

Varazdin Development and Entrepreneurship Agency and University North  
in cooperation with  
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

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

## Book of Proceedings

Editors:

Ana Aleksic, Vlatka Ruzic, Zoltan Baracskai



ISSN 1849-7535



9 771849 753006 >

19 February, 2021

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

Editors:

**Ana Aleksic, University of Zagreb, Croatia**  
**Vlatka Ruzic, Polytechnic "Nikola Tesla" in Gospić, Croatia**  
**Zoltan Baracscai, Széchenyi University of Győr, Hungary**

## **Economic and Social Development**

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

### **Book of Proceedings**

*This esd Conference is part of the project "Centar održivog razvoja"/"Center of sustainable development", co-financed by the European Union from the European regional development fund and implemented within Operational Programme Competitiveness and Cohesion 2014 – 2020 of the Republic of Croatia, based on the call "Investing in Organizational Reform and Infrastructure in the Research, Development and Innovation Sector".*

19 February, 2021

**Title ■** Economic and Social Development (Book of Proceedings), 65<sup>th</sup> International Scientific Conference on Economic and Social Development

**Editors ■** Ana Aleksic, Vlatka Ruzic, Zoltan Baracska

**Scientific Committee / Programski Odbor ■** Marijan Cingula (President), University of Zagreb, Croatia; Sannur Aliyev, Azerbaijan State University of Economics, Azerbaijan; Ayuba A. Aminu, University of Maiduguri, Nigeria; Anona Armstrong, Victoria University, Australia; Gouri Sankar Bandyopadhyay, The University of Burdwan, Rajbati Bardhaman, India; Haimanti Banerji, Indian Institute of Technology, Kharagpur, India; Victor Beker, University of Buenos Aires, Argentina; Asmae Benthani, Mohammed V University, Morocco; Alla Bobyleva, The Lomonosov Moscow State University, Russia; Leonid K. Bobrov, State University of Economics and Management, Novosibirsk, Russia; Rado Bohinc, University of Ljubljana, Slovenia; Adnan Celik, Selcuk University, Konya, Turkey; Angelo Maia Cister, Federal University of Rio de Janeiro, Brazil; Mirela Cristea, University of Craiova, Romania; Taoufik Dagbri, Mohammed V University, Morocco; Oguz Demir, Istanbul Commerce University, Turkey; T.S. Devaraja, University of Mysore, India; Onur Dogan, Dokuz Eylul University, Turkey; Darko Dukic, University of Osijek, Croatia; Gordana Dukic, University of Osijek, Croatia; Alba Dumi, Vlora University, Vlore, Albania; Galina Pavlovna Gagarinskaya, Samara State University, Russia; Mirjana Gligoric, Faculty of Economics - Belgrade University, Serbia; Maria Jose Angelico Goncalves, Porto Accounting and Business School - P.Porto, Portugal; Mehmet Emre Gorgulu, Afyon Kocatepe University, Turkey; Klodiana Gorica, University of Tirana, Albania; Aleksandra Grobelna, Gdynia Maritime University, Poland; Liudmila Guzikova, Peter the Great Saint-Petersburg Polytechnic University, Russia; Anica Hunjet, University North, Koprivnica, Croatia; Khalid Hammes, Mohammed V University, Morocco; Oxana Ivanova, Ulyanovsk State University, Ulyanovsk, Russia; Irena Jankovic, Faculty of Economics, Belgrade University, Serbia; Myrl Jones, Radford University, USA; Hacer Simay Karaalp, Pamukkale University, Turkey; Dafna Kariv, The College of Management Academic Studies, Rishon Le Zion, Israel; Hilal Yildirim Keser, Uludag University, Bursa, Turkey; Sophia Khalimova, Institute of Economics and Industrial Engineering of Siberian Branch of Russian Academy of Science, Novosibirsk, Russia; Marina Klacmer Calopa, University of Zagreb, Croatia; Igor Klopota, Medjimursko Veleuciliste u Cakovcu, Croatia; Vladimir Kovsca, University of Zagreb, Croatia; Goran Kozina, University North, Koprivnica, Croatia; Dzenan Kulovic, University of Zenica, Bosnia and Herzegovina; Robert Lewis, Les Roches Gruyere University of Applied Sciences, Bulle, Switzerland; Ladislav Lukas, Univ. of West Bohemia, Faculty of Economics, Czech Republic; Mustapha Machrafi, Mohammed V University, Morocco; Joao Jose Lourenco Marques, University of Aveiro, Portugal; Pascal Marty, University of La Rochelle, France; Vaidotas Matutis, Vilnius University, Lithuania; Daniel Francois Meyer, North West University, South Africa; Marin Milkovic, University North, Koprivnica, Croatia; Abdelhamid Nechad, Abdelmalek Essaadi University, Morocco; Gratiela Georgiana Noja, West University of Timisoara, Romania; Zsuzsanna Novak, Corvinus University of Budapest, Hungary; Tomasz Ochowski, University of Warsaw, Poland; Barbara Herceg Paksic, University of Osijek, Croatia; Vera Palea, Universita degli Studi di Torino, Italy; Dusko Pavlovic, Libertas International University, Zagreb, Croatia; Igor Pihir, University of Zagreb, Croatia; Damir Piplica, Split University-Department of Forensic Sciences, Croatia; Dmitri Pletnev, Chelyabinsk State University, Russian Federation; Mirosław Przygoda, University of Warsaw, Poland; Karlis Purmalis, University of Latvia, Latvia; Nicholas Recker, Metropolitan State University of Denver, USA; Kerry Redican, Virginia Tech, Blacksburg, USA; Humberto Ribeiro, University of Aveiro, Portugal; Robert Rybnicek, University of Graz, Austria; Tomasz Studzieniecki, Academia Europa Nostra, Poland; Elzbieta Szymanska, Bialystok University of Technology, Poland; Katarzyna Szymanska, The State Higher School of Vocational Education in Ciechanow, Poland; Ilaria Tutore, University of Naples Parthenope, Italy; Sandra Raquel Alves, Polytechnic of Leiria, Portugal; Joanna Stawska, University of Lodz, Poland; Ilko Vrankic, University of Zagreb, Croatia; Stanislaw Walukiewicz, Bialystok University of Technology, Poland; Thomas Will, Agnes Scott College, USA; Li Yongqiang, Victoria University, Australia; Peter Zabielskis, University of Macau, China; Silvija Zeman, Medjimursko Veleuciliste u Cakovcu, Croatia; Tao Zeng, Wilfrid Laurier University, Waterloo, Canada; Snezana Zivkovic, University of Nis, Serbia.

**Review Committee / Recenzentski Odbor ■** Marina Klacmer Calopa (President); Ana Aleksic; Sandra Raquel Alves; Ayuba Aminu; Mihovil Andjelinovic; Josip Arneric; Lidija Bagaric; Tomislav Bakovic; Sanja Blazevic; Leonid Bobrov; Ruzica Brecic; Anita Ceh Casni; Iryna Chernysh; Mirela Cristea; Oguz Demir; Stjepan Dvorski; Robert Fabac; Ivica Filipovic; Sinisa Franjic; Fran Galetic; Mirjana Gligoric; Tomislav Globan; Anita Goltnik Urnaut; Tomislav Herceg; Irena Jankovic; Emina Jerkovic; Dafna Kariv; Oliver Kesar; Hilal Yildirim Keser; Martina Dragija Kostic; Tatjana Kovac; Vladimir Kovsca; Angelo Maia Cister; Katarina Marosevic; Vaidotas Matutis; Marjana Merkac Skok; Daniel Francois Meyer; Natanya Meyer; Josip Mikulic; Ljubica Milanovic Glavan; Guenter Mueller; Ivana Nacinovic Braje; Zlatko Nedelko; Gratiela Georgiana Noja; Zsuzsanna Novak; Alka Obadic; Claudia Ogorean; Igor Pihir; Najla Podrug; Vojko Potocan; Dinko Primorac; Zeljka Primorac; Sanda Renko; Humberto Ribeiro; Vlasta Roska; Souhaila Said; Armando Javier Sanchez Diaz; Tomislav Sekur; Lorena Skufflic; Mirko Smoljic; Petar Soric; Mario Spremic; Matjaz Stor; Tomasz Studzieniecki; Lejla Tijanic; Daniel Tomic; Boris Tusek; Rebeka Daniela Vlahov; Ilko Vrankic; Thomas Will; Zoran Wittine; Tao Zeng; Grzegorz Zimon; Snezana Zivkovic; Berislav Zmuk.

**Organizing Committee / Organizacijski Odbor ■** Domagoj Cingula (President); Djani Bunja; Marina Klacmer Calopa; Spomenko Kesina; Erlino Koscak; Tomasz Ochowski; Mirosław Przygoda; Michael Stefulj; Rebeka Danijela Vlahov; Sime Vucetic.

**Publishing Editor ■** Spomenko Kesina, Mario Vrazic, Domagoj Cingula

**Publisher ■ Design ■ Print ■** Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia / University North, Koprivnica, Croatia / Faculty of Management University of Warsaw, Warsaw, Poland / Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco / Polytechnic of Medimurje in Cakovec, Cakovec, Croatia

**Printing ■** Online Edition

**ISSN 1849-7535**

The Book is open access and double-blind peer reviewed.

Our past Books are indexed and abstracted by ProQuest, EconBIZ, CPCI (Web of Science) and EconLit databases and available for download in a PDF format from the Economic and Social Development Conference website: <http://www.esd-conference.com>

© 2021 Varazdin Development and Entrepreneurship Agency, Varazdin, Croatia; University North, Koprivnica, Croatia; Faculty of Management University of Warsaw, Warsaw, Poland; Faculty of Law, Economics and Social Sciences Sale - Mohammed V University in Rabat, Morocco; Polytechnic of Medimurje in Cakovec, Cakovec, Croatia. All rights reserved. Authors are responsible for the linguistic and technical accuracy of their contributions. Authors keep their copyrights for further publishing.

## **CONTENTS**

<b>METHODOLOGICAL CONCEPTS FOR MODERNIZATION OF INDUSTRIAL ENTERPRISES IN THE CONCEPT OF POST-INDUSTRIAL DEVELOPMENT .....</b>	<b>1</b>
Venelin Terziev, Vladimir Klimuk	
<b>BEYOND THE PANDEMIC – A NEW ERA OF CONSUMER BEHAVIOR.....</b>	<b>6</b>
Nives Ivkovic	
<b>CONSTITUTIONAL LEGAL PROTECTION OF THE FAMILY IN THE REPUBLIC OF SERBIA .....</b>	<b>18</b>
Dejan Logarusic, Dalibor Krstinic, Borislav Bojic	
<b>REGIONAL ECONOMICS AS A PART OF REGIONAL SCIENCES.....</b>	<b>28</b>
Davor Zmegac	
<b>APPLICATION OF ENVIRONMENTAL TAXES IN THE REPUBLIC OF CROATIA NOW AND RECOMMENDATIONS FOR THE FUTURE .....</b>	<b>38</b>
Tomislava Majic, Zvonimir Majic, Georg Richter	
<b>STRUCTURAL CONVERGENCE OF SELECTED SOUTH-EAST EUROPEAN ECONOMIES TO THE EUROZONE.....</b>	<b>50</b>
Nikolay Velichkov, Dimitar Damyanov	
<b>FOOD SECURITY IN AZERBAIJAN: TRENDS, PROBLEMS AND PROSPECTS...</b>	<b>61</b>
Susen V. Farzalieva	
<b>BUILDING A RESILIENT TENDENCY: TRADITIONAL ECONOMY AND SHARING ECONOMY IN TERMS OF THE COVID-19.....</b>	<b>67</b>
Ali Ilhan	
<b>FINANCIAL MARKET OF AZERBAIJAN: NEW CHALLENGES, OPPORTUNITIES AND PROSPECTS.....</b>	<b>76</b>
Zahid Farrux Mamedov, Vugar Namazov, Elkhan N. Valiev	
<b>WORKING FROM HOME BEFORE PANDEMIC: CASE OF CROATIA 2008-2018</b>	<b>84</b>
Marija Becic	
<b>KNOWLEDGE GOVERNANCE IN THE TERMS OF CHANGE.....</b>	<b>92</b>
Mariya Peeva	
<b>REAL IMPACT OF EU FUNDING – QUALITY VERSUS QUANTITY.....</b>	<b>99</b>
Marko Sostar	
<b>CRITICAL ANALYSIS OF THE GREEN ECONOMY IN AFRICA: CASE OF BIOFUEL.....</b>	<b>106</b>
Abdelhamid Nechad, Rihab Belyazid	

