present. In history lots of benevolent foundations and unions work together and wealthy oil barons gave money those foundations and unions as a member in Azerbaijan. In the period of U.S.S.R there was an social protectorship understanding. That understanding usually contained some subjects such as providing and protecting of businesses' labor power, workers' recessing, helping of local organizations, pregnancy aids. After Azerbaijan gained independence these understandings were forgotten and social responsibility which was under public managements' responsibility started to decrease. Besides as a historical tradition today lots of family companies and firms have got pious foundations in Azerbaijan. In these sense expectation of society from companies is forming around the historical pious foundations philosophy and social responsibility is seen like firms' donations and benevolent activities. Because of hiding the amount of donations, effects properly couldn't considered. Global Compact Conference held in November 2012 in Baku was to raise awareness about CSR both among community and businesses. The conference aimed to demonstrate the results of social modernization with a specific emphasis on social, economic and environmental sustainability (ILO Website, 2013).

### **4. DOMESTIC BUSINESSES' SOCIAL RESPONSIBILITY PRACTICES IN AZERBAIJAN**

The concept of corporate social responsibility is a relatively new phenomenon for Azerbaijani companies. In the past providing social benefit was seen only doing some duties for consumers or offering them supplement services and by this way gaining their loyalty. Today social responsibility is seen as a concept that should be protected and pleased by business shareholders. Businesses' social responsibility emphasis were seen especially after The Great Depression in 1930.



Increase of unemployment, decrease of purchase power and as a result of these declining of society on a social ve economical aspects forced the companies to consider this issue (Hawkins, 2006). Because goods which be produced by the business were consumed or employment provided by that society again. After independence being a new devoloping country domestic businesses are making social responsibility practices on education and sport areas for children, waifs, refugees and disableds. Acording to a research that was made by researcher on this area Kazımov in Azerbaijan there are three types of social responsibility models. First one is financial support for in a need of people without notificiation. Second one is benevolence for increasing company’s image. And third one is company’s strategic approach. If there is a competitive case both company and society benefit from this. So company reachs social aims by using different metdods. Domestic businesses execute their social accounts independently in Azerbaijan. Some businesses publish their all social responsibility activities together. Certainly domestic businesses will realise principle of social responsibility in the near future. Because it has became very important for business’ image and internatioal activities. It appears on the surveys that lots of businesses understand social responsibility as paying the taxes. In Azerbaijan a few businesses give place corporate social responsibility activities on their own web page. Some of these businesses are in the following table.

<b>Businesses’ Name</b>	<b>CSR Practice Areas</b>	<b>Example</b>
<b>Azercell TELEKOM</b>	Disableds, depriveds; fields culture, sport; law of children	Financial support to the deprived children’s house named “Umit”
<b>Azersun Company</b>	Disableds; Karabagh refugees; poor families	Company managed to theater performances for the aim of ending drug addiction and sexual diseases and informing people
<b>Gilan Company</b>	Culture and sport	Organization and sponsorship of international sport competition, international culture days
<b>ACCESSBANK</b>	Aid projects for disableds	They started aid Project for disabled in 2008. They gave disableds banking training. After training disableds took an examination and were employmented at bank.
<b>Caspian Compassion Eye Clinic</b>	Aid to eye diseased	Localizing eye diseased and curing them free
<b>Qaradağ Sement</b>	Culture and Education	Supporting culture and civilization projects, construction and reparation of schools
<b>Şollar</b>	Culture and Sports	Sponsorship of theater performances and cultural television performances
<b>AZER Construction</b>	Gives importance CSR for business	Workers’ rights, against children’s employment informing workers. And aims to prepare ecological projects

*Table 1: CSR Practice Areas of Domestic Businesses*

Azerbaijani firms have their own standards but, they don’t use appliances about international standards. On the other hand corporate social responsibility could be loom large in foreign relations (Məmmədov, 2009). Also international non-governmental organization (NGO) could affect corporate social responsibility in Azerbaijan by using press to multinational businesses. Consequently multinational businesses affect corporate social responsibility activities in a positive way (Quazi and Obrien, 2000). Multinational businesses’ using positive press to their own local prolongations and providers for corporate social responsibility activities is impulsions

for the other Azerbaijani companies. According to the UN Global Compact that was signed voluntarily by businesses, all of the businesses have to obey some social rules their own activities. UN Global Compact is composed of human rights, breaking in period, struggle with corruption and environment main headings and has got 10 principles. In Azerbaijan any domestic business hasn't signed this compact. But BMT and AZPROM are studying on this area. Their aim is achieving to sign 10 local companies to UN Global Compact in this year. In our survey, we examined domestic businesses according to UN Global Compact and summarized their general situation at the following table.

<b>The Global Compact</b>	<b>Condition</b>
Business world should support and respect to the declared human rights	Average
Business world shouldn't be human rights violation partner	Average
Business world should support workers about unionization and collective bargaining right	Negative
All of the forced and compulsory work should be finish	Positive
All of the children employment should be finish	Positive
Discrimination on employment and working process should be finish	Negative
Business world should support precautionary approaches for environment problems.	Average
Business world should support all of the activities and formation about environment	Negative
Development and becoming prevalent of environment-friendly technology should be encourage	Negative
Business world should struggle with all of the corruption including bribe and racket	Negative

*Table 2: UN Global Compact and general analysis of domestic businesses*

United Nations (UN) emphasizes on providing corporate social responsibility of domestic businesses. Then Azerbaijan has being a part of international compacts, campaigns and activities ascending rate. And this is an important effect for raising country's conscious rate about corporate social responsibility and the other issues.

## **5. EFFECTS AND PROBLEMS OF CORPORATE SOCIAL RESPONSIBILITY PRACTICES ON COUNTRY'S COMPETITIVE POWER**

Technological developments are increasing society's needs and expectations in a rapidly changing world. Increase of population, global and environmental problems' results could not resolved by individual effort and the government could afford some of these expectations. In that case big companies should do some duties for their own society by using their available possibilities. Today because of changing point of view for big companies investments on social responsibility projects mean not only for benefaction but also for influence for good country's competitive power by increasing companies' prestige (Porter and Kramer, 2006). Companies should evolve information and connection about their own society for sustainable economical development. Social responsibility requires voluntary contributions for more better society and more beautiful environment from companies. Because today's societies could survive only sharing some responsibilities with some establishments. Today most powerful establishments are companies. Time, knowledge, technology and culture differences are getting disappear with effects of globalization and as T. Peters' statement "world has become a big shopping center". Corporate social responsibility is seen as a benevolence and social relief for poor families in countries that are in transition economy like Azerbaijan. According to the Social Activity and Research Institute's research report Azerbaijani companies usually do works of charity purpose of corporate social responsibility.

But this isn't sustainable because of being not suitable for long-term strategy and being planned. Companies' social responsibility could take a meaning with collective effort for improving working standards. Thus Azerbaijan that has excessively needs of production and employment should review developing strategies. Instead of composing competitive power by decreasing labor cost subjects such as technological improvement, increasing labor force's qualities, growing focused on employment, sectoral and regional planned industrialization should become more important. Otherwise concept of social responsibility would exist as a vehicle for advertising and employee's problems would continue increasing. On the other hand arguments about corporate social responsibility in Azerbaijan are far away from corporated leadership quality that improve this process systematically and guide correct apprehension and approach about corporate social responsibility.

## 6. CONCLUSION

Today companies are defined not only as a economical and technical units but also as a social structure and social being. Companies that are a part of society and stand with society could not consider themselves abstractly (Nalbant, 2005). In that case they should have bidirectional and expressive relations with environment that live in and run (Smith, 1994; Windsor, 2006). For setting healthy relation and keep it stand companies should know society's structure and society's needs and wills. Developing private sector is started with privatization after independence in Azerbaijan. Currently private sector with producing %73 of Gross Proceeds (GP) has an important role on solution of social and economical problems. Today %70 of workers are working at private sector, %30 are working at public sector. Also government is planning domestic enterprise support programmes for improving of private sector. In Republic of Azerbaijan purpose of overcoming existent problems on improving private sector, goverment programme (2002–2005) which about supporting of little and middle scale of enterprising was accepted. Direction of these developments public establishments need requirement of effective coordination with each other and private sector establishments. Because of this it's observed that countries' which overcame existential asymmetric information concept of coordination between foreign trade establishments, competitive ability is getting rise (Ahmadov and Quliyev, 2010). Political and institutional frame that concerned with stable development of effective, fair and neutral private sector should be formed in the country. Whereas public administration's effective and efficient working and performing quality services affect directly all country's economy and private sector. In Azerbaijan corporate social responsibility (CSR) practices are limited, because of lack of knowledge about CSR and it's benefits. In tax law there isn't either positive nor negative item for corporate social responsibility. But goverment should add new laws for supplement of corporate social responsibility's notification in the country. In Azerbaijan there are some problems on: there isn't real legal substructure that related with corporate social responsibility; there isn't enough education and institute in the area of corporate social responsibility; there isn't sufficient CSR culture; there isn't enough qualified expert potential in CSR; there isn't interest from domestic enterprices; there isn't confidence towards domestic non-governmental organization and there isn't confidence between goverment and private sector. Overcoming these problems is very important for improvement of national competitive power. For these reasons social responsibility and it's importance should be expressed to the companies and corporate social responsibility programmes should be prepeared. Then companies not only will strengthen their image, increase their recognition in society and be different than their competitors but also they will take their natural responsibility sor society and environment. Finally company interviews point out that in Azerbaijan domestic businesses are very willing about integrating to corporate social responsibility activities. But used vehicles are'nt enough for providing ufficient and efficient corporate social responsibility environment.

**LITERATURE:**

1. Ahmadov, F. (2010), *Azərbaycan'ın Ulusal Rekabet Gücü: TOWS ve Elmas Modeli Bir Çözümleme*, Sakarya Üniversitesi, SBE, Doktora Tezi, Türkiye.
2. Fariz Ahmadov, Aytan Huseynli, Ulkar Zeynalova (2019) *Comparative Analysis Of The Current Situation And Development Prospects Of The Former Soviet Union Republics In The Social Business. ESD*
3. Hawkins, D. E. (2006), *Corporate Social Responsibility: Balancing Tomorrows Sustainability and Today's Profitability*. China, Palgrave-Mcmillan.
4. Kazimov, Ə. (2010), *XXI-ci Əsrdə Azərbaycan Biznesi: Korporativ Xeyriyyəçilikdən Korporativ Sosial Məsuliyyətə Keçid*, Context, rüblük jurnal, N-2, Azerbaijan, Baku
5. Kotler, P., Armstrong, G. (2004), *Principles of Marketing*, Boston, Pearson Education
6. Litz R, A. (1996), *A Resource Based View of the Social Responsible Firm: Stakeholder Interdependence, Ethical Awareness and Issue Responsiveness as Strategic Assets*, Journal of Business Ethics, vol:15.
7. Logsdon J.M., Yuthas K. (1997), *Corporate Social Performance, Stakeholder Orientation, and Organizational Moral Development*, Journal of Business Ethics, Vol-16.
8. MacDonald, Ch. (2009). *CSR is not C.S.R. The Business Ethics Blog*. available at: Accessed 23 June 2014
9. Məmmədov, T. (2009), *Korporativ Sosial Məsuliyyətin Ölçülməsi və Hesabatlılığı*, İqtisadi Tədqiqatlar Mərkəzinin Hesabatı, Azerbaijan, Baku.
10. Nalbant, Z.E.(2005), *İşletmelerde Sosyal Sorumluluk ve İş Ahlakı*, Yönetim ve Ekonomi Dergisi, Cilt.12, No 1, SS. 193-201, Türkiye.
11. Porter, M.E., Kramer, M.R. (2006), *Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility*, Harvard Business Review, December
12. Quazi, A. M., O'brien D. (2000), *An Empirical Test of a Cross-National Model of Corporate Social Responsibility*, Journal of Business Ethics, Vol 25, p.33–51.
13. Quliyev, A; Ahmadov, F. (2010), *Yeni Dünya Ekonomisinde Azərbaycan'ın Ulusal Rekabet Gücünün Geliştirilebilmesinde Sürdürülebilir Verimlilik Stratejileri*, XVI Dünya Verimlilik Kongresi, Antalya
14. Rondinelli, D.A., Berry, A.M. (2000), *Environmental Citizenship in Multinational Corporations: Social Responsibility and Sustainable Development*, European Management Journal, Vol 18, No 1, P.70-84.
15. Smith C. (1994), *The New Corporate Philanthropy*, Harvard Business Review, May, USA
16. Windsor D. (2006), *Corporate Social Responsibility: Three Key Approaches*, Journal of Management Studies, 43:1, January
17. [www.unglobalcompact.org](http://www.unglobalcompact.org)
18. <http://www.globalreporting.org>
19. <http://www.ilo.org/business>
20. <http://www.weforum.org/en/initiatives/corporatecitizenship/index.htm>