**STRUCTURAL CONVERGENCE WITH THE EUROZONE: A COMPARATIVE ANALYSIS OF BULGARIA AND ROMANIA ..... 114**

Stela Raleva

**THE POLITICAL ECONOMY OF CHINA IN THE IMPACT OF COVID-19 ..... 124**

Aysel Musayeva-Gurbanova

**DEVELOPING AN ECOSYSTEM FOR SOCIAL ENTERPRISE IN AZERBAIJAN BASED ON THE EUROPEAN UNION EXPERIENCE ..... 134**

Turan Suleymanov, Fabio Casula, Mahammad Kekalov

**CONTEMPORARY CHALLENGES OF CULTURAL HERITAGE MANAGEMENT BY PUBLIC AND PRIVATE ENTITIES..... 144**

Adam Kozien

**THE IMPACT OF EDUCATIONAL LEADERSHIP IN EDUCATION GLOBALISATION..... 155**

Amthal Hamad AlOraifan

**INSTITUTIONAL REFORM – A NECESSARY CONDITION FOR HEALTH SYSTEM REFORM IN CROATIA..... 159**

Denis Buterin, Vesna Buterin, Stella Suljic Nikolaj

**BUSINESS LESSONS FROM AN EARLY ENTREPRENEUR: THE CASE OF DOÑA GRACIA NASI ..... 172**

Eduardo Manuel de Almeida Leite, Humberto Nuno Rito Ribeiro, Sandra Raquel Alves, Joanna Kurowska-Pysz, Amelia Ferreira da Silva

**STRATEGIC OF MODELS OF POST-INDUSTRIAL DEVELOPMENT OF INDUSTRIAL ENTERPRISES IN TERMS OF THE CONCEPT OF NATIONAL SECURITY ..... 180**

Venelin Terziev, Vladimir Klimuk

**THE CONCEPT OF A DYNAMIC ENTERPRISE IN AN ECONOMIC AND PRAXEOLOGICAL APPROACH ..... 187**

Ewa Kozien

## METHODOLOGICAL CONCEPTS FOR MODERNIZATION OF INDUSTRIAL ENTERPRISES IN THE CONCEPT OF POST-INDUSTRIAL DEVELOPMENT

**Venelin Terziev**

*Georgi Rakovski Military Academy, Sofia, Bulgaria*

*University of Rousse, Rousse, Bulgaria*

*Kaneff University Hospital, Rousse, Bulgaria*

*vkterziev@gmail.com*

**Vladimir Klimuk**

*Baranavichy State University, Republic of Belarus*

*klimuk-vv@yandex.ru*

### **ABSTRACT**

*This work analyzes the efficiency of innovative activity across countries and industries. The author offers his interpretation of the concept «model of innovation development». Tools for the quantitative assessment of level of innovative development of countries and formation of the vector of economic development based on indicators grouped under the following three components were developed: labor, productivity, and cost. This study also investigates the structure of domestic expenditure on innovation in the main sectors of investment (by country). Based on the testing of the developed tools, recommendations for the innovative development of the country are offered.*

**Keywords:** *Economic innovation, Development trend, Innovative level, Factors, Recommendations*

### **1. INTRODUCTION**

The modern era of rapid development of information technologies, automated systems, creative methods, and new types of products, sets tough conditions for ensuring market competitiveness. These conditions, which include originality, economy, standards, environmental friendliness, mobility and a number of others, dictate the urgent need for rapid adaptation to market metamorphoses, manifested in the activation of innovative activity on the principle of “being in the lead” (with an emphasis on the indicator of the quality of the result, and not a quantitative basis). Thus, innovations are the dominant source of socio-economic growth of a country, creating a platform that forces technical and technological excellence, economic and environmental benefits, and social security.

### **2. METHODOLOGICAL CONCEPTS FOR MODERNIZATION OF INDUSTRIAL ENTERPRISES IN THE CONCEPT OF POST-INDUSTRIAL DEVELOPMENT**

On the one hand, a country’s total aspiration for innovation determines the potential for improving the quality of life, the diversification of economic activity, and ensures the barrier-free functioning of the state. However, on the other hand, there may be an increase in incidents of unfair competition, which can result in a significant “overflow” of capital from “underdeveloped” countries to the innovative development of “developed” countries, which will ensure an already huge economic development gap between individual countries (Figure 1) (Averina, 2006; Goldyakova, 2006a). In Belarus, a high share of the innovative development of the country is concentrated on the acquisition of machinery and equipment (53%), which can be characterized by the consumption function (the consumption of existing innovations, rather than their independent creation) (Indicators of innovation, 2016).

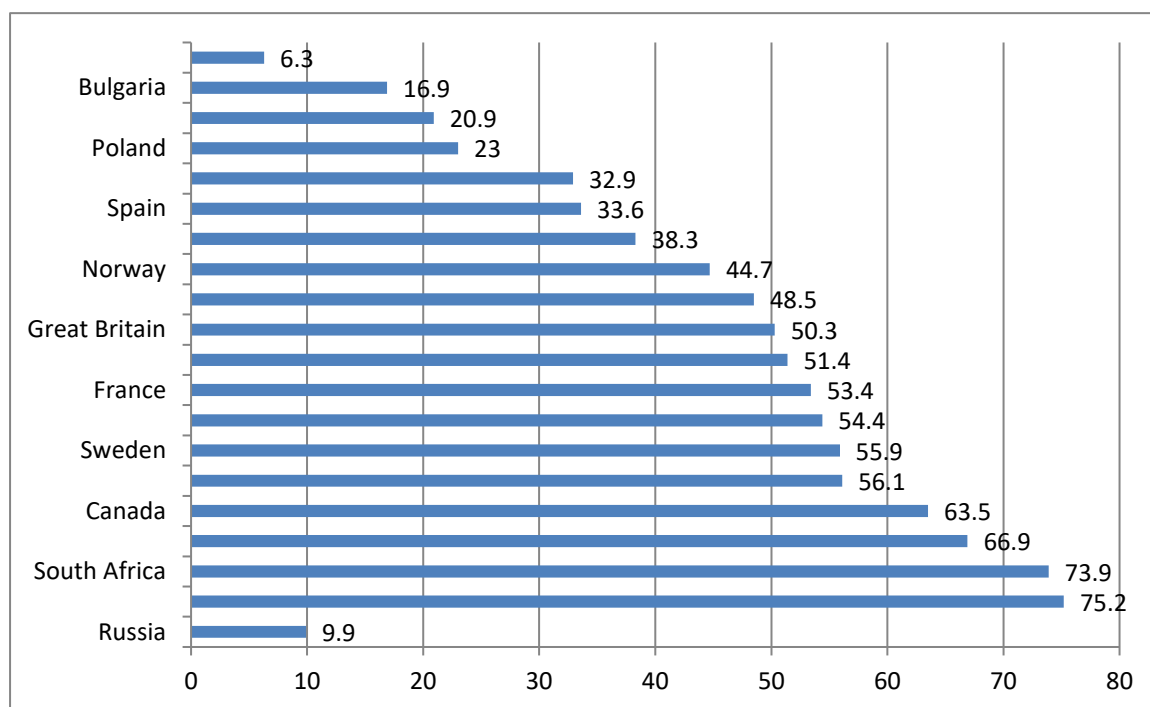


Figure 1: Aggregate level of innovation activity by countries, %  
(Notation - Collection "Indicators of innovation activity – 2018").

Looking at the role of innovative products and technologies of any era, it is crucial to observe a country's state of development. Moreover, the comparison of the current level of development and potential opportunities, as well as the model of innovative development of the current and projected, serve as the underlying motive of this work (Lvov, Glazyev, 1986). Modeling issues of innovative development is given the lion's share of research, which is associated with the economic effect of using their results in practice. The modeling of an organization's innovative development is given special attention in the works of Averina T.A. (Averina, 2006), which summarize the following types of models: the model of technological change; the model of a destructive event; the model of generations of innovative development; the model of the dependence of the economic efficiency of implementing innovations in the real sector of the economy from the trajectory of innovative development by product. In the works of Milevskaya T.S. (Milevska, 2012) three models of innovative development of countries are distinguished: Traditional, European, Asian; all based on the life cycle of the innovation process and management structure. The prioritization of development, the existing potential for excellence, and incentive mechanisms, explain the differentiation of the levels of innovative development of countries and possible trends in their deformation. We created a model that includes a set of tools and methods a country can use to move in a trajectory of innovation. We have proposed the following interpretation of this kind of model: "A model of innovation development is an integral vector of development based on the improvement of organizational, managerial, technical-technological, and economic processes of functioning, forming a platform of competitiveness and socio-ecological and economic security of the country" (Matveeva, Chernova, Klimuk, 2015). Based on the methods that are used to stimulate the innovative activity of the existing technical, raw material and intellectual base of the planned positions on a global scale of economic prosperity, different types of models are singled out. The study of the works on this subject made it possible to generalize existing models on two grounds: territorial features and a set of mechanisms for the implementation of the innovation vector (Postaljuk, Gusarova, 2014).

In order to quantify the level of innovative development of countries and form the «vector of the future», the following system of relative indicators (with the aim of unifying the applicable indicators and the possibility of intercountry comparison) is proposed. The indicators are grouped according to the leading components:

- The labor component:
  - Budget for minimum wage/wage;
  - Proportion of population with a higher education;
  - Proportion of those who have those who have presented their work in order to get a PhD;
  - The proportion of researchers with a degree within the total number of researchers.
- Efficiency component:
  - Proportion of active innovative organizations;
  - Proportion of innovative products within total production;
  - Proportion of exports of innovative products within the total volume of shipped products;
  - Proportion of patents granted within the total number of applications filed;
  - Proportion of global innovations within the country's total volume of innovative products.
- The cost component:
  - Proportion of costs for innovation within the total volume of innovative products;
  - Proportion of expenses for innovation activity within the total volume of investments in the country (region);
  - Proportion of worn-out machinery and equipment.

This set of indicators will provide an opportunity to assess the level of innovation development for the current or retrospective period, and also act as a platform for the country's development strategy to improve its level of innovation (Praslov, 2007; Sampieva Tamashev, 2011; Chernov, Sadovnikov, 2015a). One of the most important factors and conditions for the activation of innovative activity are investment funds that ensure the implementation of multi-vector functions, the development of certain tasks, as well as the approbation and implementation of innovations in practice.

### 3. CONCLUSION

The largest share in the structure of domestic costs within a country is entrepreneurship (except for Latvia, since their priority is high school), which is the lever of economic dynamics and innovative metamorphoses at the micro level. It ensures the wide-spread application of new products that have already passed the initial stage of testing (Terziev, Georgiev, 2020; Terziev, 2020a-b; Terziev, 2019b). Mechanisms for stimulating the country's innovative development, tools for assessing its level, and prospective development trajectories all form models of innovative development, the differentiation of which can be represented in the following structure:

- Productive (each type of innovation provides high indications);
- Cloning (specialize in the development and creation of one type of innovation, not all);
- Catching up (by their own efforts, but at a slower pace, they create their own innovations).

To assess the level of innovative development, the proposed method was used to calculate and analyze, according to the algorithm described above, for the comparison of Republic of Belarus and the Russian Federation (Klimuk, Tarasova, 2019; Klimuk, Lazdins, 2019a).



As for recommendations on expanding opportunities and increasing the degree of innovative development of countries, we suggest the following:

- Strengthening of measures of material stimulation for workers in the development of the economy's innovation sector (introduction of the differentiated system of progressive awarding, expansion of programs of financing of innovative projects);
- Formation of alliance economic systems (based on vertical and horizontal integration schemes ensuring prompt delivery, quality of raw materials, real buyers);

Development of innovative infrastructure (expansion of the number of technology parks, innovation funds, venture firms, approbation of start-up projects).

## LITERATURE:

1. Averina, T.A. (2006). *Analysis of models and methods of management of the innovative development of the enterprise*. // Scientific Herald of the Voronezh State Architectural and Construction University. Series: Management of construction, 2014, No. 1 (6), pp. 76-83.
2. Goldyakova, T.V. (2006a). *Concept and classification of innovations*. // Russian foreign economic bulletin, 2006, №2, pp. 20-27.
3. *Indicators of innovation* (2016). Statistical compilation, Moscow: NIU HSE, 2016, 320 p.
4. Lvov, D.S., Glazyev, S.Yu. (1986). *Theoretical and Applied Aspects of NTP Management*. // Economics and Mathematical Methods: Journal, M., 1986, № 5. pp. 793-804.
5. Matveeva, L.G., Chernova, OA, Klimuk, V.V. (2015). *Evaluation of the effectiveness of import substitution policies in industry: methodological tools*. // News of the Far Eastern Federal University. Economics and Management, 2015, No. 3 (75). pp. 3-14.
6. Milevska, T.S. (2012). *Models of innovative development of economics*. // Business Inform, 2012, №7, pp. 40-46.
7. Postaljuk, M.P., Gusarova V.U. (2014). *Mechanisms for ensuring innovation in economic development structures*. // Problems of modernization and transition to an innovative economy, 2014, pp. 27-30.
8. Praslov, A.V. (2007). *Classification of innovations and their essence*. // News from the Russian State Pedagogical University. A.I. Herzen, 2007, pp. 156-162.
9. Sampieva L.D., Tamashev I.M. (2011). *Principles and features of innovative development of enterprises of the agro-industrial complex*. // Terra economicus, 2011, T. 9, № 4, Part 3. pp. 145-147.
10. Chernov, O.A., Sadovnikov, A.S. (2015a). *Mechanisms of activation of innovative activity of enterprises*. // Modern problems of science and education, 2015, No. 1-1, pp. 759-765.
11. Klimuk, V., Tarasova, A. (2019). *Digital economy in Belarus and Russia: leading underpins of a new reality*. // Proceedings of the 3rd International Conference on Social, Economic, and Academic Leadership (ICSEAL 2019), pp. 421-427.
12. Klimuk, V.V., Lazdins, V. (2019a). *Interaction of education, science and business in terms of digital economy development*. // Proceedings of the 2019 International Conference "Economic science for rural development". Jelgava, LLU ESAF, 9-10 May 2019, pp. 37-48.
13. Terziev, V., Georgiev, M. (2020). *The place of programming in the state's social policy*. // Review of Behavioral Aspect in Organizations and Society, 2(1), 2020, pp. 25-30. <https://doi.org/10.32770/rbaos.vol225-30>.
14. Terziev, V. (2020a). *Social programming in the context of social economy development in Bulgaria*. // 51st International Scientific Conference on Economic and Social Development (Rabat, 26-27 March 2020), Economic and Social Development (Book of Proceedings), 2020, pp. 387-396, ISSN 1849-7535.

15. Terziev, V. (2020b). *Programming as mechanism of managing, oriented towards results.* // Economic and Social Development (Book of Proceedings), 50th International Scientific Conference on Economic and Social Development Development, 13-14 February 2020, Chelyabinsk, 2020, pp. 92-98, ISSN 1849-7535.
16. Terziev, V. (2019b). *The role and place of social programming in public governance.* // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 354-362, ISBN: 978-605-82433-6-1.

## BEYOND THE PANDEMIC – A NEW ERA OF CONSUMER BEHAVIOR

**Nives Ivkovic**

*University of Zagreb, Faculty of Economics and Business, Croatia,*

*Doctoral study of economics and global security*

*nivkovic@net.efzg.hr*

### ABSTRACT

*The global COVID-19 pandemic, caused by the newly discovered SARS-CoV-2 virus, is changing consumer behavior, and some aspects of the behavior remain irrevocable. Adaptation to new circumstances depends on other variables of influence, such as the culture and personal characteristics of the individual consumer. With economic instability and uncertainty, consumers are experiencing transformation in behavior. Impulsive buying behavior, apart from the COVID-19 pandemic, was also seen during the SARS pandemic and the Fukushima disaster. The purpose of this paper is to present, illustrate and explain the researched trends in changing consumer behavior during a pandemic. In order to do that, literature explaining consumer behavior has been studied and this knowledge is reinforced with the latest surveys related to changes in consumer behavior during a pandemic. A new model of consumer behavior has been proposed to which the impact of a pandemic as a situational factor has been added. Consumer optimism is explained using the confidence index. Finally, the paradigm shift towards ethical consumer behavior is defined and explored.*

**Keywords:** *Consumer behavior, economic crisis, consumer confidence, ethical consumer behavior*

### 1. INTRODUCTION

We are months into the pandemic, which surprised us with its unpredictability. Mysterious pneumonia originated from live animal markets in Wuhan, which are part of the global wildlife trade and related to which animal protection associations warned of the spread of zoonotic diseases and inhumane treatment of animals. The news of a rapidly spreading virus, highly contagious and for which there are no medications has led to the closure of the economy, new policy measures and influenced changes in consumer behavior, depending on their individual characteristics. The pandemic, which, for the sixth time in history, the World Health Organization declared a public health emergency of international concern, and for which Japan had to postpone the 2020 Summer Olympics, has led to changes in the economic status of individuals who are changing shopping patterns, requiring more favorable prices but are also guided by a new understanding of product and service quality and social responsibility. With the opening of economies, increasing confidence in measures and job security, consumer optimism is returning and there is a change in the paradigm of materialism towards ethical consumerism. It is compassion, or as historian and professor Yuval Noah Harari says, global solidarity and global cooperation that can contribute to an effective solution to the crisis. In the first chapter we discuss the change in consumer behavior, buying trends, we bring a model of consumer behavior as we chart some examples. In the second chapter, we discuss consumer optimism and confidence index, and what influences index increases and higher spending. In the third chapter, we explain the ethical behavior of consumers who are oriented towards sustainable business practices, the responsible behavior of companies towards stakeholders, the environment and animals.

## 2. RESHAPING CONSUMER BEHAVIOR IN TIMES OF CRISIS

Changing customer behavior is directly related to changes in the environment. In response to the pandemic and new circumstances, we can witness new trends related to changes in customer behavior. To explain these changes, we will first define consumer behavior. Consumer behavior can be explained as study of the processes involved when people select, purchase, use or dispose of products, services, ideas, or experiences to satisfy needs or desires (De Mooij, 2011). Research, done by Swiss Re institute, shows that it can take between 18 and 254 days to form a new habit and consumers are settling into new patterns of behavior for considerable lengths of time in response to the multiple waves of this pandemic, which is a fertile ground for new habit formation. Accenture, a leading global professional services company, conducted a survey which included 3074 consumers in 15 markets around the globe at the time of the pandemic. It is concluded that consumers are responding to the crisis in a variety of ways. Some feel worried, fueling the panic-buying of staple and hygiene products. At the other extreme, consumers remain indifferent to the pandemic and continue their usual behaviors, despite recommendations from the government and health professionals. There is a need for more customized and personalized marketing strategies. Different consumer behavior types, as shown in Figure 1., help us understand the changes that consumers are making to their purchases. Accenture survey results point out that the biggest change is in the consumption of personal hygiene products. Worriers increased these purchases by 50% as opposed to 10.4% by the Indifferent consumer type.

Figure 1: Consumer behavior types and their net purchases

Net purchases*	<b>The Worrier</b> 21% of consumers	<b>The Individualist</b> 22% of consumers	<b>The Rationalist</b> 39% of consumers	<b>The Activist</b> 8% of consumers	<b>The Indifferent</b> 11% of consumers	<b>Total net change</b>	<b>Change</b> Wave 1-Wave 2
Personal hygiene	50.0%	42.5%	27.4%	29.1%	10.4%	33.7%	-
Cleaning products	42.4%	25.9%	21.0%	24.4%	5.5%	25.2%	-
Tinned food	40.4%	26.2%	12.6%	11.1%	5.6%	20.6%	-
Fresh food	32.8%	15.1%	13.8%	15.8%	3.4%	17.1%	-
Frozen food	25.2%	17.2%	4.4%	8.1%	3.4%	11.7%	-
Online entertainment	20.1%	11.2%	5.1%	7.7%	2.8%	9.5%	-
Communication	19.2%	2.8%	4.4%	12.8%	-1.2%	7.2%	-
Wellness	22.8%	6.9%	0.6%	0.9%	-1.8%	6.4%	-
OTC	19.8%	3.4%	0.5%	2.1%	0.9%	5.4%	-
Pet care	6.3%	-2.2%	-6.8%	-9.0%	-0.6%	-2.5%	-
Non-alcohol beverage	8.2%	-1.0%	-7.3%	-6.0%	-1.2%	-1.9%	-
Toys and games	3.6%	-8.2%	-12.9%	-15.8%	-6.1%	-7.9%	-
Consumer electronics	-4.2%	-10.8%	-18.6%	-25.2%	-5.8%	-13.0%	-
Alcohol beverage	-10.8%	-17.0%	-15.3%	-16.2%	-6.7%	-13.9%	-
Beauty	-12.5%	-13.2%	-23.0%	-25.2%	-5.2%	-16.9%	-
Home décor	-12.2%	-21.5%	-27.5%	-34.2%	-10.4%	-21.7%	↓
Fashion	-23.4%	-26.2%	-35.3%	-44.0%	-16.3%	-29.4%	↓

Source: Accenture Covid-19 consumer research

Chikhi, K. (2021) studied the impact of crisis on the behavior of Algerian consumers. He finds that consumers buy basic necessities, save more to cope with possible difficult situations, place more importance on nutrition, health, food quality characteristics, price, psychological and socio-demographic well-being; have purchasing and consumption objectives based on their cultural background and prefer to adopt planned behaviors. The crisis affects consumers not only economically, but also psychologically. Increase in retail sales was recorded in the categories such as medical, pharmaceutical products, disinfectant solutions, food supplements (Vitamin D, C, Zinc and other micronutrients), medicinal plants and fungi. Consumers, as stated by Chikhi, K. (2021.) buy only the products they need, switch to cheaper brands and do not want to spend money on high quality products, even if they could afford it. As a result, consumers are changing their purchasing behavior when affected by an economic crisis. But their buying patterns vary depending on their cultural background and other factors.

Swiss Re institute concludes that there is a connection between several trends in consumer behavior changes. Key trends in the behavioral changes emerging from the impact of COVID-19 include increased digital adoption, change in mobility patterns (less use of public transport, more remote working), change in purchasing behavior (move to value-based purchasing and online shopping), increased awareness of health (wearing masks, increased hygiene, healthy eating), changes in interpersonal behavior (increased divorce, increased pet adoption). These trends are interconnected and overlapping and the authors state that increased use of digital tools is blurring the lines between work, lifestyle and social interaction and between domains like mobility, health and finance. The COVID-19 pandemic has expedited pace of behavioral changes around the world, as concluded by PwC's Global consumer insights survey. And this extends to consumption patterns in every category, including groceries, entertainment, healthcare and data. Businesses have to learn new consumer behaviors in order to reinvent their future. In Global Consumer Insights Survey, there are two separate studies, one before and one after the coronavirus outbreak. Research includes more than 19,000 consumers globally, covering 74 cities in 27 territories. In addition, trends that can be expected include more volatile buying habits, price and value becoming more crucial as well as safety and accessibility, experiences from the comfort of home, digital engagement, companies that have focus on care, well-being, innovation, sustainability and ethical choices. It is concluded that consumers spend less in most nonfood categories. Household spending in the categories as shown in Figure 2. has changed. Consumers will settle for more affordable options and buy more essential goods.