## BLACK SWANS OF THE WORLD: NEW NAME OF OLD ENTITY

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### ABSTRACT

*With the transformation of the coronavirus into a pandemic, the world seemed to fall into a daze. Confidence in economic stability, security, and the omnipotence of medicine was shattered. The victims of COVID-19 were residents of developed countries, although previously deadly diseases were considered a misfortune of the third world states. It is not the first time in modern history that the planet has suffered from global epidemics. Even in the twenty-first century, the world has already had to deal with pandemics: SARS, Ebola, swine and bird flu. However, the lessons of the past have taught us little, and the international community is distraught from his powerlessness. How have past epidemics changed the course of history? What losses did the economies of different countries suffer due to viruses? Is the coronavirus worse than the plague and the Spanish flu? The new deadly coronavirus is a "black Swan" that can hit the economy harder than the global financial crisis. This is the conclusion of Moody's analysts, who followed the fall in the index of prices for industrial metals. Turning the coronavirus into an epidemic may become a more dangerous "black Swan" than the global economic crisis of 2008-2009 years, according to Moody's Analytics-an analytical division of the financial Corporation Moody's Corporation. The black Swan is an unforeseen event that has a huge impact on the economy. This term was introduced in the book of the same name by the economist Nassim Taleb. The coronavirus had a very negative impact on the Chinese economy (16% of the world's GDP) and on the world economy. In a short time, the supply of oil has significantly exceeded the global demand. As an oil exporting country, we are negatively affected by two external factors: the global economic situation and low oil prices. This is a serious challenge for the country. Azerbaijan is much better prepared for low oil prices today than at any other time in the past, as it has learned from the fall in energy prices in 2015:*

- *Transition to a digital economy;*
- *Since 2015, Azerbaijan has been able to increase its gold and foreign exchange reserves;*
- *Low external debt-to-GDP ratio;*
- *Tighter control over speculative currency transactions;*
- *Reforms in tax and customs spheres;*
- *Personnel policy.*

**Keywords:** *Black Swan, Coronavirus, Oil prices, World economy*

### 1. INTRODUCTION: THE HISTORY OF PANDEMICS AND THEIR IMPACT ON ECONOMIES

Let us take a brief excursion into the history of infectious diseases terrified the world. Epidemics have always had a serious impact on the development of the economy and civilization. The first merciless pandemic that claimed the lives of 100 million people was the Justinian plague, but it was atrocious in the VI century. But everybody heard about the plague epidemic raging in Europe in the Middle Ages: they read books, saw films... Plague columns still remind it, the monuments commemorating the end of the "plague pestilence" in many European cities, and images of the plague doctor masked in the shape of a bird's beak.

The bubonic plague, or "black death" (the name is because the corpses of the dead bodies were black and looked charred), was brought to Europe from the territory of Indochina in the middle of the XIV century and quickly grew to the scale of a terrible pandemic. At that time medicine was at a primitive level. Doctors treated patients with the popular herbs at that time, but useless and even harmful method - bloodletting. A beak-shaped mask was discovered on religious belief that such look would scare away the disease. The plague claimed the lives of 60 million people. On average, every second resident died of the cities in which the epidemic was atrocious. As you can see, the economic disasters are not only due to poor regulation of financial markets, anti-market government policies or wars. There are other reasons, more difficult to manage. Nassim Taleb, who became a world celebrity, writes about the "black swans" - events that occur extremely rarely and that significantly affect the economy. For example in 2008, a 30% falling property prices in the United States seemed fantastic, and it was almost impossible to predict that the capitalization of the stock market would fall by half. Although the popularization of the "black swans" is considered the merit of Taleb, modern macroeconomists, such as Robert Barro from Harvard, have long been studying the impact of such events. One possible "black swan" is the global epidemic presence. It is not surprising that economists, governments and financial markets comprehensively investigated the situation of bird flu several years ago, and now they monitor the spread of swine flu with deep concern. The global epidemic could exacerbate the financial crisis or prevent the beginning process of recovery of the world economy (1). What do the economists know about the possible consequences of a global epidemic? Unfortunately, very little. The Spanish flu pandemic of 1918-1919 is well studied. This epidemic was one of the worst in the history of humanity: 20% of the world population were infected, 2.5-5% of those had died, and in general the disease killed 50 million people (0.5-1% of the world population). Only two other pandemics exceed the number of deaths from the Spaniard: Justinian's plague (peak in 540–544, 100 million victims, from a quarter to half of the world's population) and "black death" (1347–1351, 60 million victims). "The Black death" has tremendously changed the socio-economic situation in Europe: the economy, mentality, culture and even the genetic composition of the population. "Survived people after the plague became rich. They were the owners of money and property of thousand victims". The newly arrived rich became the founders of merchant and banking dynasties. The economic needs of the population changed: the need for food fell sharply, the world changed, explains the head of IAC "Alpari" Alexander Razuvaev (2).

## **2. THE IMPACT OF CORONAVIRUS ON BUSINESS AND CONSUMERS**

With the transformation of coronavirus into a pandemic, the world seemed to fall into a daze. Confidence in economic stability, security, omnipotence of medicine was shattered. The victims of COVID-19 were residents of developed countries, although previously deadly diseases were considered the third world states. However, the lessons of the past taught us little, and now the international community is at a loss from its powerlessness. How did past epidemics change the course of history? What losses did economies of different countries suffer from viruses? Is the coronavirus worse than the plague and the "Spaniard"? The new deadly coronavirus is the Black Swan, which can hit the economy harder than the global financial crisis. This is the conclusion made by Moody's analysts, who have followed the fall in the industrial metal price index. Turning coronavirus into an epidemic could become a more dangerous black swan than the global economic crisis in 2008-2009, says Moody's Analytics, an analytical subdivision of the financial enterprise Moody's Corporation. The Black Swan is an unforeseen event that has a huge impact on the economy. This term was presented by the economist Nassim Taleb in the book of the same name (3). But Nassim Taleb himself does not consider coronavirus "Black Swan". Taleb emphasizes: "We issued a warning that it (the coronavirus) should be killed in the bud, and act very quickly, if it is possible".

Taleb is sure that people simply ignored this warning - the exception was the Donald Trump administration, which limited air traffic to China at an early stage to the spread of coronavirus. According to Taleb, the pandemic was predictable, which means that it is a “white swan”. He believes that since the pandemic was predictable, businesses and governments around the world “have no excuses” for such a low level of preparation for the spread of the virus: “They did not want to spend a penny on this (the fight against coronavirus) in January, and now they are spending billions” (4). The purpose of this article is not to define a coronavirus in “the Black or White Swan” category. The fact remains that the coronavirus was not a predictable event for business units in the world. Naseb Taleb considers one of the key criteria for success in life and business, according to his philosophy - this is decision-making in conditions of unpredictability. It is obvious that it helps to survive in a crisis. So Naseb Taleb introduced with the concept of “black swan” introduced the term “antifragility”. “Antifragility” - the ability to become stronger when it is faced with chaos and failure. Antifragility can be explained through the image of Hydra or the Serpent of Gorynych. After you chop off one head of this creature, two new ones grow. The more attacks it survives, the stronger it becomes. If you are fragile, you are afraid to make a mistake, because you can lose everything. If you strive for antifragility, you must be prepared to make mistakes, be ready for a state of volatility - the variability of circumstances and time (5). Let's look how a pandemic has affected business in the world. Naturally, it was negative. But some organizations have benefited from the current situation. In quarantine, people are increasingly watching online movies and TV shows on the Internet. This trend was observed even before the pandemic, but in the quarantine period it became more obvious (6). The quarantine regime around the world has helped the American streaming service Netflix, increased the number of subscribers by 15.8 million people since the beginning of the year. According to the results of the first quarter, the company managed to get revenue of \$ 5.77 billion, which is slightly higher than the initial forecasts, reports The Verge. Such examples are single, mostly business all over the world suffers and most business units cannot survive without state support.

### **3. AZERBAIJAN'S PRACTICE OF COMBATING SOCIAL AND ECONOMIC CONSEQUENCES COVID-19**

The coronavirus had a very negative impact on the Chinese economy (16% of the world's GDP) and on the world economy. In a short time, the supply of oil has significantly exceeded the global demand. As an oil exporting country, we are negatively affected by two external factors: the global economic situation and low oil prices. This is a serious challenge for the country. Azerbaijan is much better prepared for low oil prices today than at any other time in the past, as it has learned from the fall in energy prices in 2015:

- Transition to a digital economy;
- Since 2015, Azerbaijan has been able to increase its gold and foreign exchange reserves;
- Low external debt-to-GDP ratio;
- Tighter control over speculative currency transactions;
- Reforms in tax and customs spheres;
- Personnel policy.

It is known that, the Azerbaijani authorities have announced their intention to send funds for 2.5 billion manats (1USD= 1.7 AZN) or 3.1% of GDP to support business and the public in the context of a coronavirus pandemic. Each of the micro-business entities will receive 250 manats as a minimum support mechanism. If the amount of tax in the micro-business entity's payment was less than 250 manats in 2019, it will be paid a minimum 250 manats, the Ministry of the Economy added. In total, 248.5 thousand individual entrepreneurs and 43.9 thousand other entities of microbusiness will be able to use this mechanism (7).

Social support measures implemented in Azerbaijan cover 2.5 million people in connection with the coronavirus pandemic. Action plan to support employment and social welfare population conducted based on the relevant Order of the President of Azerbaijan:

- Secured employment with a salary of more than 1.6 million employees.  
The purposeful work has carried out to save workers' jobs and income of employees in the public and private sectors. The daily monitoring carried out through an electronic system. In general, employment was provided with salary retention of more than 1.6 million employees, including 910,000 employees under the state budget sector and 719 thousand people for non-state sector.
- In April and May, 50 thousand paid public jobs will be created.  
In connection with the pandemic one of the priority areas of activity is also the expansion of employment opportunities for the population. For this purpose, the activity of employment agencies has strengthened. Through the creation of DOST work center, the process of creating 50 thousand paid public jobs were launched in April-May. For these purposes, 30 million manats were allocated. Five thousand people have already employed, to date. These public works mainly cover disinfection, social services, and other areas.
- On behalf of the President of Azerbaijan, 600 thousand unemployed people will be provided with lump sum payments in two months.  
Support mechanisms for unemployed and informally employed persons who lost their jobs due to the pandemic include several measures. The most important of them is providing a one-time payment in the amount of the minimum subsistence level, 190 manats in the country. The Cabinet of Ministers adopted a corresponding resolution on April 7, and an extremely short time, only after two days they began to produce payments. Overall, from 9 to 17 April, one-time payments were made to 140 thousand unemployed people. On the instructions of the President the lump sum payment was paid to 600 thousand people and this process will cover April-May.
- Unemployment insurance payments cover up to 20 thousand people.  
One of the planned measures in the social protection is expanding coverage of unemployment insurance payments. In April-December 2020 this measure will cover 20 thousand people in a year, and from the Fund 20 million manats will be allocated for these purposes, for unemployment insurance.
- 70 million manats have been allocated to expand the self-employment program.  
Another area of the action plan is the expansion of programs self-employment. Within this framework, the self-employment program in 2020 will be launched about 12 thousand families. They take into account here as public funds, as well as funds from the World Bank and local private banks. For this purpose, the unemployment insurance Fund has allocated 70 million manats. To expand the program, you can cooperate with the public Association "Regional development" of Heydar Aliyev Foundation. Within the framework of this cooperation, each year 250 families will be involved in self-employment programs. We also cooperate with banks in this direction. From April 8, banks started issuing assets to program participants. A joint project, implemented with the World Bank, aims to ensure self-employment of 5 thousand families in a year. Also in partnership with the UN development program provides access to business for about 500 individuals with some disabilities.



- In three months, 2.3 million people were provided 1.5 billion manats of social benefits. Social protection of particularly vulnerable group of population is also one of the priority areas. Reserve of 200 million manats generated by the growth of the state Fund's revenues social protection at the end of 2019, aimed to ensure sustainability of social benefits to the population. These payments: pensions, allowances and scholarships are provided to 2.3 million people. Pensions for April month in the country were paid on April 8-15. April 20-21, the allowances, scholarships and compensations were paid, and on April 28 targeted the state social assistance.
- The number of families receiving targeted social assistance has increased by 10 thousand. During a special quarantine regime, provision of targeted state social assistance to low-income families was extended until the 1st day of the following month, the expiration quarantine mode. An additional 3 million manats has allocated for this purpose. From April 1, the number of families receiving targeted social assistance, increased by 10 thousand people. In total 330 thousand members of 80 thousand families are covered by the targeted social assistance program help. The average monthly amount of assistance for each family is 222 manats.
- Currently, more than 15 thousand single elderly people are provided with social protection at home.  
In Azerbaijan, for preventing the spread of infection COVID-19 Operational headquarters at the Cabinet of Ministers has declared a special quarantine regime in the country and banned people over 65 to leave their homes. How did they solve these people's problems? The provision of social services has started protection for single people over 65 years at home and people in need of special care or population located in social service institutions, since March 24. Currently, more than 15 thousand lonely elderly people receive social services at home, particularly people related to household management, purchase of consumer goods, medicines, payment of utility services, etc. (8).

#### 4. CONCLUSION

One of the key criteria for success in life and business, according to his philosophy - this is decision-making in conditions of unpredictability. It is obvious that it helps to survive in a crisis. So Nassim Taleb introduced with the concept of "black swan" introduced the term "antifragility". "Antifragility" - the ability to become stronger when it is faced with chaos and failure. Antifragility can be explained through the image of Hydra or the Serpent of Gorynych. After you chop off one head of this creature, two new ones grow. The more attacks it survives, the stronger it becomes. If you are fragile, you are afraid to make a mistake, because you can lose everything. If you strive for antifragility, you must be prepared to make mistakes, be ready for a state of volatility - the variability of circumstances and time.

#### LITERATURE:

1. Сергей Гуриев; Олег Цывинский.(2009) Ratio economica: Экономика чумы; 11 мая 2009, 20:00 / Мнения from: <https://www.vedomosti.ru/opinion/articles/2009/05/12/ratio-economica-jekonomika-chumu>
2. Инна Деготькова (2020), Экономика эпидемий, 01.04.2020, [http://pressdubna.ru/news\\_full\\_rm.php?nid=25732](http://pressdubna.ru/news_full_rm.php?nid=25732)
3. Александр Пятин (2020). Страшнее мирового кризиса: Moody's оценило возможное влияние коронавируса на экономику, 31.01.2020 23:07 / Финансы и инвестиции. <https://www.forbes.ru/newsroom/finansy-i-investicii/392311-strashnee-mirovogo-krizisa-moodys-ocenilo-vozmozhnoe-vliyanie>

4. Юрис Балтгайлис (2020) Почему в Европе не ловят «лебедей» Нассима Талеба?, 27.04.2020/ Новости и аналитика. <http://www.baltic-course.com/rus/opinion/?doc=155430>
5. Насем Талеб 2017. Деловой форум в Минске. <https://probusiness.io/ideas/7046-nassim-taleb-evgeniy-chernyakh-i-drugie-zvezdy-biznesa-smotrite-ikh-topovye-vystupleniya.html>
6. 13.05.2020 Коронавирус и бизнес: кто выиграл и кто проиграл в условиях карантина. <https://www.bbc.com/russian/features-52647490>
7. 08.04.2020 Субъекты микробизнеса в Азербайджане получают государственную помощь в рамках поддержки из-за коронавируса. <https://www.wem.az/ru/news/novosti/13345.html>
8. 19.04.2020 Азербайджан во время пандемии коронавируса проводит успешную социальную политику. [https://azertag.az/ru/xeber/Azerbaidzhan\\_vo\\_vremya\\_pandemii\\_koronavirusa\\_provodit\\_ushpeshnuyu\\_socialnuyu\\_politiku-1466813](https://azertag.az/ru/xeber/Azerbaidzhan_vo_vremya_pandemii_koronavirusa_provodit_ushpeshnuyu_socialnuyu_politiku-1466813)

# MUTUAL RELATIONSHIP BETWEEN LABOR MARKET AND MANAGEMENT OF HIGHER EDUCATION SYSTEM IN AZERBAIJAN

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## **ABSTRACT**

*The development of states and nations is characterized by significant achievements in science and technology and social progress in recent decades. These achievements are consequently reflected in the trends of the internationalization of material production, the development of interstate relations and cultural and educational environment and the formation of a single labor market. These processes objectively lead to progressive changes in the higher education systems of states and seriously emphasize the problem of ensuring the quality of training at all levels of the higher education system and providing effective communication between business structures, the labor market and higher education institutions. The main problem of getting quality higher education is that the current state of the quality management system of higher education in Azerbaijan does not fully provide the necessary level of training of higher education specialists. The process of application of any innovation and advanced educational technologies in the field of education in Azerbaijan is at low level in terms of both time and labor efficiency by passing through bureaucratic obstacles. The implementation of new trends in the teaching process by higher education institutions is observed with very low efficiency due to the inflexibility of the public administration system of education when labor market requirements change flexibly. In this regard, it is necessary to increase the independence of higher education institutions in this direction and to expand their authorities and opportunities in introduce of new subjects, creation of new specialties, change of educational standards, especially in terms of the implementation of international experience. This will increase their responsibility and quality of education by strengthening competition in the market for educational services. In this respect, the problems researched in the scientific article are very relevant in terms of modern realities. In the article, the current state of higher education in Azerbaijan is analyzed, the main problems are determined and priority aspects for improving the quality and management of educational services are indicated.*

**Keywords:** *Higher education system, Independence of higher education institutions, Labor market, Quality management system of higher education*

## **1. INTRODUCTION**

The labor market is a sphere of interaction between employers and job seekers who are the subjects of this market. Each of these subjects strives to achieve its goals. Employers want to get professional staff, and job seekers want to get profitable jobs. The socio-economic well-being of any modern society depends significantly on the development of the labor market and its agents, especially the higher education system. The level of competitiveness of a modern innovative economy depends significantly on the quality of professionals, their cooperation, and their ability to compete. Azerbaijan cannot achieve and maintain its competitive position in the world economy by using cheap labor and saving on education and science. Therefore, in today's conditions, it is necessary for the Republic of Azerbaijan to radically renew educational technologies, facilitate the emergence of a fundamentally new management system at all levels of the national economy, balance the higher education process with socio-economic development, and maintain balance at the national, regional and individual levels of higher education by developing and applying new methods of university management.

From this point of view, we believe that the development and implementation of a model of a balanced system of indicators for the management and strategic planning of higher education institutions is an urgent issue in Azerbaijan.

## **2. ANALYSIS OF THE CURRENT SITUATION OF LABOR MARKET RELATIONSHIP WITH HIGHER EDUCATION SYSTEM**

One of the strategic directions of the socio-economic development of the country can be defined as the use of the potential of higher education. We believe that in order to manage the development of higher education, it is necessary to develop a system of quality management in higher education at the national, regional and sectoral levels and apply new standards and criteria in this area. Effective organizational and implementation mechanisms need to be identified and applied for the efficient work of this system. So, significant indicators of the modern labor market are as following: the quality of the workforce, its social and professional mobility; efficient use of labor potential; the level of development of small and medium business; effectiveness of the interaction between the higher education system and the labor market; employment infrastructure, unemployment rate, civilized cooperation between employers and employees, etc. Modern Azerbaijani society is characterized by a certain archaic nature in the field of education. In general, the education system, as well as the higher education system, does not meet the current requirements of the labor market and society. The education system remains a more closed system; this contradicts the high demand of the labor market and the annual increase in the number of people admitted to higher education institutions, which in itself is accompanied by a decline in the recruitment rate of graduates in relevant spheres. Today, the higher education system, by all possible means, reproduces itself, deepening the contradiction between supply and demand in the labor market. Despite certain archaic features inherent in it, our society enters the stage of information development or the stage of "knowledge economy". On the other hand, intellectual labor and intellectual property are not fully valued; this creates a new contradiction that needs to be resolved. The contradiction between the fundamental knowledge of the higher education system of Azerbaijan, the fields of science, and the requirements of the modern labor market, which is focused on the pure application of the acquired knowledge, is becoming more acute. How can the above-mentioned contradictions between the higher education system and the labor market be resolved optimally? In the most general case, the answer to this question may be the formation of a civilized labor market, effective social policy in the field of education, providing high labor mobility, and quality higher education. It is necessary to create appropriate conditions for this, including the formation of an external order for higher education, forecasting the ability of new educational programs to meet the needs of society and the labor market. One of the main directions of optimizing the labor market and the education system is the involvement of small, medium, and large businesses in the higher education system. Unfortunately, today not only medium business, but also large business structures are not involved in the education system. In this regard, it is necessary to make significant qualitative changes in the activities of higher education institutions.

## **3. MECHANISMS OF EFFECTIVE MANAGEMENT OF THE QUALITY OF THE LABOR MARKET AND THE HIGHER EDUCATION SYSTEM IN AZERBAIJAN**

We need to pay more attention to new scientific directions. This can be interpreted as a transition to other forms and methods of organizing the interaction of higher education institutions with public authorities and small, medium, and large business structures in the labor market. On the other hand, there are specific systemic threats to the higher education system. Thus, the level of funding, especially its salary-related aspects, does not meet modern requirements in this system.

If there are no radical changes in terms of remuneration and financial motivation, it will not be possible to make any significant progress on these issues. The low salary system, especially for young teachers, does not allow them to adapt to the higher education system and leads to an influx of more creative people from education institutions. This is one of the main reasons for the aging of teaching staff in higher education institutions and their low activity in science. In the early years of independence, the situation of the economy was characterized by the elimination of high-tech industries. This was one of the main reasons for the lack of demand for most of the engineering and medium-technical staff of the country's large industrial enterprises. As a result, the vast majority of professionals working in the petrochemical and other industries, which are one of the key links in the specialization of the Azerbaijani economy, have experienced a decline in qualifications and a sharp rise in unemployment. These events have led to the outflow of production and technical professionals trained in Azerbaijan for many years. At that time, new commercial and trade-oriented professions became more popular. However, today we see a shortage of experienced personnel in the new production and non-production enterprises opened in Azerbaijan. Training, rehabilitation, development, retraining of new staff, increasing the level of specialization of the necessary human resources of the enterprise requires large financial costs, time, and labor. A paradox has arisen: Azerbaijan, once world-famous for its petrochemical engineers, even in this area sometimes attracts staff from abroad. One of the important steps in overcoming these problems and improving the work in this direction is to strengthen social cooperation between higher education institutions and business structures, which are the main buyers of labor in the labor market, and the active participation of these business structures in the educational process. Thus, just as the inadequacy of the level of training of universities to the needs of the economy is a negative phenomenon, we must take into account that businesses now have a great need for personnel that they lost in the past. Due to the fact that the business is focused on short-term financial goals, it is inevitable that certain jobs will be required in the short term. These structures do not take into account the long-term development trends, the application of the achievements of scientific and technological progress in production, and in most cases have short-term goals, rather than strategic goals. As a result, in the long run, there are inconsistencies between labor markets and training. In order to eliminate these discrepancies between both businesses and the education system, it is necessary to involve low and middle-level managers of more advanced businesses, who are better acquainted with the current requirements of the labor market, in the postgraduate and doctoral degrees. It is possible to bring together the practical and scientific sides of both business and higher education institutions by creating conditions to encourage them to participate in scientific researches, as well as by ensuring the participation of teachers of higher education in certain projects of business enterprises. In many cases, there are great difficulties in applying the proposals and recommendations of scientific research in higher education institutions to the real economy and production. Even the suggestions of researchers on the effective organization of new management methods and forms do not find practical application. Thus, enterprises and organizations do not attract innovative ideas. However, as mentioned above, the involvement of business people, especially low and middle level managers, in scientific and teaching activities can increase their knowledge of the future prospects of the labor market, as well as facilitate the application of research results in production and the real economy. Also, the involvement of teachers in the business process and certain projects of business structures provides accurate information about the needs of businesses, their competitiveness requirements, and what professional skills are the most valued in the labor market. As a result, these features and knowledge will be given to the students by the teaching staff.

As mentioned above, the practical application of the results of scientific research by low, medium, and even high-ranking managers can lead to the restoration and development of an effective link between science and production, which has long been lost in the Azerbaijani economy.

#### **4. CONCLUSION**

It is crucial to implement a number of measures at the state, industry and individual levels to resolve the above-mentioned issues that arise in the relations between the higher education system with business structures in the labor market. First, it is necessary to forecast the long-term demand and to develop and apply a new unified methodology for training qualified staff at the national level. Otherwise, it would be impossible to ensure the effective vocational guidance of young people and, consequently, to achieve a balance between the labor market and the higher education system. Second, adopting a law on “Labor force development” or adding a section on labor force development to the Labor Code of the Republic of Azerbaijan is an important step to take. These changes in the field of labor legislation should reflect the issues of guaranteed employment of graduates studying on a contract basis with employers and graduates studying on the basis of budget funding. Third, organizing the internships of students and graduates, which is realized only as formal requirement today, in the form of more serious involvement of cheap labor by employers on a new paid basis is necessary as well. In the long term, these measures can help interns to improve themselves and advance in their future careers. Finally, it is significant to draw the attention of the state, business enterprises, higher education institutions, and the society to the creation of an informal system of effective vocational guidance of young people. Higher education institutions should intensify their work in these areas:

- First, to constantly monitor the employment situation of their graduates;
- Second, to use the experience of professional career and training centers on the adaptation of graduates in the labor market and to cooperate with them;
- Third, to create business incubators, corporate universities, research departments, laboratories, and educational departments at higher education institutions;
- Fourth, to strengthen work in the field of vocational guidance of pupils and students;
- Fifth, to increase the social responsibility not only of employers but also of higher education institutions.

The integral components of this responsibility should be as follows:

1. High quality of professional training of graduates, which allows them to compete successfully in the labor market;
2. Active social policy towards students, staff, and employees of higher education institutions;
3. Employment of graduates and support for their acceptance in the labor market;
4. Concluding agreements on the training of senior students on the basis of contracts with enterprises.

The implementation of these measures is necessary to make the employment of the students one of the priorities at a later stage. Obviously, in carrying out all these activities, it is necessary to actively use both the social practice of Azerbaijan and the experience of developed countries, and this experience must be adapted to the realities of Azerbaijan.

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**LITERATURE:**

1. Baydenko, V. I. 2002. Bologna Process: Structural Reform of Higher Education in Europe.
2. M. Research Center for the Problem of Quality Training of Specialists. Russian New University. p.128.
3. Berulova, M. N. 1998. Integration of educational content. Moscow: Perfection, p.192.
4. Brazhnik, E. Y. 2005. Prospects for the development of higher education in European countries and in Russia in the context of the Bologna Process. Philosophical Century. Almanac. Theory of university education in Russia and international traditions of enlightenment. Ed. Artemyeva, T.V. and Mikeshin, M.Y. Saint-Petersburg. Issue.29, Vol.2, pp.100 – 113.