*Figure 2: Consumers are spending less in most nonfood categories*

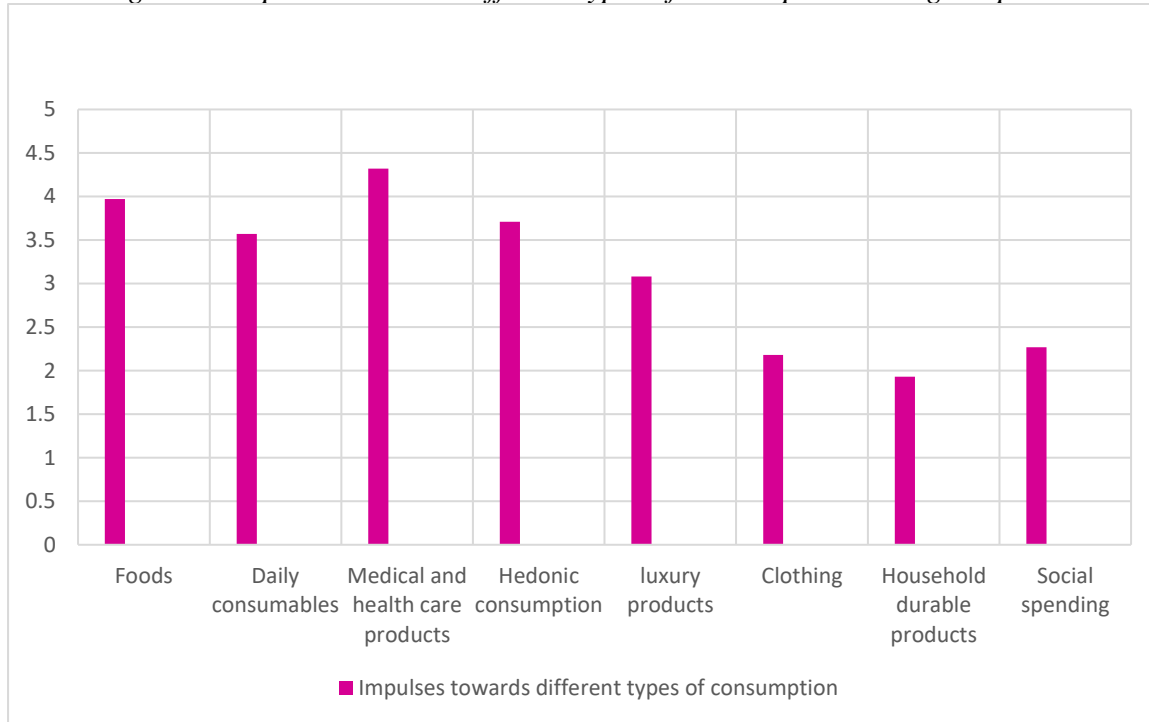
51% down – clothing and footwear (Spain 70%, Italy 65%, UK 60%)
46% down -sports equipment and outdoors (Spain 61%, Italy 57%, Middle East 53%)
41% down - restaurant food pickup and delivery (Spain 62%, UK 58%, China 49%)
36% down - office equipment (Middle East 50% Spain 49% Italy 44%)
35% down - health and beauty products (Middle East 45% UK 44% China 42%)

*Source: Adjusted according to Global consumer insights survey 2020.*

Research concludes that decreased income has led to less spending in Spain, UK, Italy and on the other side of the spectrum are Middle East, China and France. It is important to mention that the culture of country in which the pandemic occurred plays an important role in determining behavior change. Previšić and Ozretić Došen (2002) provide a concept of consumer decision making process in which the consumer's decision is influenced by two components: interpersonal (influence of culture, society and family) and personal (needs and motives, perceptions, attitudes, learning and concept of oneself). De Mooij (2011) suggests marketers must integrate culture in various components of human behavior. An individual may behave according to cultural norms, rules and customs, but he is also the initiator of the creation and change of culture. Swiss Re institute (2020.) suggests that the pandemic is making this dimension of consumer behaviour even more complex, since physical movement is restricted and consumers are migrating into virtual worlds at an unprecedented rate and are exposed to newer influences, which could require us to go beyond traditional methods of modeling their behavior. Public health emergencies, such as COVID-19, affect people's impulsive consumption behavior. Li et al. (2020.) collected data from 1548 participants in China during the COVID-19 outbreak. The study finds that the severity of a pandemic positively affects people's impulsive consumption. The results indicate that both perceived control (individuals' beliefs that they are able to control external factors and their environment) and materialism (value of possessions as an indicator of succeeding in life) play mediating roles between the severity of a pandemic and impulsive consumption. By enhancing perceived control or by reducing their materialistic tendency consumers tend to act less impulsive.

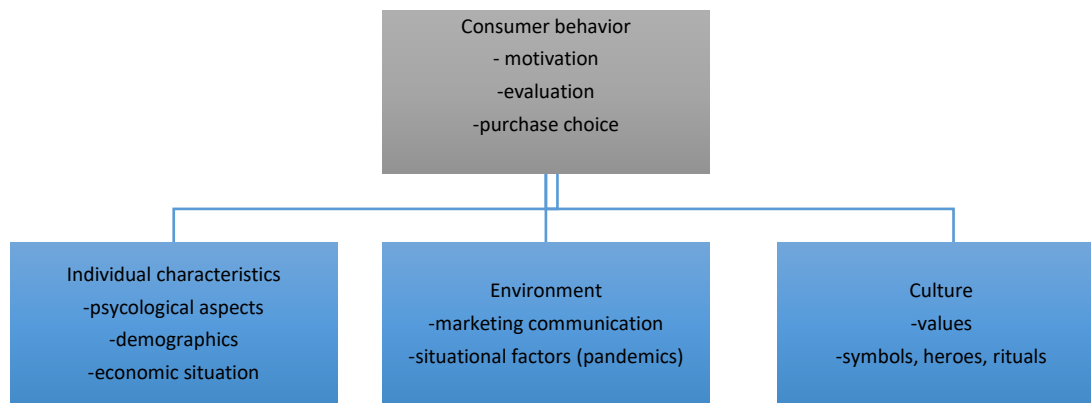
Authors conclude impulsive consumption results in irrational consumption behavior. As shown in Figure 3., medical and health care products, food and daily consumables provoked most impulses amid the risk and uncertainty regarding product availability. Hedonic consumption and luxury products were also more impulsive consumption items.

*Figure 3: Impulses towards different types of consumption during the pandemic*



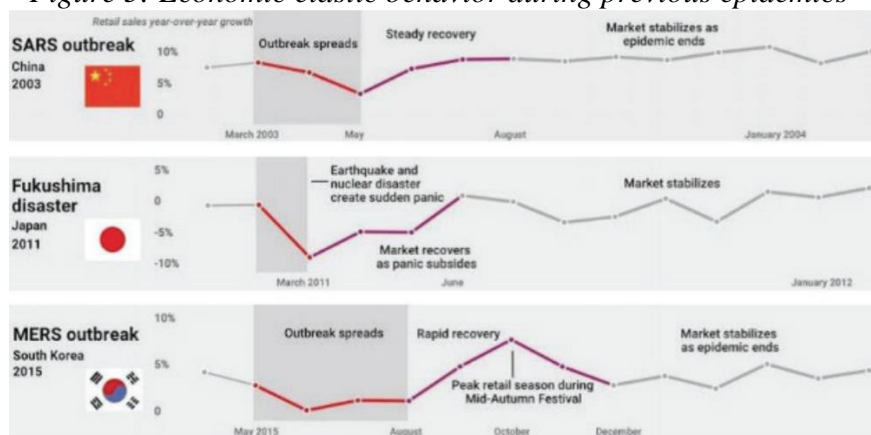
*Source: Adjusted according Li et al. (2020.)*

Panic buying or the action of buying large amounts of a particular product due to a sudden fear of a forthcoming shortage or hoarding which is defined as the situation when consumers purchase more products than they need has also been observed. Başyazıcıoğlu, N. H. (2020.) contends that we can connect panic buying, hoarding, impulsive buying, herd behavior and misbehavior with negative emotions such as stress, panic and pain. He finds that characteristics of consumers is significant in terms of perception of environmental stimuli. In other words, there are different consumer reaction to the same environmental stimuli. Consumers tend to handle the pandemic outcomes with behaviors such as do-it-yourself projects or online shopping. Butu et al. (2020.) conclude that each pandemic in recorded history had immediate effects on the primary reactions of the social human, because they affected directly health, financial security, life quality and food security. For instance, when cholera or the Spanish flu hit, the economic balance and food supply systems broke. We can see the impact of the inability to meet primary needs on consumer behavior using Maslow's motivational theory of the hierarchy of needs. It is first necessary to meet physiological and safety needs in order for consumers to come to self-actualization by purchasing products. The model of consumer behavior, proposed by the author, that includes the pandemic as a situational factor that along with culture (it is important who the heroes of a particular culture are, during a pandemic) affect the way consumers respond to a crisis (psychological aspects) as well as their economic status. All variables are interconnected and affect consumer behavior and their choice of products to buy (Figure 4.) By carefully influencing each of the variables, it is also possible to influence trends related to changes in consumer behavior in a pandemic.

*Figure 4: Model of consumer behavior amid COVID-19 pandemics*

*Source: Ivković, N. (2021.)*

Changes in consumer behavior in the midst of a global pandemic may ultimately lead to a reduction in trade between countries. Online responses of 3500 Chinese consumers were collected by The New Zeland Institute for plant and food research in June. Results of the study were compared against similar study done in China last March to access changes in consumers attitudes towards health and nutrition. The findings showed that respondents are less interested (than in previous study) in overseas supplement brands as 75% of respondents said they were less agreeable with the statement „I prefer multivitamins and supplements from overseas brands. Mehta, Saxena and Purohit (2020.) find that during the previous epidemics such as SARS, MERS and disaster such as Fukushima nuclear accident, consumers displayed economic elastic behavior in form of rapid, steady or slow recovery of market (Figure 5.) Authors conclude that part of this behavior is permanent and brings in structural changes their buying decisions. Li et al (2020.) discuss impulsive consumption behavior could also be observed during both the SARS and as a result of the Fukushima nuclear power plant leakage. We can conclude that we can get some guidance from previous pandemics and disasters.

*Figure 5: Economic elastic behavior during previous epidemics*

*Source: Mehta, Saxena, Purohit (2020.)*

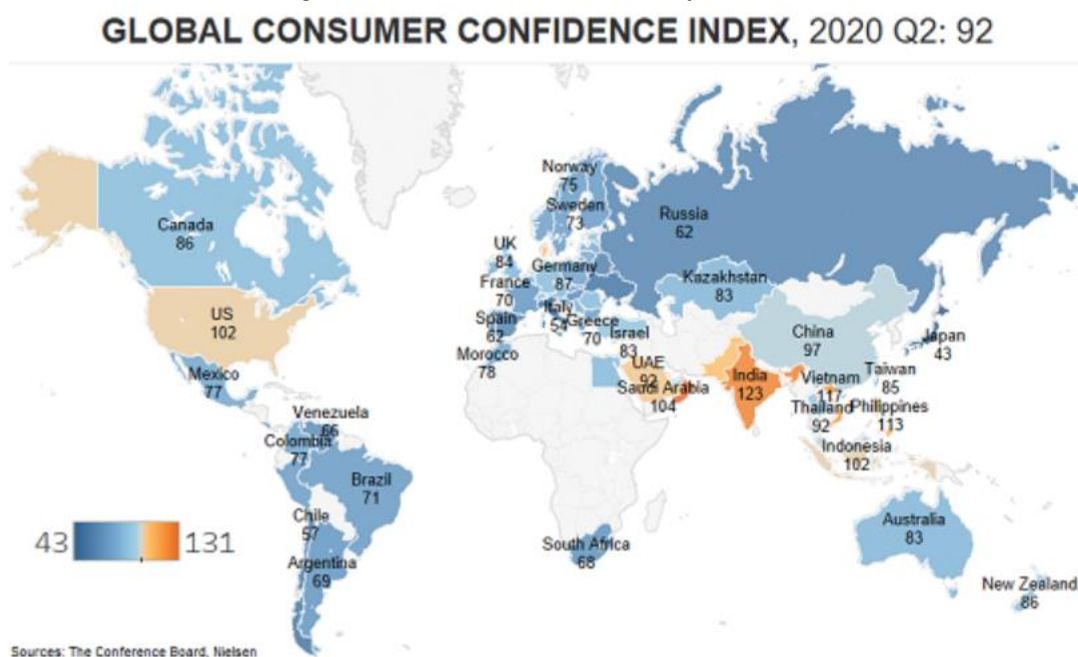
### 3. CONSUMER CONFIDENCE AMID THE PANDEMIC

Consumer confidence is defined as statistical measure of consumers' feelings about current and future economic conditions as the index is monitoring the degree of optimism that consumer feel about the overall state of the economy. Consumer confidence index is based upon answers regarding their future financial situation, their sentiment about the general economic situation, unemployment and capability of savings.