# THE ROLE OF THE STATE IN CREATING A FAVORABLE BUSINESS ENVIRONMENT IN THE AGRICULTURAL SECTOR

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## ABSTRACT

*The purpose of the article is to identify factors affecting the environment of agricultural development, the impact of state regulation on agricultural development. The article discusses agricultural reforms, the institutional environment and the legal framework. Reforms in the country have led to significant qualitative changes in agriculture, and food security has been ensured in the country. Measures were taken to ensure the development of agriculture in the regions and further improve its infrastructure. The main objectives of the research are to identify legal, economic and institutional mechanisms for creating a favorable business environment in the agricultural sector. In the article, the author uses statistical data for comparison and analysis. Grouping methods are used. The performance indicators of agricultural enterprises, the relationship between income and expenses, the degree of productivity is analyzed. The potential and factors of the development of the agricultural sector, resource security, possible risks are considered. The article identifies the problems that arise in the process of agricultural management. This study examines the mechanisms of state regulation to increase productivity, reduce costs and maximize profits in the agricultural sector of Azerbaijan. Considering the differences in production and consumption of agricultural products, the author identifies the causes and suggests ways of state regulation and elimination of deviations. As a result of the study, recommendations are made on optimizing the regulatory role of the state in agriculture and creating a favorable business environment.*

**Keywords:** *Agricultural Sector, Factors, Potential, Reforms, Regulation*

## 1. INTRODUCTION

At the present stage of development, the main means of achieving strategic and current goals set for the agrarian sector is the development of various forms of agriculture through the rational use of production potential, natural and economic opportunities, local and foreign investments, scientific, technical and personnel potential; as well as their more rational distribution in the economic regions of the republic. An analysis of the existing literature related to this problem shows: which agricultural areas and why should be resolved through research; what methods should be used for settlement. While neoclassicists point out the need for financial assistance from the state, proponents of the theory of cumulative growth speak of the importance of active state intervention by all existing methods.



However, the limited funds needed to implement radical reforms in the agricultural sector, and, in addition, as the proponents of the theory of cumulative growth point out, the low level of benefits obtained, lead to the preference for a model for matching the agricultural sector with state security conditions. In the agricultural sector, there is a profitability or disadvantage, in comparison with neighboring countries, of a long production environment due to the dependence of the growth-decrease of a product compared to previous years on many factors. Sometimes a shortage of a product within the country leads to its purchase from other countries. Often, this problem is solved by reducing the cost of local production or changing standards. As a result, imports are replaced by local products. And this, in turn, occurs when rural or family farms have a strong material and technical base, and with government intervention (incentive or restrictive measures). The agrarian sphere, the fragile sphere associated with the ecological environment, and in some cases, the instructions put forward for its implementation, may not be executed. This often happens if an imported product is cheaper, farmers lack material interest, and the level of land fertility decreases. The fact that importing any desired product into a country is cheap can be an example of a country's food safety policy; however, the pandemic announced today to the whole world, and other similar cases pose new requirements for countries to national security and, against this background, to the development of agrarian sectors. That is, existing calls require real actions and strict control measures. For this reason, in this article we have committed ourselves to determine the following:

- mechanisms for creating a profitable business environment in the agricultural sector in Azerbaijan;
- agricultural development potential and ways to increase it;
- existing problems in agricultural management and ways to eliminate them.

During the study, we tried to use statistical information, in particular, data from open access.

## **2. MECHANISMS FOR CREATING A PROFITABLE BUSINESS ENVIRONMENT IN THE AGRARIAN SPHERE IN AZERBAIJAN**

Profitable business environment in the agricultural sector reflects several areas. This implies potential opportunities (natural, labor, scientific and technical, financial, information and other resources) and aspects (means and measures of market and state regulation) that serve the development of the agricultural sector, as well as existing risks (natural, military, social and economic).

*Figure following on the next page*

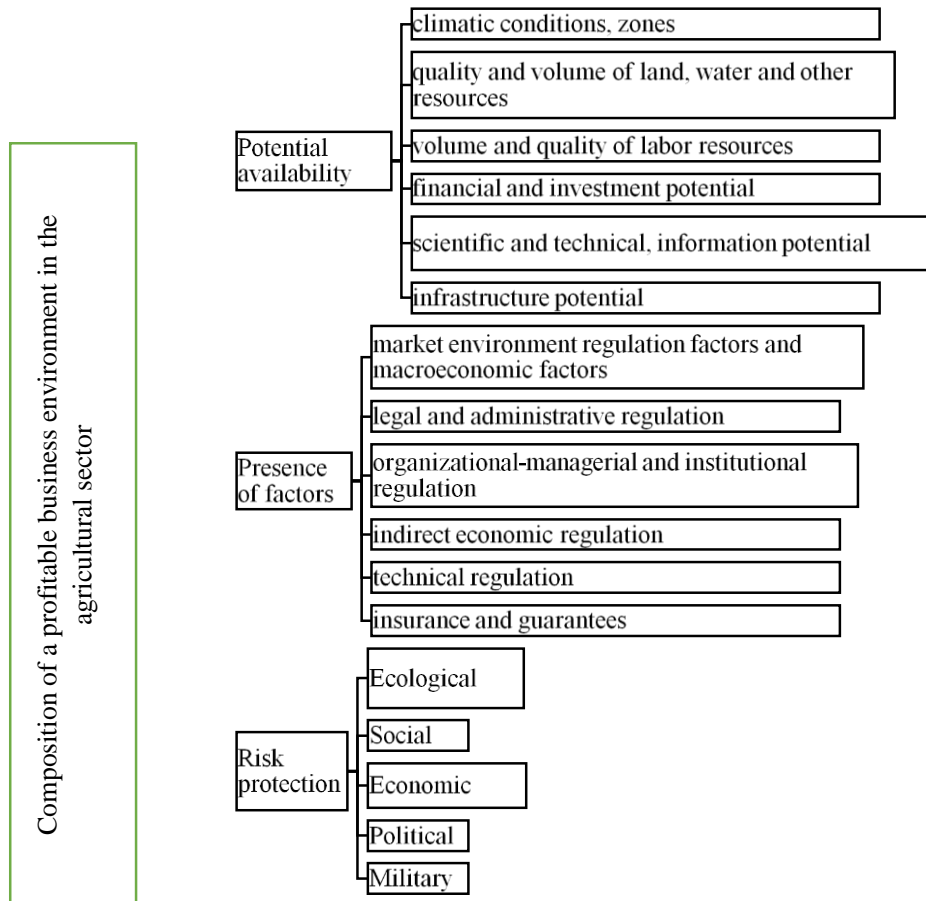


Figure 1: Composition of a profitable business environment in the agricultural sector

The strengths of the business environment in the agricultural sector in Azerbaijan may include the following:

- the presence in the country of favorable climatic conditions (9 climatic zones out of 11 existing), natural resources and geographical location;
- the presence of property relations corresponding to a market economy;
- creation of agribusiness enterprises and the availability of mechanisms of state support and assistance for the intensive development of the agriculture;
- a good level of self-sufficiency in food;
- improving the provision of equipment and technologies to the agricultural sector and related processing enterprises;
- subsidies and tax incentives for agricultural producers;
- increase exports and facilitate access to the international market.

As the weaknesses of the business environment in the agricultural sector of the country, we can indicate the following:

- low productivity and large number of small family farms;
- incomplete modernization of the irrigation system and the presence of certain problems in this area;
- insufficient number of distribution centers and storage facilities;
- despite a more developed supply policy (as opposed to a demand policy), the presence of a weak level of supply of processing enterprises with local products, and insufficient cooperation between the agricultural sector and industry;
- limited access to financial markets;

- underutilization of value added opportunities;
- inconsistency with the requirements of knowledge and skills of workers in the agricultural sector.

At present, in Azerbaijan, the regulation of the development of the business environment in the agricultural sector and the sector itself as a whole is based on the formation of the legal environment, provision of various property forms, application of methods of economic and institutional regulation. Since a special type of property prevails in agriculture, let us dwell on the other three points.

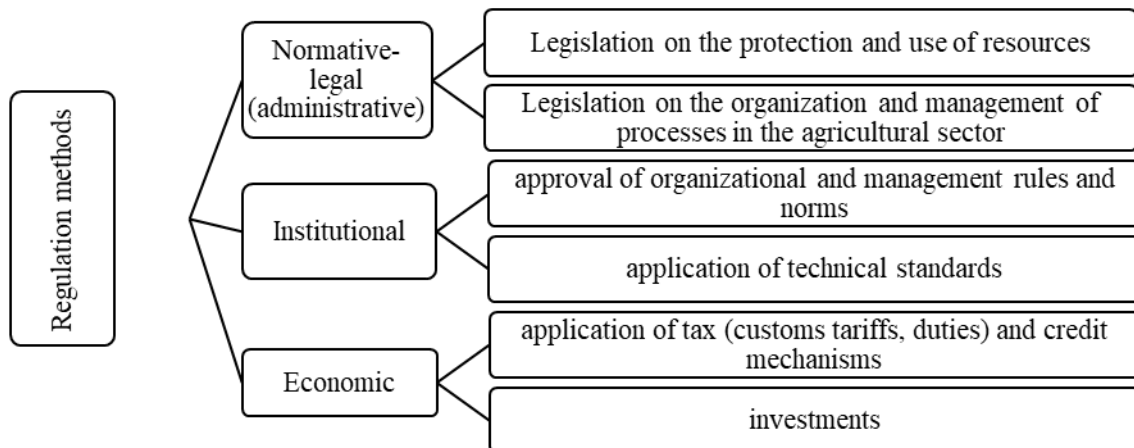


Figure 2: Methods of regulating the development of the agricultural sector

Regarding the formation of the legal environment, it should be noted that over the years of independence, the legislation on the agricultural sector has undergone many changes. The following regulatory documents, created in accordance with the Land Code, Water Code, Forest Code, "Land Reforms" and "Land Lease Law" of the Republic of Azerbaijan, along with the formation of a profitable business environment in the agricultural sector, have created the legal basis for continuing the reform process in this area: "Regulations on state control over land use and protection"; "Rules for compensation of damage and loss to forestry"; "Rules for state control over the condition, use, protection, preservation of the forest fund and restoration of forests"; Law of the Republic of Azerbaijan "On the Fundamentals of Agrarian Reform" of February 18, 1995; Decree of the President of the Republic of Azerbaijan dated March 22, 1999 "On some measures to accelerate reforms in the agricultural sector"; Decree of the President of the Republic of Azerbaijan dated November 24, 2003 "On measures to accelerate socio-economic development in the Republic of Azerbaijan"; Order of the President of the Republic of Azerbaijan dated January 23, 2007 "On state support to agricultural producers"; Order of the President of the Republic of Azerbaijan dated August 21, 2008 "On additional support for the provision of agricultural producers with seeds, fertilizers and breeding animals"; Law of the Republic of Azerbaijan "On ecologically clean agriculture" dated June 13, 2008; Order of the President of the Republic of Azerbaijan "On measures related to the development of seed production" dated July 4, 2016; "Strategic Roadmap for the production and processing of agricultural products in the Republic of Azerbaijan" dated December 6, 2016; Order of the President of the Republic of Azerbaijan dated February 23, 2018 "On measures to strengthen the technical support of the agricultural sector"; Decree of the President of the Republic of Azerbaijan dated December 19, 2018 "On improving state support for agriculture and leasing activities in the agricultural sector"; "Rules for acquisition, permanent suspension, cancellation and restoration of the right of foreign trade participants to permanent use of the" Green Corridor

"clearance system" approved by the Decree of the President of the Republic of Azerbaijan dated December 21, 2018; "List of equipment to be discounted in the agrarian sector" approved by the decision of the Board of the Ministry of Agriculture of the Republic of Azerbaijan dated April 26, 2019; "Rules for subsidizing agricultural production" approved by the Decree of the President of the Republic of Azerbaijan dated June 27, 2019 "On establishment of a new subsidy mechanism in the agrarian sector"; Law of the Republic of Azerbaijan "On Agrarian Insurance" dated June 27, 2019; Decision of the Cabinet of Ministers of the Republic of Azerbaijan dated November 27, 2019 "On approval of the part of the agrarian insurance premium to be paid at the expense of the state budget for each insurance product". At present, against the background of the global COVID-19 pandemic, the demand for environmentally friendly products to strengthen the immune system is growing. However, in the Republic of Azerbaijan, the adoption of the Law on Ecologically Clean Agriculture of 13 June 2008 was one of the steps aimed at ensuring ecologically clean agricultural production. Regarding the adoption of state programs with financial and material support, we can say that along with a number of short-term, targeted programs (related to the development of viticulture, cotton, etc.), "The State Program on Deepening Agrarian Reforms in the Republic of Azerbaijan in 1999-2000" and "Assistance to the Development of Entrepreneurship in Agriculture and the Program on Development of the Agrarian Sector in the Republic of Azerbaijan for 2002-2006" served to create a profitable business environment in the agrarian sector. In connection with the development of the agrarian sector, there is a need for the use of institutional mechanisms in Azerbaijan today, along with a number of normative legal acts. The study of the theory of institutional change, formal and informal, dominant and complementary institutions, a special group of rules within them, allows us to distinguish between mandatory and modifying mechanisms (institutional mechanisms). Institutional mechanisms ensure the use of institutions in the economy, the formation of the necessary institutional environment for their activities. In fact, institutional mechanisms are rules. An institutional mechanism is a complex system of rules that ensures the establishment of horizontal and vertical relationships between institutions, their application in the economy, their impact on economic agents, and transformation in the process of economic relations. It is a set of legal, organizational, financial and economic norms that ensure the interaction, application and target impact of institutions with economic entities (agents) (Migunov R.A., 2018). In general, institutional changes encompass changes in management and regulatory institutions. According to this point of view, the following changes have been made to the institutions that form the conditions for the development of the agricultural sector in our country, which are still ongoing:

- 1) institute of possessiveness in the agrarian sector;
- 2) institute of competition in the agrarian sector;
- 3) institute of legal protection and regulation of property in the agricultural sector;
- 4) institutions related to the use of financial and credit resources in the agricultural sector, including the application of taxation.

The changes to ensure the economic growth of the agricultural sector in our country are as follows:

- 1) as regulatory institutions that will serve to long-term economic growth in the agricultural sector:
  - directly involved in providing subsidies,
  - supporting innovative development,
  - implementing political decisions;
- 2) as institutions aimed at reducing the level of volatility of economic development in the agricultural sector:
  - serving to stabilize the conjuncture of agricultural products,
  - engaging in the regulation of demand in the agricultural market.

It should be noted that the State Veterinary Committee and the State Plant Quarantine Inspectorate under the Cabinet of Ministers of the Republic of Azerbaijan were abolished by the Decree of the President of the Republic of Azerbaijan dated February 4, 2000 "On measures to improve the management system of the agrarian sector in the Republic of Azerbaijan"; the powers of these state bodies and the enterprises and organizations subordinated to them were transferred to the Ministry of Agriculture of the Republic of Azerbaijan. By the Order of the President of the Republic of Azerbaijan dated October 23, 2004 "On additional measures in the field of expanding leasing in the agrarian sector", the Ministry of Economic Development was instructed to establish "Agroleasing" Open Joint Stock Company. By the Decree of the President of the Republic of Azerbaijan dated April 16, 2014 "On measures to improve management and accelerate institutional reforms in the agricultural sector" under the Ministry of Agriculture were established the State Agency for Amelioration and Water Resources, State Veterinary Service, State Phytosanitary Control Service and State Agency for Agricultural Credits, district and city departments of the Ministry of Agriculture of the Republic of Azerbaijan. However, the improvement of management did not end there, and with the help of innovative technologies, work continued to make the management process easier and more accessible, transparent, efficient and convenient. According to the Decree of the President of the Republic of Azerbaijan dated January 14, 2019 "On additional measures to improve management in the agricultural sector" on the basis of the State Phytosanitary Service, the State Veterinary Service, the State Service for Registration and Seed Control of Plant Varieties and the Main State Technical Control Service under the Ministry of Agriculture of the Republic of Azerbaijan has been established the Agrarian Services Agency under the Ministry of Agriculture of the Republic of Azerbaijan and it currently coordinates the activities of state agrarian development centers. In order to increase the efficiency of the management system, the informatization of the management process and the use of information technology to implement specific management decisions in the management of the agricultural sector, the formation of information bases play an important role. In accordance with paragraph 6.3 of the Decree No. 152 of the President of the Republic of Azerbaijan dated April 16, 2014 "On measures to improve governance in the agricultural sector and accelerate institutional reforms", in order to regulate the organization and operation of the "Electronic Agriculture" Information System in the agricultural sector and the integration of this system with other state information systems and resources the Cabinet of Ministers approved the "Rules for the use of the" Electronic Agriculture "Information System" by Resolution No. 408 of December 30, 2014. Currently, those working on the basis of widespread application of innovative technologies in the agricultural sector use the portals "Azexport.az" and "Aqrar.az". For the first time in the world, the "Unified Export Application" project was implemented and declaration, certificate and licensing procedures were simplified through the "Azexport.az" portal<sup>1</sup>. In connection with the investment environment, the portal [www.EnterpriseAzeryan.com](http://www.EnterpriseAzeryan.com) began to be used. Ways to solve the problems of agricultural development are not limited to ensuring efficiency and the adopted legal and regulatory acts, institutional changes. At the same time, state regulation in the agricultural sector, ie increasing state support for agricultural producers is being carried out. However, the concessions made so far (in the field of taxes and credit) and financial support, organized at the expense of the state, have had a short-term effect. The reason for this can be explained by a number of points. First of all, it should be noted that the involvement of investors in the development of the agricultural sector can help to solve a number of financing problems. However, the attractiveness of the sector for investors is achieved by improving the agricultural infrastructure. In this case, infrastructure should be widely accepted as a synthetic indicator of economic conditions in the agricultural sector.

<sup>1</sup>Azerbaijan has created the world's first online Unified Export Application.

[https://azertag.az/xeber/Azərbaycanda\\_dunyada\\_ilk\\_defe\\_onlayn\\_vahid\\_ixrac\\_erizesi\\_yaradilib\\_YENILANIB-1136629](https://azertag.az/xeber/Azərbaycanda_dunyada_ilk_defe_onlayn_vahid_ixrac_erizesi_yaradilib_YENILANIB-1136629)

Secondly, the issue of stimulating development through the introduction of tax exemptions is on the agenda. Although the improvement of agrarian infrastructure creates profitable conditions for long-term development of the agrarian sector, based on national and international experience, we can say that tax exemptions do not have this effect. Thus, when tax exemptions expire or are canceled, they cause dissatisfaction and may result in investors leaving the sector. In order to develop the agricultural sector, legal entities and individuals involved in the production of agricultural products, except for the land tax, are also exempt from other taxes (income tax, value added tax and simplified tax). The exemption of lands on which agricultural activity is carried out in the Republic of Georgia from land tax can be assessed as an advantage in comparison with the areas where land tax is applied in the Republic of Azerbaijan. Therefore, in the realities of Azerbaijan, the improvement of agricultural infrastructure can lead to long-term economic development of this sector. Secondly, in practice, two factors are taken into account for lending: the assessment of the borrower or the assessment of the business to which the loan will be issued. The main difference is that most banks often consider the first factor instead of the second. And this is due to the riskiness of activities in the agricultural sector. Thirdly, the absence or imperfection of some of the legal and institutional mechanisms that need to be systematically implemented has not allowed the expected effect to be achieved in the agricultural sector. This was due to the fact that the problem was considered only in the agricultural sector and was not predicted as part of a series of consecutive steps for the long-term development of the country. The analysis of experience allows us to conclude that in most countries, including Azerbaijan, the following mechanisms are preferred during state regulation:

- Formation of legal environment;
- Adoption of state programs with financial and material support;
- Concessions in taxation and lending.

However, it should be borne in mind that introducing the ideology of public-private partnerships and increasing the regulatory and controlling role of society in the development process require the introduction of new innovative approaches to regulation.

### **3. POTENTIAL FOR THE DEVELOPMENT OF AGRARIAN SECTOR AND WAYS TO INCREASE IT**

The development of the agrarian sector in terms of quantity envisages development in two directions: to increase production and exports.

One of the potential opportunities to increase production is to increase the efficiency of the volume and use of natural resources. Our country's land resources are limited, and if we take into account that 20% of it, including 10% of land suitable for agriculture, is under occupation, we see that the problem of land use in the Republic is more acute. Although the total land area of our country is 8660 thousand hectares, the area of land suitable for agriculture in 2018 increased by 39.1 thousand hectares compared to 2000. Thus, the share of land suitable for agriculture was increased from 54.7% to 55.1%. Regarding the issues of production and processing of agricultural products of the Republic of Azerbaijan, the Strategic Road Map sets a goal by the end of 2020 to increase the sown area from 1.5 million hectares to 2 million hectares. It is planned to use 60% of the sown area for grain growing and to strengthen the fodder base of livestock. Another sub-goal is to rehabilitate and return to use saline soils and to take measures to maintain the quality of pastures and hayfields. It should be noted that the cost of land restoration in 2000-2018 increased by 51.8 times. At the beginning of 2020, the total land area per capita in the country was 0.8 ha, the area of land suitable for agriculture was 0.47 ha, and the sown area of crops was 0.1 ha. These figures decrease as the population grows.

Therefore, in order to fulfill the task of President Ilham Aliyev to implement the efficient use of land, by the Order of the Cabinet of Ministers of the Republic of Azerbaijan, the purpose and category of 224,800 hectares of land were changed, taking into account their quality, reclamation and other indicators. Along with such measures of advice and support, such as land rest, increasing their fertility, applying an alternate sowing system, work was also done to comply with the conditions of land use legislation. Another problem is related to land productivity by region and, therefore, rents vary. And this, in turn, manifests itself in the cost of the product. The analysis shows that even in 2000, irrigation and agricultural water supply accounted for 58% of total water consumption, in 2018 this figure was already 73%. That is, a 15% increase was observed. As part of increasing water efficiency, the country has taken steps to convert seawater into fresh water and then use it for technical purposes, such as irrigation, and in 2013 a plant with a daily production capacity of 1,000 cubic meters was commissioned. The fresh water converted by this plant is now widely used to irrigate seedlings in areas close to the plant. This plant, with a future infrastructure capacity of 20,000 cubic meters per day, will play an important role in meeting the water needs of the agricultural sector. Another potential opportunity to increase production manifests itself in increasing productivity and product range. 50% of agricultural goods are used as raw materials and 3/4 of consumer goods are paid for by agriculture. Agriculture accounts for 5.3% of Azerbaijan's GDP and is growing annually. During 2007-2018, there was an increase in livestock production. The increase was 1.5 times in meat production, 1.6 times in milk production, 1.8 times in eggs and 1.1 times in wool production. From 2007 to 2018, the increase in the production of crops was 1.7 times in cereals and legumes (which are considered strategic products), 2.3 times in cotton, 2.2 times in tobacco and 1.2 times in vegetables. However, the production of potatoes and garden crops in 2018 decreased compared to 2007. At present, the country's full self-sufficiency is observed in fruits and berries, all kinds of vegetables and eggs. There is a potential to increase the production of legumes, potatoes, garden crops, all kinds of beef and poultry, milk and dairy products, and this is important for self-sufficiency. According to the Strategic Roadmap for import substitution, it is planned to increase the production of the following products for 2020-2025: milk and dairy products - 20%, meat and meat products - 30%, cotton - 400%, tea - 200%. In terms of the potential to increase exports, it should be noted that there are comparative advantages of local agricultural products. Compared to 2007, the export situation (increase or decrease) of agricultural products in 2018 can be seen in the following tables.

*Table 1: Reserves and use of plant products, in tons*

Products	Cereals and legumes		All kinds of vegetables		Garden crops		Fruits and berries	
	2007	2018	2007	2018	2007	2018	2007	2018
Balance at the beginning of the year	661 137	1 200 215	175 509	205 223	8 181	2 942	59 251	47 365
Production	1 961 492	3 218 397	1 227 350	1 521 931	417 622	401 943	677 762	1 010 816
Import	1 472 802	1 170 127	68 033	36 794	8	1 327	37 846	138 078
Consumption	3 194 897	4 158 715	1 155 072	1 208 241	390 606	377 099	506 278	794 300
Export	352	44 272	53 147	235 299	618	313	224 686	328 338
Losses	193 454	264 713	78 153	100 604	26 031	26 496	13 083	16 947
Balance at the end of the year	706 728	1 121 039	184 520	219 804	8 556	2 304	30 812	56 674

Source: <https://www.stat.gov.az>

The analysis of Table 1 allows us to conclude that though compared to 2007, in 2018 while there was an increase in production of cereals and legumes in 1.6 times, all types of vegetables in 1.2 times and of fruits and berries in 1.5 times; there was 3.4% decrease in production of

garden crops. Compared to 2007, exports of cereals and legumes produced in 2018 increased from 0.02% to 1.4%, and for all types of vegetables from 4.3% to 15.5%. However, a comparison of these periods shows that exports of garden crops fell from 0.15% to 0.08%, and exports of fruits and berries fell from 33.2% to 32.5%. If we pay attention to the losses, we can see that compared to 2007, the loss of production in 2018 decreased from 9.9% to 8.2% in cereals and legumes, from 1.9% to 1.7% in fruits and berries. However, losses on all types of vegetables increased from 6.4% to 6.6%, and on garden crops from 6.2% to 6.6%.