An indicator above 100 signals an increase in the consumers' confidence as a consequence of which they are less prone to save, and more inclined to spend money in the next 12 months. Values below 100 indicate a pessimistic attitude towards future developments in the economy (OECD, 2021.) Deteriorating job prospects and rising uncertainties about personal finances globally and especially in emerging markets drove down global consumer confidence in the second quarter of 2020, according to The Conference Board Global Consumer Confidence Survey, as shown in figure 6.

*Figure 6: Global Consumer Confidence index*

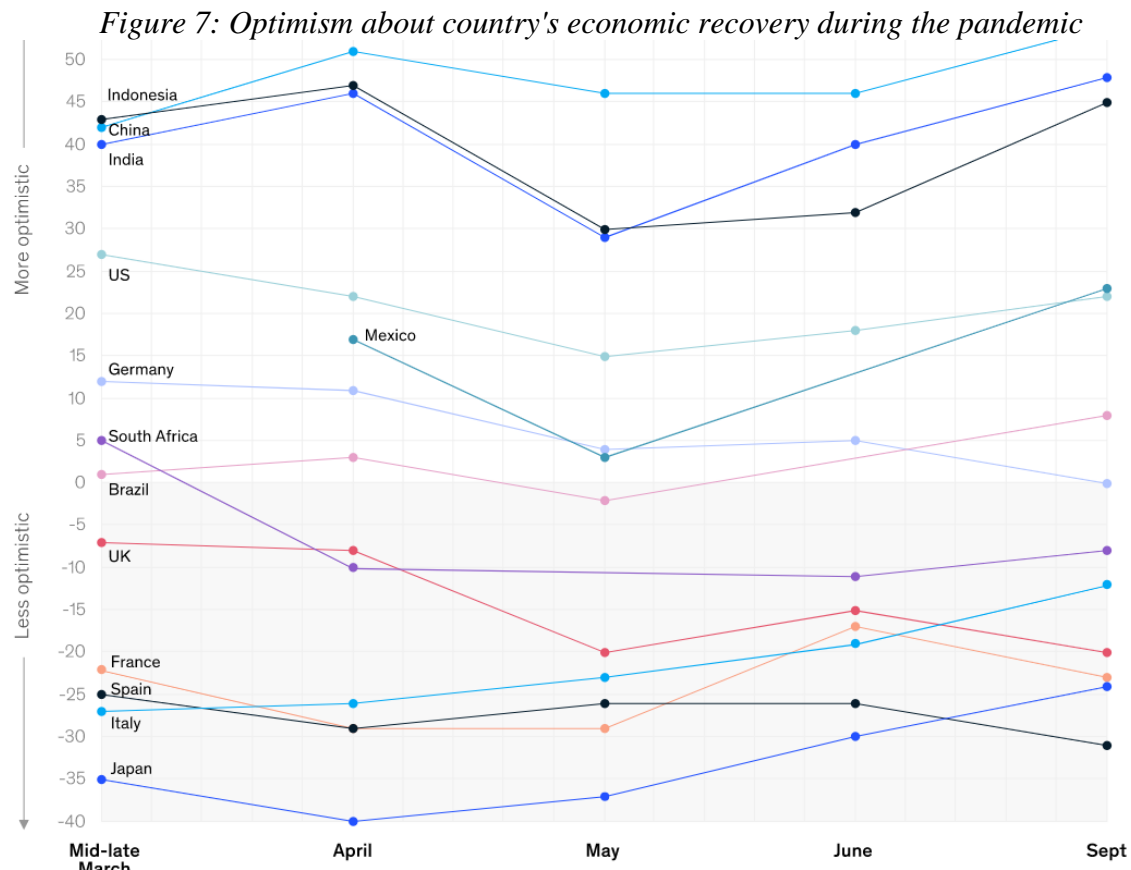


*Source: The Conference Board, Nielsen*

The survey found that overall global consumer confidence fell to 92 in the second quarter from a high of 106 in the first quarter, indicating that consumers were more pessimistic than optimistic globally for the first time since 2016. Decline is twice as deep as the largest drop during the 2008-9 global financial crisis. Organization for economic co-operation and development (OECD) suggests that trust in government is necessary to increase confidence of investors and consumers during all stages of the COVID pandemic. Consumer confidence is more resilient in markets where authorities have earned their citizens' trust, such as Sweden, South Korea and Taiwan. In North America and Europe, and especially within the Euro Area, according to the Global consumer confidence survey, the worsening job outlook has led to decline in confidence levels. The Conference Board index in the United States declined in November, after remaining relatively flat in October. In Latin America and Asia-Pacific markets expectations about personal finances over the next 12 months led to the decline in confidence. In Italy, Spain, UAE, India, Singapore, and Mexico, according to the survey, business closures leading to fading jobs and personal finances has led to weakening in consumer confidence. According to PWC Consumer Insights Survey consumers are becoming more optimistic, especially in the countries where isolation measures are being lifted, such as China and the Middle East. Consumers are spending the most on groceries, in-place entertainment and home projects and significantly less on most nonfood items. Survey conducted by McKinsey concluded that optimism in China has grown to the highest level since the COVID-19 outbreak. Spending intent is mostly positive across essential and discretionary categories. Most Chinese intend to continue new shopping behavior beyond the crisis.



Optimism in the United States has increased to levels not seen since March. While consumers' spending intent shows improvement from previous months, it remains depressed across discretionary categories (Mckinsey, 2020.). Consumers are trying new brands and channels, seeking both better value and prices. Consumer sentiment varies across countries impacted by the pandemic, reports Mckinsey in the article about reflecting uncertainty in consumer behavior (figure 7.) Consumers in China, India, and Indonesia consistently report higher optimism than the rest of the world, while those in Europe and Japan remain less optimistic about their countries' economic conditions after COVID-19. It is interesting how optimism is growing in Italy, unlike most European countries.

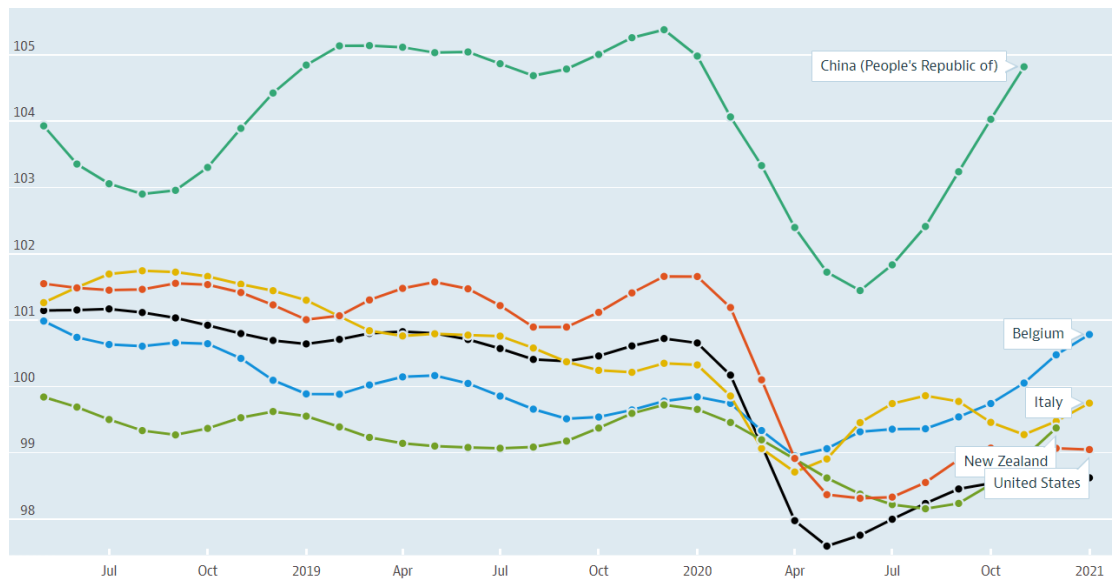


*Source: Mckinsey and company Consumer pulse surveys conducted globally between March 15-December 30, 2020.*

If we use consumer confidence tool from the OECD, taking into account 2021., we can see differences in optimism among selected countries as well as improvement in most (Figure 8.).

*Figure following on the next page*

Figure 8: Consumer confidence index among selected countries (July 2020 – February 2021.)



Source: OECD (2021.) Consumer confidence index

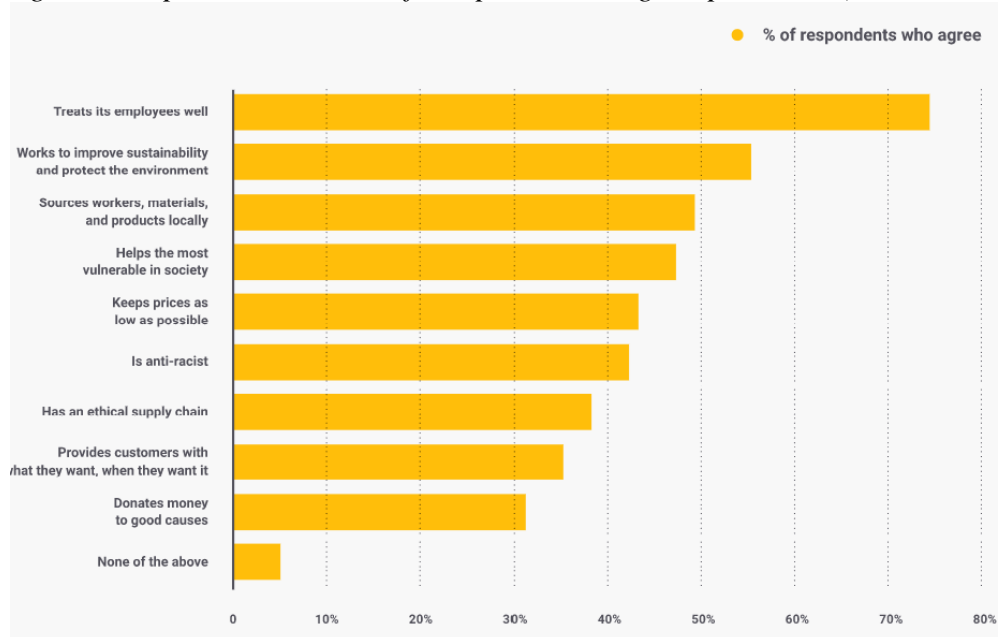
When we talk about faster recovery of confidence, building citizens' trust in government, including its policies to mitigate the virus's effects will be key to increasing confidence and to begin to reengage in their local economy. Other two factors, as discussed by Global consumer confidence study are increases in new cases of COVID, job cuts and expected reduced incomes. In Asia-Pacific, countries such as China and South Korea have begun to open up their economies again and it is expected confidence in those markets will likely rebound fairly quickly. Europe has much diversity in the policy response. Germany's proactive containment measures and wage subsidy program may support a swifter recovery but in the UK, delayed policy responses may result in greater job and income losses, leading to an extended period of low confidence (The Conference Board, 2020.). In North America the decline in oil prices adds to the pressure on consumer confidence.