*Table 2: Reserves and uses for livestock products*

Products	All kinds of beef and poultry		Fish, fish products and seafood		Milk and dairy products		Eggs	
	2007	2018	2007	2018	2007	2018	2007	2018
Balance at the beginning of the year	13 833	12 163	633	2 960	223 386	5 668	21 455	32 869
Production	218 670	326 024	20 599	61 879	1 341 006	2 080 437	953 627	1 676 213
Import	30 900	68 874	9 386	13 148	191 619	330 853	19 512	18 537
Consumption	250 160	409 488	28 995	73 962	1 499 937	2 384 394	975 805	1 642 015
Export	1 239	775	896	522	4 642	12 647	958	44 034
Losses	2 943	2629	101	210	49 131	10 279	3 494	8 601
Balance at the end of the year	9 061	13126	626	3 293	202 301	9 638	14 337	32 969

*Source: <https://www.stat.gov.az>*

An analysis of Table 2 allows us to conclude that, compared with 2007, in 2018 the production of all types of beef and poultry increased by 1.5 times, fish and seafood - 3 times, milk and dairy products - 1.6 times, eggs - 1.8 times. Compared to 2007, exports of all types of beef and poultry produced in 2018 decreased from 0.6% to 0.2%, and fish and seafood - from 4.3% to 0.8%; exports of milk and dairy products increased from 0.3% to 0.6%, and eggs - from 0.1% to 2.6%. If we pay attention to the losses, we can see that compared to 2007, the loss of production in 2018 decreased for all types of livestock and poultry - from 1.3% to 0.8%, for fish and seafood - 0.5% to 0.3%, for milk and dairy products from 3.7% to 0.5%; for eggs the loss increased from 0.4% to 0.5%. Currently, one of the main problems is to reduce or eliminate losses in use. And this can be achieved by improving the management in the agricultural sector. At present, a multi-level business management system covering all levels (republican, regional, local (district)) has been established to achieve management efficiency. Management mechanisms of business entities, and especially territorial-sector formations, are one of the most complex socio-economic systems. Their successful formation, use and development cannot be achieved without following the general rules of a systematic approach, as well as the principles that ensure the rational and rapid achievement of strategic, tactical and operational goals. The analysis of the system is based on an approach that brings together consumers (users), customers and researchers interested in solving the problem of the agricultural sector. If initially the analysis of the system was compiled mainly for senior executives and based on their opinions, wishes and requirements, in recent years, the list also includes the views and approaches of production technologists, researchers, managers of small and medium-sized companies (ie, all specialists involved in solving technical, scientific, financial and other system problems). However, the analysis shows that government measures are more based on cost reduction at the initial stage of the value chain. That is, although agricultural producers are provided with assistance and benefits at the initial stage (exemption from taxes other than land tax, etc.), at other stages of the value chain, these benefits and assistance are very low or non-



existent. On the other hand, incomplete provision of quality infrastructure, weak link between production and processing leads to losses in use. The application of adequate state regulatory mechanisms and the solution of the above-mentioned problems will ensure the synchronization of production and consumption in the agricultural sector.

#### 4. CONCLUSION

The results of the study show that the implementation of reforms in the agricultural sector continues from the first years of independence to the present, and for this purpose have been widely used legal, institutional and economic regulatory tools. During these years, a large number of normative-legal documents have been adopted, and regular measures have been taken to improve governance. However, the lack of consideration of the scale, methods and means of state regulation, which serve to economic growth in the agricultural sector, did not allow to optimize the relationship between production and consumption. It is clear from the analysis that although significant progress has been made in the agricultural sector in 2007-2018, gaps in the normative and legal documents adopted in this area have slowed down the large-scale development of the agricultural sector. State regulation of the activities and development of the agrarian sector was intended for the initial stages of the value chain, while government concessions and assistance were not sufficient at other stages. In our opinion, in order to create a favorable business environment in the agricultural sector, it is necessary to continue to take measures to make better use of available resources and opportunities; wide use of equipment, technologies and innovations in the field of management; facilitate communication between production and consumers. Along with measures to eliminate water shortages, prevent soil salinization and restore them, and protect the environment, it is necessary to reduce losses in the use of agricultural products and increase incentives for the formation of brands of “local organic products”.

#### LITERATURE:

1. "Rules for subsidizing agricultural production" approved by the Decree of the President of the Republic of Azerbaijan dated June 27, 2019 "On the establishment of a new subsidy mechanism in the agricultural sector"
2. “Composition of guaranteed risks on agrarian insurance” approved by the Resolution of the Cabinet of Ministers of the Republic of Azerbaijan dated December 27, 2019 “On approval of the composition of guaranteed risks on agrarian insurance”
3. “Strategic Roadmap for Production and Processing of Agricultural Products in the Republic of Azerbaijan” dated December 6, 2016
4. Abbasov I. (2013) Agriculture of Azerbaijan and the world, East-West publishing house, Baku, 2013
5. Alyev İ.H. (2004) Improving the development of the agrarian sector and the qualitatively effective implementation of reforms in the regions, Baku, 2004
6. Alyev İ.H. (2003) Improving the mechanism of economic management in the agricultural sector in the Republic of Azerbaijan, Baku, 2003
7. Approved by the decision of the Board of the Ministry of Agriculture of the Republic of Azerbaijan dated April 26, 2019 "List of equipment to be discounted in the agricultural sector"
8. Atashov B. (2017) Structural and efficiency problems in the agricultural sector, Cooperation Publishing House, Baku, 2017
9. Decision of the Cabinet of Ministers of the Republic of Azerbaijan dated November 27, 2019 "On approval of the part of the agrarian insurance premium to be paid at the expense of the state budget for each insurance product"

10. Decree of the President of the Republic of Azerbaijan dated April 16, 2014 "On measures to improve management and accelerate institutional reforms in the agricultural sector"
11. Decree of the President of the Republic of Azerbaijan dated December 19, 2018 "On improving state support for agriculture and leasing activities in the agricultural sector"
12. Decree of the President of the Republic of Azerbaijan dated February 4, 2000 "On measures to improve the management system of the agrarian sector in the Republic of Azerbaijan"
13. Decree of the President of the Republic of Azerbaijan dated January 14, 2019 "On additional measures to improve management in the agricultural sector"
14. Decree of the President of the Republic of Azerbaijan dated March 22, 1999 "On some measures to accelerate reforms in the agricultural sector"
15. Decree of the President of the Republic of Azerbaijan dated November 24, 2003 "On measures to accelerate socio-economic development in the Republic of Azerbaijan"
16. İbrahimov İ.H.(2003) Fundamentals of Agrarian Economy, Baku: Sada Publishing House, 2003
17. Law of the Republic of Azerbaijan "On the Fundamentals of Agrarian Reform" dated February 18, 1995, <http://www.e-qanun.az>
18. Law of the Republic of Azerbaijan "On Agrarian Insurance" dated June 27, 2019
19. Migunov R.A.(2018) Institutional environment for sustainable agricultural growth. Abstract of dissertation for the degree of candidate of economic sciences. Moscow, 2018.
20. Order of the President of the Republic of Azerbaijan "On state support to agricultural producers" dated January 23, 2007
21. Order of the President of the Republic of Azerbaijan dated August 21, 2008 "On additional support for the provision of agricultural producers with seeds, fertilizers and breeding animals"
22. Order of the President of the Republic of Azerbaijan dated August 21, 2008 "On additional support for the provision of agricultural producers with seeds, fertilizers and breeding animals"
23. Order of the President of the Republic of Azerbaijan dated February 23, 2018 "On measures to strengthen the technical support of the agricultural sector"
24. Order of the President of the Republic of Azerbaijan dated July 4, 2016 "On measures related to the development of seed production"
25. Order of the President of the Republic of Azerbaijan dated October 23, 2004 "On additional measures to expand leasing in the agrarian sector"
26. Order of the President of the Republic of Azerbaijan dated October 23, 2004 "On additional measures to expand leasing in the agrarian sector"
27. Resolution of the Cabinet of Ministers of the Republic of Azerbaijan dated March 26, 1999 "On preferential sale of oil products to agricultural producers"
28. Resolution of the Cabinet of Ministers of the Republic of Azerbaijan dated March 15, 2000 "On the organization of operation of domestic reclamation and irrigation systems on the balance of former collective farms, state farms and other agricultural enterprises"
29. State Program "On deepening agrarian reforms and assistance to the development of entrepreneurship in agriculture in the Republic of Azerbaijan in 1999-2000"
30. State Program "On the development of the agrarian sector in the Republic of Azerbaijan in 2002-2006"

## **DIVERSIFICATION OF THE ECONOMY IN THE RESOURCE- RICH COUNTRIES (BY THE EXAMPLE OF AZERBAIJAN, KAZAKHSTAN, AND RUSSIA)**

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### **ABSTRACT**

*The study addresses diversification issues of the economies of the countries with a comparative advantage in the form of natural resources, in particular mineral ones. As countries with rich natural resources, the Caspian countries, Azerbaijan, Kazakhstan and Russia, are being investigated. These countries have much in common: with the collapse of the Soviet Union they were among the countries with low per capita incomes. And only thanks to their competitive advantage - availability of rich energy resources - they were able to strengthen their economic situation. The purpose of the study is to measure the level of diversification of the economy of the Caspian countries and determine the effectiveness of governance. As a methodology, there have been adopted the calculations of Herfindahl-Hirschman index which measure the level of economic diversification and The Worldwide Governance Indicators used to assess the quality of governance of these countries. The analysis indicates a weak diversification of the economy and a strong dependence of these countries on oil revenues. The results of the study show that it is necessary to develop manufacturing, non-tradable sectors of the economy, and increase the efficiency of governance. Successful governance requires improvement of the institutional base, implementation of effective rules and reliable control over their implementation.*

**Keywords:** *Caspian countries, economic diversification, governance, institutions, natural resources*

### **1. INTRODUCTION**

Countries with rich natural resources, in particular mineral ones, have some peculiarities and face certain problems in comparison with countries with balanced resources. First, production ties with other sectors of the economy are relatively limited. Second, natural rent is highly concentrated and is largely realized in the form of tax revenues. These trends are especially true in hydrocarbon-rich countries (Gelb, 2010). By definition, a resource-oriented economy is an economic system where the share of natural resources is more than 10% of GDP and 40% of exports. Due to the volatility of raw material prices, such an economy is particularly vulnerable to external shocks and is highly dependent on the external market conditions (Ahrend, 2005). Generally, oil and gas exporting countries are heavily dependent on their dominant sector. According to estimates by Bornhorst, Gupta and Thornton (2008), hydrocarbon revenues of 30 oil exporting countries for the period 1992-2005 accounted for an average of 16.2% of GDP or 49.1% of total budget revenues (in the Middle East 20.0% and 57.2%, respectively). But taking into account also other types of production activities that are directly or indirectly dependent on the oil sector, as well as many “non-oil” taxes (including import duties or corporate taxes) that depend on export earnings from the sale of oil and gas, it should be noted that the true dependence of these countries from mineral resources are much more than it seems. Due to its geo-economic advantages and geo-economic position, the Caspian region, rich in energy resources and located at the junction of Europe and Asia, is an important transport and communication corridor of Eurasia that attracts the interests of leading countries of the world. The Caspian countries, Russia, Iran, Kazakhstan, Turkmenistan and Azerbaijan, begin to play a prominent role in the global economy, participate in the development and implementation of numerous trans-regional projects.

Due to its rich energy resources and geopolitical importance, the region has gained the interest of foreign oil and gas companies and great powers. The strategic importance of the Caspian sea lies in its abundance of energy resources. The sea contains large volumes of oil and natural gas reserves both in offshore fields and onshore fields in the immediate region. The Caspian sea is estimated to contain 48 billion barrels of oil and 8.7 trillion cubic meters of gas in explored or probable reserves (<https://worldview.stratfor.com>). The countries of the Caspian region have much in common: for 70 years they have been part of the single state. The Caspian countries are united by similarities in the strategy of building a market economy; therefore, along with historical ones, there are socio-economic foundations for the formation and development of economic ties between these countries. With the collapse of the Union and the severance of inter-Union ties, the Caspian countries faced an acute economic crisis. This strongly affected the main macroeconomic indicators that determine the level of socio-economic development of the country and indicators of living standards. The wealth of natural resources opens up opportunities for countries to build up human and institutional capital. Countries with rich natural resources and strong institutions have more opportunities for diversification than countries with weak institutions (Sy Amadou N.R., Rabah Arezki, Thorvaldur Gylfason, 2011). Unfortunately, most resource-exporting countries have weak institutions. According to the institutional indicators of Governance Quality (WGI), oil-exporting countries have an average institutional score corresponding to that of the much poorer non-oil countries (WGI, 2018).

## 2. LITERATURE REVIEW

Numerous studies on diversification of countries with rich natural resources have been published with the support of international financial institutions, in particular the World Bank: “Diversified Development: Making the most of natural resources of Eurasia” (Indermit S. et al, 2014). Diversification studies in Azerbaijan were elucidated by: Ingilab Akhmadov “Diversification problems of Azerbaijani economy: Obstacles and solutions” (2017); Kanan Aslanli et al. “Assessment of the Azerbaijani economy and diversification opportunities” (2013); Vugar Bayramov, and Abbas G. “Oil shock in the Caspian Basin: Diversification policy and subsidized economies” (2017); Fakhri Hasanov “Dutch disease and the Azerbaijan Economy” (2014); Zohrab Ismayil “Oil Dependence and Challenges of the Economic Diversification” (2015). Reports on diversification of the economy of Kazakhstan were published by the Asian Development Bank, “Kazakhstan Accelerating Economic Diversification” (2018); by World Bank, “Kazakhstan – The Challenge of Economic Diversification amidst Productivity Stagnation” (2018); by EBRD, “Diversification of Kazakhstan’s economy: A capability-based approach” (2015); as well as by Akram Esanov, “Economic Diversification: The Case for Kazakhstan” (2012). Studies of the economic diversification of the Russian Federation were published in the EBRD’s Report “Diversifying Russia” (2012); Silvana Malle publication (2013); Dobrynskaya and Turkisch “Economic diversification and Dutch disease in Russia” (2010); Zagashvili “Diversification of Russian economy under sanctions” (2016). In these studies, economic diversification is considered as an important and necessary event for countries with rich resources and it is noted that economic factors alone are not enough for successful economic diversification, and political factors play an important role as well.

## 3. METHODOLOGY

Herfindahl-Hirschman index (HHI) and The Worldwide Governance Indicators (WGI) have been adopted as a methodology to measure the level of economic diversification.

HHI is calculated by the formula:

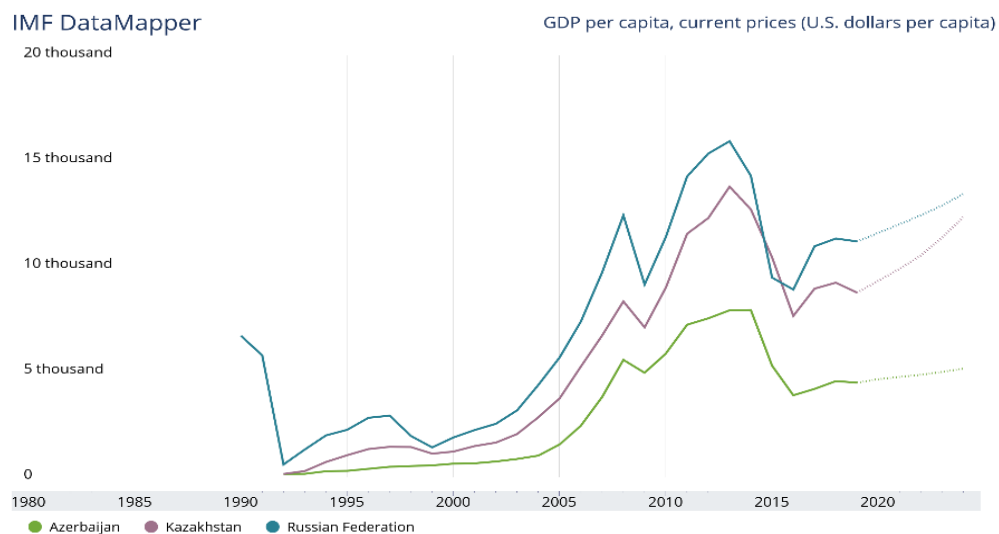
$$HHI = \sum_{i=1}^n S_i^2 \quad (1)$$

Where  $S_i^2$  is the share of a particular sector of the economy or volume of production in the economy or total exports;  $i$  is a specific economic sector (product group);  $n$  is the number of economic sectors (product group) in a country. The index values vary in the interval [0; 1]. An index value closer to 0 indicates a low level of economic concentration (maximum diversification) of a particular sector or group of goods. One of the most popular indicators used to assess the quality of public administration is the Worldwide Governance Indicators (WGI) indicator developed by the World Bank. WGI presents six aggregated indicators characterizing the degree of effectiveness of public administration in various countries: 1. Voice and Accountability; 2. Political Stability and Absence of Violence/Terrorism; 3. Government Effectiveness; 4. Regulatory Quality; 5. Rule of Law; 6. Control of Corruption (WGI, 2018).

#### 4. DISCUSSION AND RESULTS

##### 4.1. Object of study: Caspian countries - Azerbaijan, Kazakhstan and Russia

In terms of per capita income, the Caspian countries, like other countries of the post-Soviet space, actually turned out to be among the countries with low incomes. And only thanks to their competitive advantage, the availability of rich natural resources, especially energy ones, the countries managed to strengthen their economic position (Fig. 1).



*Figure 1: GDP per capita*  
(Source: IMF Data Mapper, December 2019)

As can be seen from Figure 1, per capita GDP growth in Azerbaijan, Kazakhstan and Russia began after 2000. And from this period, there has been a parallel increase in the GDP of these countries until 2008, a fall in 2009 due to the global financial crisis, then again a gradual increase in per capita GDP after 2009 until 2013. The maximum mark of GDP in these countries per capita reached in 2013 due to high world oil prices. Thus, in Russia, according to the IMF, in 2013 this indicator was at the level of \$15,940; in Kazakhstan - \$13,790; in Azerbaijan - \$7,930. Due to the sharp drop in oil prices, per capita GDP in oil-rich countries is also declining.

This trend is observed until 2016. In 2016, per capita GDP in Russia dropped to \$8,910; in Kazakhstan - to \$7,660; in Azerbaijan - \$3,900. Starting from 2017, countries are gradually increasing per capita GDP.

#### 4.2. Measuring the level of economic diversification

Tables 1-3 below show the structure of GDP by type of economic activity in the countries under consideration and calculate the concentration index of HHI industries in GDP. Due to the fact that Russia is one of the largest oil exporters, there is an opinion that the entire Russian economy rests solely on the gas and oil industries. However, in reality, the share of extractive industry in Russia's GDP for 2010-2017 is about 10%, the share of processing industry exceeds the share of extractive one (Table 3). A similar situation is typical for Kazakhstan. Despite the fact that this is primarily a country with rich natural resources, it has a more developed manufacturing industry, the share of which is almost equal to the share of the extractive industry. If in 2010 the share of extractive industry in Kazakhstan's GDP was about 20%, then starting from 2015 its share decreased to almost 13% (Table 2). In Azerbaijan, the manufacturing industry accounts for about 5% of GDP, while the extractive industry accounts for about 30-40%. Despite the fact that in 2015 the share of the extractive industry decreased to 29% (due to a decrease in oil production in view of low world prices), in 2017 it rose to 36.8% (Table 1).

	2005	2010	2013	2014	2015	2016	2017
A – Agriculture, forestry, hunting and fishing	9,7	5,9	5,7	5,7	6,8	6,1	6,1
B – Mining	45,5	49,2	42,0	37,0	29,0	33,4	36,8
C-Industrial processing	7,0	5,1	4,5	5,1	5,5	5,4	5,1
D-E- public utilities	0,9	1,1	2,2	2,1	1,7	1,6	1,3
F-Construction	9,6	8,7	12,4	13,7	13,1	11,4	10,3
G-Trade	6,5	6,9	7,6	8,5	10,9	11,3	11,2
H-Transport	5,5	6,0	4,7	4,9	6,5	7,3	7,3
I-S-Other industries	15,3	17,1	20,8	22,9	26,5	23,5	21,9
HHI*	0,26129	0,293438	0,248783	0,224027	0,19553	0,204768	0,218358

\* – the level of industry concentration in GDP

*Table 1: Azerbaijan - specific weight of gross value added by type of economic activity in GDP (in per cent)*

*(Source: State Statistical Committee of the Republic of Azerbaijan. System of National Accounts, 2018, p. 34)*

	2005	2010	2013	2014	2015	2016	2017
A – Agriculture, forestry, hunting and fishing	6,6	4,7	4,5	4,4	4,8	4,6	4,3
B – Mining	16,4	20,1	15,2	15,1	12,6	12,9	13,6
C-Industrial processing	12,5	11,7	10,6	10,3	10,3	11,3	11,2
D-E- public utilities	2,0	2,2	1,9	1,9	1,9	1,9	1,9
F-Construction	8,2	8,0	6,0	5,9	6,0	5,9	5,5
G-Trade	12,3	13,4	15,1	16,0	17,0	16,8	15,9
H-Transport	12,3	8,3	7,5	7,9	8,6	8,3	8,4
I-S-Other industries	29,7	31,6	39,2	38,5	38,8	38,3	39,2
HHI*	0,172468	0,18788	0,222416	0,219254	0,21959	0,21717	0,222276

\* – the level of industry concentration in GDP

*Table 2: Kazakhstan - specific weight of gross value added by type of economic activity in GDP (in per cent)*

*(Source: National accounts of the Republic of Kazakhstan 2006-2010 (2012, p. 38), National accounts of the Republic of Kazakhstan 2013-2017 (2019))*

	2005	2010	2013	2014	2015	2016	2017
A – Agriculture, forestry, hunting and fishing	4,9	4,1	3,6	4,1	4,6	4,8	3,6
B – Mining	11,9	10,0	9,3	9,1	9,7	9,4	9,7
C-Industrial processing	19,0	16,7	13,0	13,3	13,7	13,7	12,2
D-E- public utilities	3,5	3,0	3,1	2,9	3,0	3,1	3,1
F-Construction	5,4	5,8	7,0	6,8	6,4	6,2	5,5
G-Trade	17,7	20,8	16,2	16,2	16,4	15,9	13,1
H-Transport	9,3	9,2	8,0	7,8	7,7	7,8	6,4
I-S-Other industries	28,3	30,4	39,8	39,8	38,5	39,1	46,4
HHI*	0,17687	0,187978	0,223754	0,223848	0,21634	0,21896	0,266128

\* – the level of industry concentration in GDP

Table 3: Russia - specific weight of gross value added by type of economic activity in GDP (in per cent)

(Source: Federal State Statistics Service, 2019)

As can be seen from the GDP structure, wholesale and retail trade in all three countries is the leading non-oil sector; in Azerbaijan, construction is also a leading sector. The Herfindahl-Hirschman Index (HHI), calculated to determine the level of concentration of industries in GDP, was in the range 0.18-0.22 in the analyzed countries for 2005-2017. And only in Azerbaijan in 2010 it amounted to 0.29 and in Russia - 0.26 in 2017 (Figure 2).

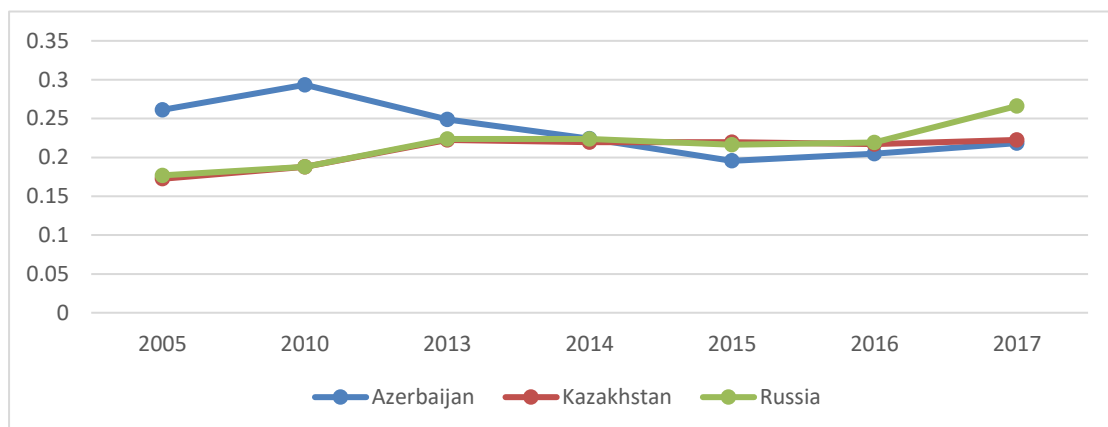


Figure 2: HHI - level of industry concentration in GDP (economic diversification)  
(Source: author`s calculations)

A high level of concentration, and therefore low diversification, is typical for Azerbaijan since, as it has been noted above, the share of extractive industry prevails in the structure of its GDP. The high HHI index in Kazakhstan and Russia is due to the high share of other sectors: education, healthcare, real estate transactions, etc.

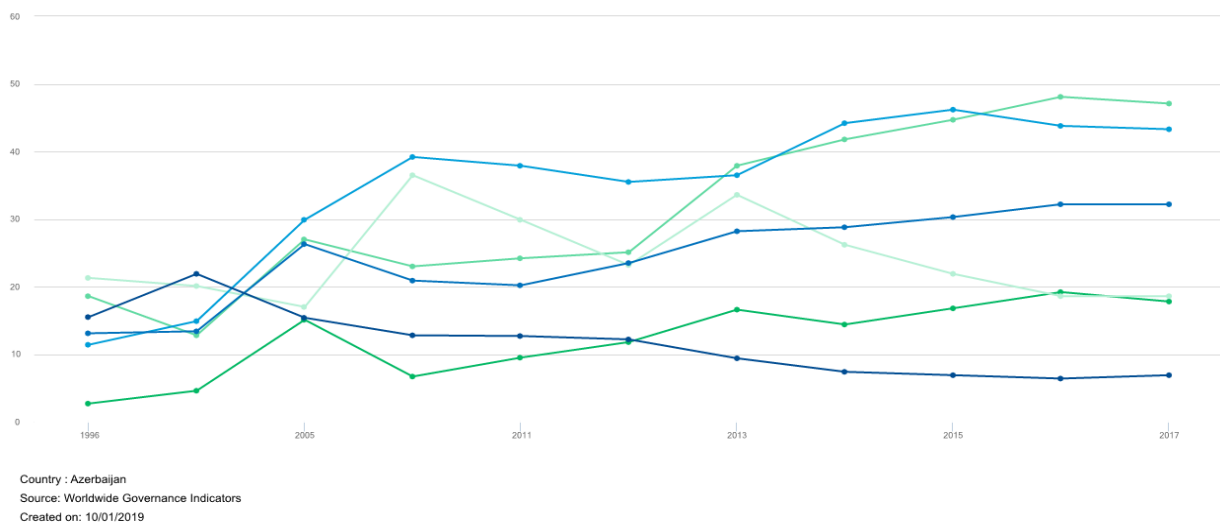
#### 4.3. Governance efficiency

In general, an analysis of the diversification level of the economy of the Caspian countries has showed the resource orientation of these countries. According to Alan Gelb, natural resources do not always have a negative impact on the economies of countries, but only if the institutions are weak (Gelb, 2010). To wide extent, institutions are most often understood as formal and informal rules and norms of interaction between people, ways to ensure the effectiveness of such rules and norms (we mean the institutional environment here), as well as organizations that provide certain interactions between people (Kokorev, 2008). A common feature of the economies under study is the weak development of institutions. By “weak” institutions we mean inefficient institutions.