#### 4. FOCUS ON ENVIRONMENT FRIENDLY AND ETHICAL CONSUMER BEHAVIOR

Ethical consumers are referred to as consumers who select products with the least damaging effect on the environment, as well as those products which upkeep arrangements of social justice (Khan, S. Y., 2017). It is a form of consumer activism, in other words, consumers are taking responsibility for their decisions according to social and environmental considerations such as animal, social, and environmental welfare (Papaoikonomou, E., Ryan, G., Valverde, M. 2011.). According to Khan S. Y., 2017. environmental consciousness and anti-consumption has been shown to have positive relation but they are not synonymous to each other. In addition, environmental consciousness has been shown to have a negative relationship with materialism (emphasizing possessions and money for personal happiness and social progress). The crisis is causing consumers to more seriously consider the health and environmental impacts of their shopping choices as concluded in Accenture COVID-19 consumer behavior survey of more than 3,000 consumers in 15 countries across five continents. Even 64% of consumers in the survey said they're focusing more on limiting food waste and will likely continue to do so and 45% of consumers said they're making more sustainable choices. It is stated that many of the changes in consumer behavior are likely to continue after the pandemic and it will cause lasting structural changes to the consumer goods and retail industries

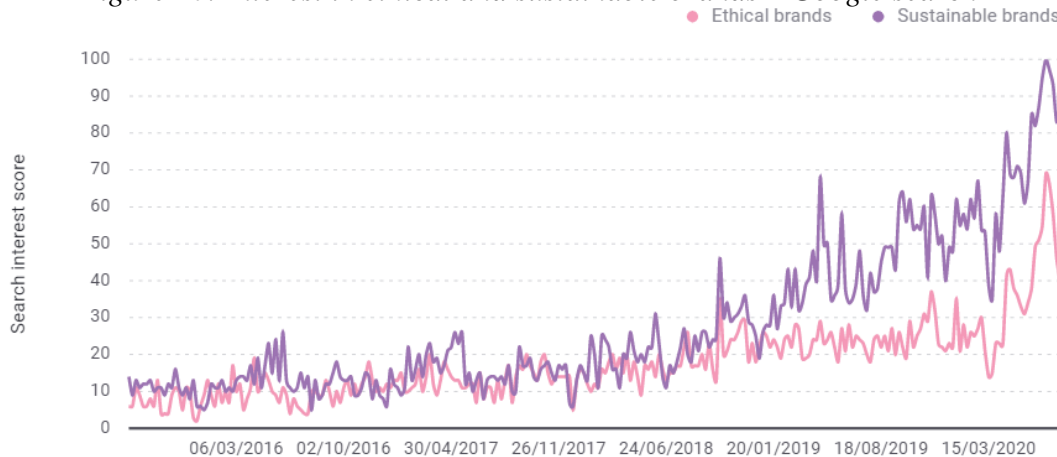
According to PWC survey, 43% of global respondents said they expected businesses to be accountable for their environmental impact. Consumers' focus on sustainable business practices has surged during the COVID-19 crisis. In a consumer survey of US residents, PwC found that 75% believe companies should try to retain some of the unintended environmental benefits from the US lockdown, such as less air pollution. Companies that adopt a world view based on benefiting stakeholders (not just shareholders) will earn support from consumers. Data from Brandwatch research, conducted on 7180 consumer sample, provide insights into what consumers want from businesses in a pandemic era. Employee wellbeing, sustainability and helping most vulnerable came above "keeping prices as low as possible", as shown in figure 9.

*Figure 9: Important activities of companies during the pandemic (7180 consumers)*



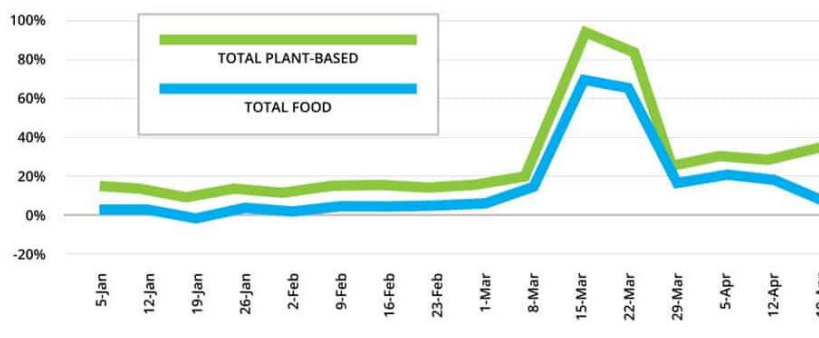
*Source: Brandwatch research*

Report by Meticulous research points out consumers are willing to pay for premium-priced organic products and there is rising awareness towards organic living, growing food security concerns and environmental issues. Organic food ingredients consumed by North Americans and Europeans are majorly produced and exported from Asia, Latin America, and Africa but the restriction on transportation has affected the availability of organic food in stores and supermarkets. One of the most consistent long-term food trends has been the increased consumer demand for sustainable and perceived-healthier food. Restaurants are continuing to react and better meet consumer expectations in this area with balance between offering more choice and managing costs and complexity, as suggested by Khan et al (2020.). A new research from Mintel revealed that 25% of young British millennials (aged 21–30) say that the COVID-19 pandemic has made a vegan diet more appealing. Research indicates there is a strong belief in the healing power of plants, as half of British residents believe botanical ingredients can have medicinal benefits. Interest in plant-based proteins continues to grow. Bradnwatch consumer research showed that English-language mentions of sustainable products were up 217 % in online conversations when comparing March to December 2020. Additionally, consumers are thinking about ethical delivery, in other words, there is a moral dilemma regarding concern about workers delivering non-essential items during the crisis. Consumers are interested in buying from brands that have goals that aren't only profit-related. Additionally, it is stated that purpose-conscious consumers positive associations can't be won easily. Figure 10 shows how Google search interest in ethical and sustainable brands has grown.

*Figure 10: Interest in ethical and sustainable brands – Google search*

*Source: Brandwatch research report*

Plant based food sales in United states of America increased by 90% at peak of panic buying and by 25% higher than total food sales, concluded Plant based foods association research. There was an increase 27%, which is 35% faster than total food sales over four weeks post-panic buying (figure 11.)

*Figure 11: plant based as opposed to total food retail sales*

*Source: Plant based foods association and SPINS*

Additionally, it is stated that plant-based meat sales are showing strong growth while growth of animal meat sales is declining, even after the highest panic buying period. Since beginning of the pandemic, there has been continued shift in consumer purchasing toward natural and organic products that enhance immunity and which are produced by socially responsible companies. With the rise in environmental concerns, as Chikhi, K. (2021.) contends, the consumption of animal proteins is set to decrease sharply in the years to come for reasons of cost, health, ethics and the environment. In the longer term, the pandemic will catalyze economic and societal transformations which will give new guidelines to post-Covid-19 societies to act in the face of climate risk.

## 5. CONCLUSION

Changes in consumer behavior were influenced by the sudden onset of the pandemic as well as its duration. Consumers respond differently to a crisis, depending on individual characteristics as well as the culture to which they belong. For the most part, they buy essential products, pay more attention to price, but also begin to appreciate more and more socially responsible companies and products that exhibit social or environmental principles. Although a product cannot be ethical per se, it can represent what consumers believe in.

From a practical perspective, these findings have implications for marketing practice as there is a need for more customized and more personalized marketing strategies. The occurrence of impulsive buying during the COVID-19 pandemic was observed both during the SARS pandemic as well as during the Fukushima disaster. Changes in customer behavior are affecting the global economy and trade, and a global approach to solidarity, sharing information and trust, and learning from past events and preparing for possible new pandemics is imperative. Optimism and confidence index have shown an increase but reduced optimism could occur if vaccines prove ineffective against mutated SARS-CoV-2 viruses. Since some mutations have been shown to be more contagious and may better avoid the immune system, there is a possibility that the demand for micronutrients, medicinal plants, and fungi will increase even more. By increasing customer confidence in the proposed measures and job security, confidence index and consumption increase. The trend of ethical consumerism arising from this crisis is showing signs that it will last and change the products and consumer culture of the future.

## LITERATURE:

1. Accenture (2020.), COVID-19: How consumer behavior will be changed – research report, available at: <https://www.accenture.com/us-en/insights/consumer-goods-services/corona-virus-consumer-behavior-research> (accessed 5.12.2020.)
2. Başıyazıcıoğlu, H. N., 2020. Effects of COVID-19 on consumer behavior. In: Buckley Ö. A. eds. *Academic studies in administrative sciences*. Lyon: Livre de Lyon, pp. 183-201.
3. Brandwatch research (2020.), New research reveal how consumers view brand purpose in 2020. – research report, available at: <https://www.brandwatch.com/reports/2020-brand-purpose/view/> (accessed 22.1.2020.)
4. Butu, A., Brumă, I. S., Tanasă, L., Rodino, S., Dinu Vasiliu, C., Doboş, S., & Butu, M. (2020). The impact of COVID-19 crisis upon the consumer buying behavior of fresh vegetables directly from local producers. Case study: the quarantined area of suceava county, Romania. *International journal of environmental research and public health*, 17(15), 5485.
5. Chikhi, K. (2021). L'impact de la crise sanitaire du Covid-19 sur le comportement de consommation des Algériens. *Revue d'Etudes en Management et Finance d'Organisation*, 6(12).
6. De Mooij, M. (2011.), *Consumer behavior and culture: Consequences for global marketing and advertising*. CA: Sage Publications, Thousand oaks.
7. Khan et al (2020.), Reimagining European restaurants for the next normal, available at: <https://www.mckinsey.com/industries/retail/our-insights/reimagining-european-restaurants-for-the-next-normal> (accessed: 2.2.2021.)
8. Khan, S. Y. (2017). *Anti-consumption and materialism in consumer behaviour: a value orientation perspective* (Doctoral dissertation, Cardiff University).
9. Koe, t. (2020.) COVID-19 changes preferences? China consumers less interested in overseas supplement brands, while trust in TCM rises, available at: <https://www.nutraingredients-asia.com/Article/2020/11/04/COVID-19-changes-preferences-China-consumers-less-interested-in-overseas-supplement-brands-while-trust-in-TCM-rises> (accessed 7.11.2020.)
10. Li, M., Zhao, T., Huang, E., & Li, J. (2020). How does a public health emergency motivate People's impulsive consumption? an empirical study during the COVID-19 outbreak in China. *International Journal of Environmental Research and Public Health*, 17(14)

11. McKinsey and Company (2020.) Chinese consumer sentiment during the coronavirus crisis, available at:  
<https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-chinese-consumer-sentiment-during-the-coronavirus-crisis> (accessed 14.11.2020.)
12. McKinsey and Company (2020.) Consumer sentiment and behavior continue to reflect the uncertainty of the COVID-19 crisis, available at <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19> (accessed 2.12.2020.)
13. McKinsey and Company (2020.) Survey: US consumer sentiment during the coronavirus crisis, available at:  
<https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-us-consumer-sentiment-during-the-coronavirus-crisis> (accessed 14.11.2020.)
14. Mehta, Seema, Tanjul Saxena, and Neetu Purohit. "The New Consumer Behaviour Paradigm amid COVID-19: Permanent or Transient?." *Journal of Health Management* 22.2 (2020): 291-301.
15. Meticulous research (2020), Organic food market – global opportunity analysis and industry forecast 2020.-2027., available at: [https://www.meticulousresearch.com/product/organic-food-market-5122?utm\\_source=PRNewswire&utm\\_medium=Press%20Release&utm\\_campaign=Paid](https://www.meticulousresearch.com/product/organic-food-market-5122?utm_source=PRNewswire&utm_medium=Press%20Release&utm_campaign=Paid) (accessed 22.1.2020.)
16. Mintel (2020.), Plant-based proteins: impact of COVID-19, available at: <https://reports.mintel.com/display/986972/#> (accessed 2.2.2021.)
17. OECD (2020.) Trust in government, available at <https://www.oecd.org/gov/trust-in-government.htm> (accessed 10.11.2020.)
18. OECD (2021), Consumer confidence index (CCI) (indicator). doi: 10.1787/46434d78-en (accessed on 10. February 2021.)
19. Papaoikonomou, E., Ryan, G., Valverde, M. (2011), Mapping ethical consumer behavior: integrating the empirical research identifying future directions. *Ethics and behavior*, Vol. 21, No. 3, pp. 197-221.
20. Plant based foods association (2020.), New data shows plant-based food outpacing total food sales during COVID-19, available at: <https://plantbasedfoods.org/plant-based-food-outpaces-total-food-sales-during-covid19/> (accessed:2.2.2021.)
21. Previšić, J., Ozretić Došen, D. (2002.), *International marketing*, Masmedia, Zagreb
22. PWC (2020.), Global consumer insights survey, available at  
<https://www.pwc.com/gx/en/industries/consumer-markets/consumer-insights-survey.html>  
 (accessed 14.11.2020.)
23. Swiss Re Institute (2020.), All change: how COVID-19 is transforming consumer behavior, available at: <https://www.swissre.com/institute/research/topics-and-risk-dialogues/health-and-longevity/covid-19-and-consumer-behaviour.html> (accessed 5.12.2020.)
24. The conference board (2020.) The Conference Board Global Consumer Confidence Survey, available at <https://conference-board.org/> (accessed 12.11.2020.)