The reasons for the inefficiency of institutions are as follows:

- Institutions are poorly applied due to their ambiguity, insufficient information on the significance of these institutions;
- They are inconvenient in practice, not flexible, not adapted to the needs of economic agents;
- Various institutions contradict each other; and
- Some of the existing institutions are even harmful to economic development or effective social interactions, they solve certain economic or social problems in a non-optimal way. For example, excessive state regulation in licensing activities that do not require special control.

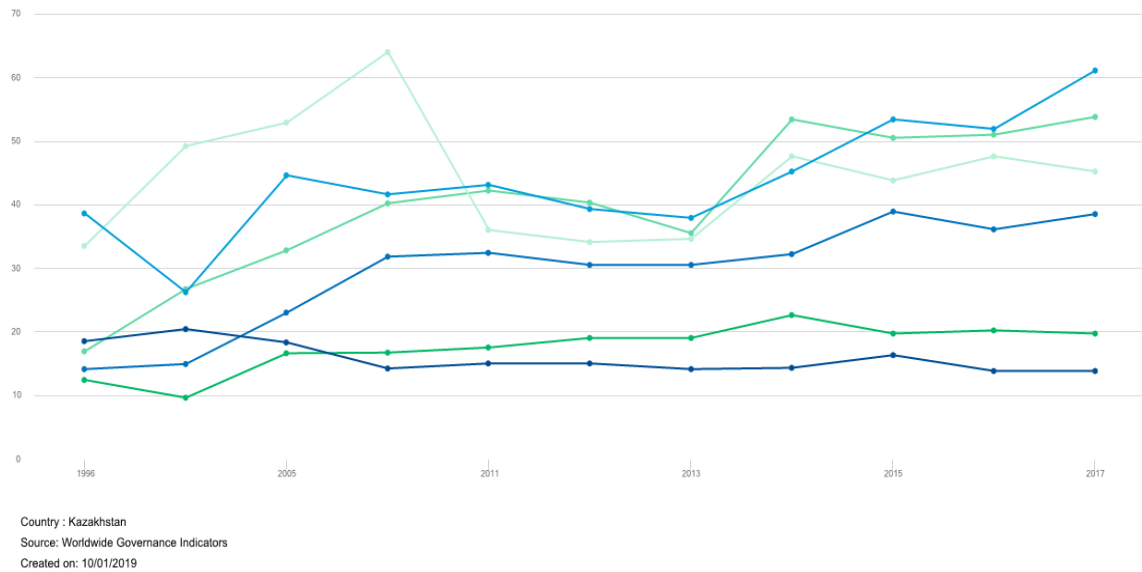
In addition to the inefficiency of institutions (protection of property rights and the judiciary), it should be noted the absence of some institutions (for example, civil control mechanisms), and the redundancy of others (interference of government bodies in the activities of business entities). P.Collier and A.Hoeffler (2012) suggest that in resource-rich countries, operators of natural resource rents are gradually weakening institutions that limit their ability to exploit natural resource rents. Regulatory institutions also receive a kind of rent. A large number of economic entities benefit from the restriction of competition, and thus, few incentives remain to improve the investment climate. Thus, the state is not interested in mitigating regulatory standards. Below are the WGI data for Azerbaijan, Kazakhstan and Russia for 1996-2017 (Figure 3-5).



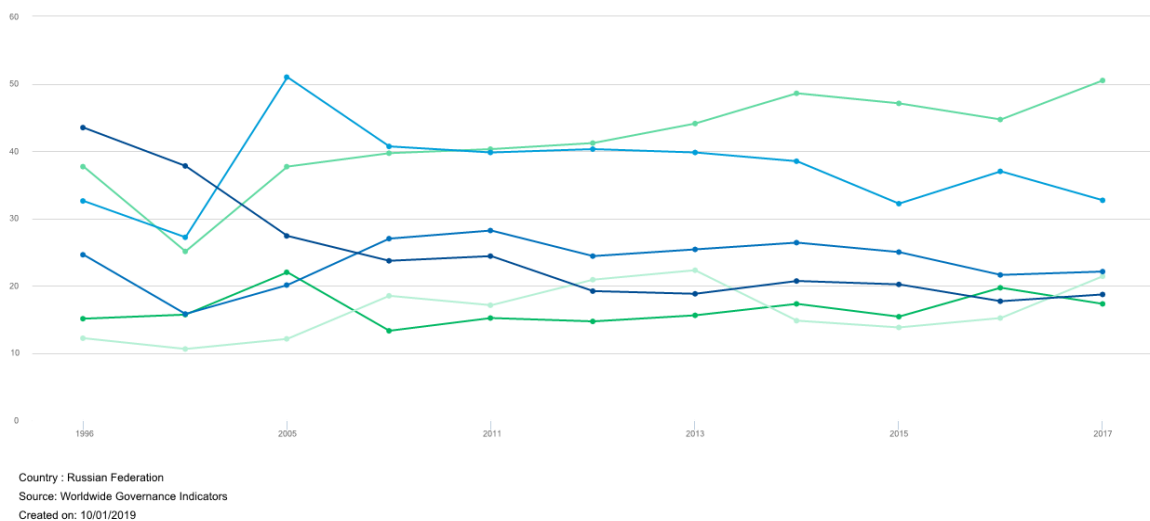
*Figure 3: WGI - Azerbaijan*  
(Source: <https://databank.worldbank.org>)

*Figure following on the next page*





*Figure 4: WGI - Kazakhstan*  
(Source: <https://databank.worldbank.org>)



*Figure 5: WGI - Russian Federation*  
(Source: <https://databank.worldbank.org>)

The figures show the scale of percentile ranks, reflecting the position of a certain state among the rest by determining the percentage of countries with the same or lower indicators. According to the WGI data for the period from 1996 to 2017, Azerbaijan has never reached the “50th percentile” mark, although in recent years, starting from 2015, the Government Effectiveness and State Regulatory Quality indicators have increased. In the Russian Federation, the situation is slightly better, and the mark “50” was reached only 2 times. In Kazakhstan, the situation with Government Effectiveness is relatively better, more than 60 percentiles in 2017.

## 5. CONCLUSION

Resource-based development is undoubtedly associated with serious risks. However, a resource curse is not inevitable, as examples of Australia, Canada, and the Scandinavian countries show. The problems associated with resource dependence, which includes increased vulnerability to external shocks, the risk of the “Dutch disease” and the risk of developing institutional

pathologies, can be overcome or at least mitigated very substantially if they are accompanied by the right economic policies. Availability of rich deposits of oil, gas or other minerals in the country implies the well-being of its inhabitants. However, the economies of countries with rich natural resources are developing more slowly than the economies of countries with poor mineral reserves. One reason for this discrepancy is how resources are managed. Effective governance requires an improvement in the institutional framework. Successful governance needs effective rules, reliable control over their implementation, as well as the ability and desire to follow them.

#### LITERATURE:

1. Ahrend, R. (2005). *How to Sustain Growth in a Resource Based Economy? The Main Concepts and their Application to the Russian Case*. UNECE. Retrieved 16.02.2020 from <https://www.unece.org/fileadmin/DAM/ead/sem/sem2005/papers/Ahrend.pdf>
2. Akhmadov I. (2017). *Diversification problems of Azerbaijani economy: Obstacles and solutions*. Entrepreneurship Development Foundation, Baku.
3. Aslanli K., Ismayil Z., Aghayev R., Mehtiyev A. (2013). *Assessment of the Azerbaijani economy and diversification opportunities*. Revenue Watch Institute.
4. Bayramov V., and Abbas G. (2017). *Oil shock in the Caspian Basin: Diversification policy and subsidized economies*. Resources Policy. Vol. 54, December 2017, pp. 149-156
5. Bornhorst, F., Gupta, S., and Thornton, J. (2008). *Natural Resource Endowments, Governance, and the Domestic Revenue Effort: Evidence from a Panel of Countries*. IMF Working Paper. July 2008. p. 13. DOI: 10.5089/9781451870282.001
6. Collier P., Hoeffler A. (2012). *High-value natural resources, development, and conflict: Channels of causation*. High-Value Natural Resources and Peacebuilding, ed. Lujala and Rustad. London: Earthscan. Retrieved 19.02.2020 from <https://www.extractiveshub.org/servefile/getFile/id/2665>
7. *Diversification of Kazakhstan's economy: A capability-based approach*. (2015). EBRD. Whiteshield Partners, 95 p.
8. *Diversifying Russia*. (2012). EBRD, 96 p.
9. Dobrynskaya, V., Turkisch, E. (2010). Economic diversification and Dutch disease in Russia. Journal Post-Communist Economies. Volume 22, Issue 3.
10. Esanov A. (2012). *Economic Diversification: The Case for Kazakhstan*. Revenue Watch Institute, 33 p.
11. *Federal State Statistics Service*. (2019). Rosstat. Retrieved 15.12.2019 from <https://gks.ru/>
12. Gelb, A. (2010). *Economic Diversification in Resource Rich Countries*. Retrieved 16.02.2020 from <https://www.imf.org/external/np/seminars/eng/2010/afrfin/pdf/Gelb2.pdf>
13. Hasanov F. (2014). *Dutch disease and the Azerbaijan Economy*. Communist and Post-Communist Studies. Vol. 46, Issue 4, December 2013, pp. 463-480
14. Indermit S., Izvorski G.I., Donato De Rosa, W.E. (2014). *Diversified Development: Making the most of natural resources of Eurasia*. World Bank
15. Ismayil Z. (2015). *Oil Dependence and Challenges of the Economic Diversification*. Atlas Network. Retrieved 25.02.2020 from [http://freeeconomy.az/site/assets/files/1393/economic\\_diversification\\_challenge.pdf](http://freeeconomy.az/site/assets/files/1393/economic_diversification_challenge.pdf)
16. *Kazakhstan – The Challenge of Economic Diversification amidst Productivity Stagnation*. (2018). World Bank
17. *Kazakhstan Accelerating Economic Diversification*. (2018). Asian Development Bank. 232 p.

18. Kokorev R. (2008). *The Role of Institutions for Diversifying the Economy in the Russian Federation*. Report at the International Conference "Strengthening Integration of the Economies in Transition into the World Economy through Economic Diversification". Geneva, April 2-4, Retrieved 11.02.2020 from [https://www.un.org/en/development/desa/policy/publications/general\\_assembly/eitconference/2apram\\_report\\_kokorev\\_rus.pdf](https://www.un.org/en/development/desa/policy/publications/general_assembly/eitconference/2apram_report_kokorev_rus.pdf)
19. *National accounts of the Republic of Kazakhstan 2006-2010. (2012)*. Statistics Committee of the Ministry of National economy of the Republic of Kazakhstan. Astana, p. 38
20. *National accounts of the Republic of Kazakhstan 2013-2017. (2019)*. Statistics Committee of the Ministry of National economy of the Republic of Kazakhstan. Astana
21. Silvana Malle. (2013). Economic modernisation and diversification in Russia. Constraints and challenges. *Journal of Eurasian Studies* Vol. 4(1). January 2013, pp. 78–99. DOI:10.1016/j.euras.2012.07.004
22. Sy Amadou N.R., Rabah Arezki, Thorvaldur Gylfason. (2011). *Beyond the Curse: Policies to Harness the Power of Natural Resources*. International Monetary Fund, p. 67
23. *System of National Accounts*. Statistical Bulletin. (2018). State Statistical Committee of the Republic of Azerbaijan. Baku, 644 p.
24. *The Strategic Importance of the Caspian Sea*. (2014). May 19, 2014. Retrieved 19.02.2020 from <https://worldview.stratfor.com/article/strategic-importance-caspian-sea>
25. *World Economic Outlook*. (2019). IMF Data Mapper. Retrieved 25.12.2019 from <https://www.imf.org/external/datamapper/NGDPDPC@WEO/AZE/KAZ/RUS?year=2020>
26. *Worldwide Governance Indicators*. (2018). World Bank. Retrieved 23.02.2020 from <https://info.worldbank.org/governance/wgi/>
27. Zagashvili V. (2016). *Diversification of Russian Economy under Sanctions*. *Mirovaya ekonomika i mezhdunarodnye otnosheniya*, Vol. 60, No 6, pp. 52-60. <https://doi.org/10.20542/0131-2227-2016-60-6-52-60>



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