## CONSTITUTIONAL LEGAL PROTECTION OF THE FAMILY IN THE REPUBLIC OF SERBIA

**Dejan Logarusic**

*Faculty of Law for Economics and Justice in Novi Sad,  
University of Business Academy in Novi Sad, Republic of Serbia  
drdejanlogarusic@gmail.com*

**Dalibor Krstinic**

*Faculty of Law for Economics and Justice in Novi Sad,  
University of Business Academy in Novi Sad, Republic of Serbia  
krstinicdalibor@yahoo.com*

**Borislav Bojic**

*Faculty of Law for Economics and Justice in Novi Sad,  
University of Business Academy in Novi Sad, Republic of Serbia  
borislavbojic71@gmail.com*

### **ABSTRACT**

*The Constitution of the Republic of Serbia regulates numerous constitutional rights that directly concern the family. Its provisions establish the most relevant principles on the family and family relations. For that reason, the authors of this paper will pay special attention to the most important constitutional provisions related to the matter of arranging family relations and its protection. In this paper, the authors will analyze the following constitutional rights and principles: gender equality, prohibition of discrimination, the right to marry and equality of spouses, equating extramarital union with marriage, freedom to decide on birth, children's rights, parental rights and duties and special family protection, mother, single parent and child. These principles will be discussed in order to review the current situation in the studied area, but also to improve the legal protection and legal position of the subjects of family law relations and the provision and protection of human rights.*

**Keywords:** *constitution, family, protection, equality, Republic of Serbia*

### **1. INTRODUCTION**

The new Constitution of the Republic of Serbia entered into force on November 8, 2006. The provisions of this Constitution which establish some of the most important principles concerning family relations are more extensive and numerous than was the case in previous constitutions. Namely, the new Constitution of the Republic of Serbia (hereinafter the Constitution) regulates the entire range of constitutional rights related to the family, and they are included in the part of the Constitution related to human and minority rights (Pajvančić, 2011). The Constitution guarantees the direct application of guaranteed human and minority rights guaranteed by generally accepted rules of international law, ratified by international treaties and laws (Constitution, Article 18). However, the relevance of this constitutional provision is limited by the Constitution itself, ie the provision of Article 16, paragraph 2, which stipulates that ratified international agreements must be in accordance with the Constitution, because only then can they be a source of law and be directly applicable. This constitutional concept of subordination of accepted and ratified international treaties provides primacy to domestic law in relation to ratified international treaties, but also leaves room for interpretation, which has been criticized among Serbian theorists (Etinski, 2007). The Constitution, as the highest legal act of our country, represents the most relevant legal source of law, and thus of family law.

Regarding family law, the most important constitutional principles and constitutional rights are: gender equality, prohibition of discrimination, the right to marry and equality of spouses, equalization of extramarital union with marriage, freedom to decide on birth, children's rights, parental rights and duties and special family protection, mother, single parent and child. Therefore, they will be the subject of analysis of this paper. The mentioned principles represent the constitutional principles on the basis of which the existing Family Law of the Republic of Serbia was adopted. Through the mentioned most important constitutional principles, not only the principles of family law are given, but also specific provisions whose application cannot be avoided (Počuča, 2010, p. 24).

## **2. GENDER EQUALITY AND PROHIBITION OF DISCRIMINATION**

The principle of gender equality was introduced into our legal system as a general constitutional principle in the first post-war Constitution of 1945, and then it was accepted in our later constitutions. The principle of gender equality is a special value of our post-war legal system, and especially the family law system. This principle in family law means that men and women are fully equal in marriage, as spouses in all mutual rights and obligations, then they are equal as parents to their children and finally both male and female children are fully equal in all rights and obligations both to each other and to parents and other relatives. However, it is important to emphasize that until the end of World War II, this principle was not recognized as a legal principle. Man and woman were not equal as spouses, nor as parents, nor were male and female children equal in all rights, such as hereditary (Draškić, Popović-Obradović, 1998). It means that the principle of gender equality is a post-war constitutional principle that is almost completely implemented in our legal system. The exception to the above is the right to freely decide on the birth of children, which will be discussed in more detail in the paper. The principle of prohibition of discrimination and gender equality is proclaimed by the provisions of Articles 21 and 15 of the Constitution, and consists in the constitutional guarantees of equality of all before the Constitution and the law, as well as in the prohibition of discrimination on any grounds. In addition to the principle guarantee of gender equality, the Constitution also prescribes the obligation of the state to pursue a policy of equal opportunities in order to effectively achieve the principle guarantee of the equal status of women and men. The Constitution guarantees legal principles according to which all citizens are equal in rights and duties regardless of race, sex, nationality, birth, social origin, religion, political or other belief, property status, culture, language, age and mental or physical integrity. However, the Constitution does not explicitly mention the prohibition of discrimination on the basis of sexual orientation, although the prohibition of discrimination on this basis derives from the general wording on the prohibition of discrimination (Article 21, paragraph 3 of the Constitution). This is an open modern clause, which explicitly states the most common grounds for discrimination, but it also protects all other grounds for discrimination that are based on a personal characteristic.

## **3. RIGHT TO MARRIAGE AND EQUALITY OF SPOUSES**

Free consent to marriage is one of the basic constitutional freedoms of man and citizen, which is especially protected in the most important international documents. Also, the Family Law of the RS protects the right of every individual to enter into marriage with free consent (Article 3, paragraph 2). Article 31 provides for the sanction of nullity of marriage if one spouse enters into marriage under duress. In addition, the legislator envisages that the marriage is null and void even if it was concluded by persons of the same sex, as well as if it was not concluded before the registrar (Article 31 of the Family Law). And the provision of Article 62 of the Constitution stipulates that everyone has the right to freely decide on the conclusion and dissolution of marriage.



According to this constitutional provision, a marriage is concluded on the basis of the freely given consent of a man and a woman before a state body. This excludes the possibility of marriage of persons of the same sex, although the opposite could be concluded on the basis of the first paragraph of this article, which reads that "everyone has the right to freely decide on the conclusion and dissolution of marriage". However, paragraph 2 already limits this right to persons of the opposite sex only in accordance with the traditional understanding of marriage as a union of a man and a woman. Conclusion, duration and dissolution of marriage are based on equality of men and women, which derives from the general principle of equality of women and men from Article 15 and the principle of discrimination (Article 21 of the Constitution), and Article 62 of the Constitution repeats the same but in the context of mutual marital relations. However, it is necessary to state that the constitutional provision formulated in this way on marriage as a freely dissolving community confirms the tendency of liberalized divorce which started from the moment when undisguised divorce causes were introduced, which means that it is enough for one spouse not to want a divorce. lives in a marital union (Cvejić Jančić, 2009a). This is a practice of returning to the principle of unilateral divorce at the request of one spouse, and even one who has exclusively contributed to the divorce itself. However, Pajvančić (2009, p. 84) considers that the constitutional provision guaranteeing freedom of decision when it comes to divorce is disputable. He states as a reason that divorce is not always decided by the free will of the spouses. In addition, the fact that the law prescribes the reasons for divorce, as well as that divorce is decided by the court as a state body, confirms that divorce cannot be decided by the free will of the spouses. However, thanks to the principle of gender equality, which is increasingly gaining the dimensions of a universal principle, the right to unilateral divorce is also granted to women, not only men (Cvejić Jančić, 2009a). The relevant fact is that the right to marry and the equality of spouses belong to the group of absolutely protected rights, deviations from which are not allowed even during a state of emergency and war (Article 202, paragraph 4 of the Constitution).

#### **4. EQUALIZATION OF THE OUT-OF-MARRIAGE COMMUNITY WITH THE MARRIED**

Equating an extramarital union with a marital one is a completely new constitutional provision, which was first provided for in the 2006 Constitution. Prior to that, this was not a constitutional matter, but exclusively a legal one. The legal regulations of extramarital union began to be applied in 1980 with the adoption of the Law on Marriage and Family Relations, in which the rights and obligations of men and women were equal, regardless of whether they concluded a marriage or not. Prior to the enactment of this law, cohabitation was not recognized as an institution of family law. The only exception was the Workers' Insurance Act of 1922, which recognized the status of an extramarital union in terms of material support to the illegitimate wife of a deceased worker. It was necessary to fulfill the condition that the marriage lasted for at least a year and that a child was born in it (Randelović, 2017, p. 128). In the absence of legal regulations, certain legal protection of extramarital partners arose through the practice of courts, which faced numerous requests for recognition of certain property actions after the termination of extramarital union, which are primarily related to the division of property acquired during its duration. The 2006 Constitution adopts the principle of equating extramarital union with marriage, but in accordance with the law, which means that the more detailed determination of the conditions for recognition of extramarital union, as actions that occur during its duration and after termination, is left to law. This constitutional provision according to which extramarital union is equated with marriage has no precise meaning. The question of content remains open, because it is realized "in accordance with the law" (Article 62, paragraph 5) to which the Constitution explicitly refers, and the status of this constitutional guarantee is disputable.

Although the Constitution in principle guarantees the equality of extramarital union and marriage, it does not determine the content of this guarantee, but prescribes that it be exercised in accordance with the law. Therefore Pajvančić (2009, p. 84). states whether in practice the question can be asked, whether it is a constitutional or legal right and whether the law can define the content of the right? In the law of the Republic of Serbia, the legal relations of extramarital partners are regulated by the provisions of the Family Law. Article 4, paragraph 2, the legislator prescribed that "marriage partners have the rights and duties of a spouse under the conditions determined by this law". And when it comes to property relations, the Family Law prescribes that its provisions on property relations of spouses are applied to the property relations of extramarital partners. However, in order to be able to apply the identical property regime to the relations of extramarital partners, as well as to the property relations of spouses, it is necessary that the extramarital union meets certain legal conditions regarding existence, which is "the duration of life of a woman and a man Article 4, paragraph 1 of the Family Law). If the stated conditions are fulfilled, the extramarital union is legally recognized and the property relations of extramarital partners in the extramarital union enjoy family law protection, ie they produce property law effects in the sense of family law.

## **5. FREEDOM TO DECIDE ON BIRTH**

The Constitution stipulates that everyone has the right to freely decide on the birth of children, which means that the right of every person of childbearing age to freely decide whether to have children, when to have them and how many children will be recognized. have, or what will be the distance between individual births (Article 63 of the Constitution). This constitutional provision means that the right to freely decide on birth cannot be limited by law or in any other way, bearing in mind that constitutional rights can be limited only if the constitution explicitly provides for it. In this case, the constitution does not provide any possibilities for restricting this right, which means that it belongs to every individual who is in the generative age, whether he is married, out of wedlock, as well as an individual who is neither married nor married. extramarital union. This is confirmed by the general, ie. a neutral form used by the legislator - "everyone" when referring to subjects who can freely decide on birth (Pajvančić, 2009, p. 85). Family legislation should contribute to the decision to have children being made with respect for the equality of men and women with full mutual respect, given that this is one of the most delicate decisions in family life. However, the Family Law stipulates that free decision-making on childbirth is reserved only for women, ie that only women are free to decide on childbirth (Article 5, paragraph 1 of the Family Law), which is contrary to constitutional principles. The decision to have children means a decision in favor of or against giving birth. For that reason, the content of this right can be summarized in two basic rights, the right to have a child and the right not to give birth. The right to give birth is the right of every person of childbearing potential to have their own child. If this right is not exercised naturally, its holder will have the right to sterility treatment, ie the right to artificial insemination. The right to artificial insemination, ie conception with biomedical assistance, is a very complex issue because it includes different types of fertilization and is regulated by the Law on Biomedically Assisted Fertilization. It is unquestionable that every woman and man has the right to have their own child, regardless of whether they live in marriage or cohabitation, but it is debatable whether the same right should be granted to those women and men who do not have a sexual partner and who have their right to they can only have their own child using one of the methods of biomedically assisted fertilization. More precisely, the question arises whether a woman living alone has the right to anti-infective insemination or in vitro fertilization that would be done by donor semen, as well as whether a man who does not have a sexual partner is entitled to a child with the help of a surrogate mother who would also be an egg donor. cells. The mentioned Law on Biomedically Assisted Insemination resolved this dilemma by stipulating in the provision of

Article 25, paragraph 2 that an adult and able-bodied woman who lives alone and who is able to perform parental duties and who is in such a psychosocial condition on the basis of can reasonably expect to be able to perform parental duties, in accordance with the law, in the interest of the child has the exclusive right to biomedically assisted fertilization procedures. On the other hand, surrogacy is expressly prohibited by Article 49, paragraph 1, item 18 and even provides for imprisonment of three to ten years for persons offering surrogacy services, as well as for those who include in this procedure a woman who intends to after birth, the child is transferred to a third party with or without payment of any compensation (Article 66 of the Law on Biomedically Assisted Insemination). However, the question is whether it is stated in accordance with the Constitution. Namely, if we start from the principle that "everyone has the right to give birth", any restriction or denial of the right to conceive with biomedical assistance has no basis in the Constitution, whether it is a method of exercising this right or restricting the subjects to whom this right is available. Therefore, the establishment of a parental relationship through childbirth for another, ie a surrogate for motherhood, should be allowed, which is in line with another constitutional principle - the principle of gender equality. We believe that the prohibition or restriction of birth for another violates another constitutional principle - the principle of non-discrimination, which is defined in Article 21 of the Constitution. It is important to emphasize that the Serbian Family Law explicitly allows the method of biomedically assisted conception, which means that it is legally completely indisputable and that it is a permissible method of treating marital infertility or reduced infertility of the husband or mother's illegitimate partner (Articles 57 and 58 of the Family Law). , while giving birth to another is not mentioned in this law. The right not to have a child is also the right of every person to make a decision to deprive himself or herself of the possibility of having his or her own child. The child's right not to work can be exercised in a preventive or corrective manner. The preventive right is exercised through the right to contraception which deprives a person of fertility immediately or temporarily, as well as through the right to sterilization. Sterilization extinguishes the ability to fertilize for a certain period of time or permanently. In both cases, it is understood that the holder of this right must be completely free to choose any of the means to prevent conception of recommended and applicable methods in modern medicine and on the basis of general regulations on health care (Rašević, 2002). Corrective exercise of the right not to have a child is exercised through the right to abortion, ie abortion. However, the conditions and procedure of abortion by surgical intervention are regulated by a special law - the Law on the procedure of abortion in health care institutions. This law stipulates that only women have the right to decide on termination of pregnancy. Exceptions are persons under the age of 16 and persons who are completely deprived of legal capacity, which requires the written consent of a parent or guardian. If, for certain reasons, consent cannot be obtained from them, it is necessary to obtain it from the competent guardianship authority (Article 2). So the legislator does not mention the right of a man to participate in a decision concerning abortion. It is important to emphasize that the Constitution encourages parents to decide to have children and helps them to do so. This means that the Constitution suggests a turn towards pro-natality policy, and the laws further need to develop a system of measures that should contribute to the implementation of these constitutional provisions. In that sense, state incentive measures should contribute to the birth decision being supported by a number of significant reliefs, such as credit, tax, economic, housing, etc., so that individuals who want a larger family feel the support of the state. However, free decision-making on the birth of children remains a priority rule, which means that any introduction of special levies on those who decide not to have children or those who cannot have them, as well as on those who opt for a smaller number of children, would be unconstitutional.

However, it is important to emphasize that more significant support, not only in the form of material benefits, but also in providing benefits and facilities related to raising, educating and educating children, to those families who want to have more children should be clear and long-lasting. desired results. (Cvejić Jančić, 2009b, p. 20)

## **6. CHILDREN'S RIGHTS**

Children represent a vulnerable group, which is specially protected by the Constitution. Namely, the Constitution is the first domestic constitutional text that accepted the concept that children's rights should be recognized and protected as a special category of human rights. Thus, Article 64 of the Constitution guarantees children the enjoyment of human rights, which are appropriate to their age and mental maturity. Every child is guaranteed the right to a personal name, registration in the birth register, the right to know their origin and the right to preserve their identity. Children are protected from psychological, physical, economic and any other exploitation or abuse. Based on the Constitution (Article 64, paragraph 5), the rights of the child as well as their protection are regulated in more detail by law. In that sense, it can be said that there is no law that directly or indirectly applies to children. However, according to its importance for the regulation of the rights of the child in family relations, the Family Law stands out. Thus, the provisions of the Family Law, in addition to the above-mentioned, recognize other rights of the child and regulate a special procedure for their protection, such as. the child's right to live with his parents, to maintain personal relations with the parents with whom he lives, the right to freely express his opinion, the right to maintenance, the right to adoption, etc. The right of the child to a personal name is also the duty of the parents to determine their child's personal name by agreement, and that means both the name and the surname. Regarding the name, parents are free to choose the name they want for their child, provided that it is not derogatory and does not offend morals and is not contrary to customs and perceptions of the environment (Article 344 of the Family Law). The child also received a surname according to the surname of one or both parents, but they cannot assign different surnames to their joint children (Article 345 of the Family Law). The personal name of the child is determined by only one parent, if the other is not alive, if he is unable to exercise parental rights, or if he is unknown. Instead of the parents, the child's guardian's personal name may also be determined by the guardianship authority if the parents are not alive, are not known, or have not assigned the child's name within the legal deadline. Also, the guardianship authority will determine the child's personal name even if the parents have assigned the child a derogatory name, a name that offends morals, as well as a name that is contrary to customs and perceptions of the environment (Article 344, paragraph 4). It is the duty of the parents to report the personal name of the child to the competent registrar no later than 30 days from the day of the child's birth (Article 25 of the Law on Registry Books). And the birth of a child is registered within 15 days of his birth (Article 48, paragraph 1 of the Law on Registry Books). Regardless of the age, the child has the right to know who his parents are. And a child who has reached the age of fifteen and who is capable of reasoning can inspect the birth register and other documentation related to his origin (Article 59 of the Family Law). The right to know the biological origin is explicitly regulated for the first time in the Convention on the Rights of the Child, with a restriction according to which the child has the right to know who his parents are whenever possible (Article 7 of the Convention on the Rights of the Child). One of the most interesting constitutional principles concerning the rights of the child is the principle of equating children born out of wedlock with children born in wedlock (Article 64, paragraph 4 of the Constitution). Equality of children regardless of their family status is one of the most important preconditions for humanity in family relations. Precisely for that reason, the goal is to achieve the rule that children born out of wedlock have the same rights and duties as children born in wedlock. An additional principle of equality which stipulates that adopted children have the same legal status

as born children is contained in Article 6, paragraph 5 of the Family Law. The Constitution proclaims the principles of equality of married and illegitimate children, and they are supplemented by family law provisions by ensuring the application of this principle by the rules on full equalization of married, illegitimate and adopted children with regard to the right to a personal name, the right to maintenance, the right to live with parents, etc.

## **7. RIGHTS AND DUTIES OF PARENTS**

The rights and duties of parents represent a completely new constitutional provision which lists the partial content of parental rights - the duty to support, educate and educate their children and at the same time emphasizes the equality of parents in exercising that right and duty (Article 65, paragraph 1 of the Constitution). The principle concerning the rights and duties of parents derives from the constitutional principles on gender equality and the prohibition of discrimination and implies equality of parents. Therefore, from the aspect of the relationship between the child and the parents, the principle of equality of parents is manifested as the right to the duty of mother and father to decide completely equally on all issues concerning the content of their parental rights. The amendment to the mentioned constitutional principle is represented by the provisions of the Family Law, which specifies that parental rights belong to mother and father together, as well as that abuse of parental rights is prohibited (Article 7, paragraphs 1 and 3 of the Family Law). Also, according to this law, the child has the right to be cared for by the parents before everyone else, ie the parents have the right and duty to raise the child by personally taking care of the child's life and health (Article 60, paragraph 1 and Article 69 of the Family Law). Equality between adoptive parents and parents derives from the rule that adoptive parents have the same legal status as the child's parents (Article 7, paragraph 4 of the Family Law). Article 65, paragraph 2 of the Constitution states that only a court decision may limit or deprive all or only some of the rights that parents have towards their children and this may apply to both or only one parent. In addition, the legislator provided that this decision on the restriction or deprivation of parental rights can be made only if it is in the best interest of the child. Also, the Family Law stipulates that the court may make a decision on separating a child from a parent only if there are reasons for the parent to be completely or partially deprived of parental rights or in case of domestic violence (Article 60, paragraph 3 of the Family Law). Parents are of great importance in the content of parental rights, because by performing their duties towards the child, they realize and protect his rights and interests. Therefore, it can be said that the duties of parents are in interaction with the rights of the child. The duties of the parents, ie the right of the child arising from the parental right, aim to enable the child morally, physically, emotionally and intellectually to be a useful, healthy and successful member of society. So raising a child and enabling him to live independently is in the interest not only of the child and his parents, but also of the entire social community (Pavlović, 2011).

## **8. SPECIAL PROTECTION OF FAMILY, MOTHER, SINGLE PARENT AND CHILD**

The provision of Article 66 of the Constitution provides for special support and protection for the mother, both before and after childbirth, for a single parent, as well as for children whose parents do not care for them and for children with mental or physical disabilities. The mentioned constitutional provision first of all affirms the special protection of the family, which means that every family in our society has special protection regardless of the way in which it is founded. More precisely, regardless of whether it is a married, extramarital or adopted family. This constitutional principle is of particular importance because it gives special protection to the mother and thus expresses society's concern to ensure the protection of a woman's biological function so that she can become a mother. Namely, special support and protection is provided for the mother, both before and after the birth, for a single parent, as well as for children whose parents do not take care of them and for children with mental or physical disabilities.

That the mother and the child enjoy special protection also follows from a number of basic provisions of family legislation, ie special provisions of marital, parental and guardianship law. Thus, e.g. everyone is obliged to be guided by the best interests of the child in all activities concerning the child, the state has the obligation to take all necessary measures to protect the child from neglect, physical, emotional and sexual abuse, as well as any kind of exploitation. The state also has an obligation to respect, protect and promote the rights of the child (Article 6, paragraphs 1-3 of the Family Law). The constitutional principle of family legal protection of the mother is affirmed by the provision of Article 153 of the Family Law, according to which an illegitimate father is obliged to support the mother of his illegitimate child three months before birth and one year after the birth of the child. would be an obvious injustice to the father. In addition to the special protection of the mother, the Constitution also provides for the special protection of every single parent, as well as minor children. Family law protection of minor children is comprehensive, because it permeates almost all provisions of the Family Law, while the protection of single parents is more pronounced in other branches of law, such as social, labor and health legislation (Cvejić Jančić, 2009b, p. 24). Minor children who are not cared for by their parents, as well as children with developmental disabilities, are also under special protection. One of the types of this protection is realized in family law, through provisions which provide the child without parental care with new parental care (adoption) or some other type of protection, such as guardianship or foster care. Starting from the fact that the needs of children without parental care are different, the legislator obliged the guardianship authority to choose the form of protection in each specific case, having previously considered all relevant circumstances, which guarantees the conditions for optimal physical, intellectual and emotional development. protection is provided. First of all, children without parental care are provided with family protection in the first place, considering that the generally accepted position of modern social psychology is that family life has an absolute advantage over the institutional way of taking care of a child. Therefore, placement in a family that is not related and in which the rights and obligations from the relationship are not based is the best substitute for the natural and related family of the child. Only in a situation when it is not possible to provide family protection to a child without parental care is institutional protection realized (Article 6, paragraph 6 of the Family Law).

## 9. CONCLUSION

The 2006 Constitution of the Republic of Serbia contains rights that are the result of harmonization with the most modern understandings of human rights. Thus e.g. The Constitution stipulates that everyone has the right to decide on the conclusion and dissolution of a marriage. In this way, the legislator introduces the constitutional right to divorce, which in fact represents the right to unilateral divorce. Pursuant to the principle of gender equality and non-discrimination, this right belongs equally to women and men, and we can conclude that it is an expression of the understanding that the state should not interfere in the private life of individuals, who are given a greater degree of freedom in personal and family life. The new Constitution equates extramarital union with marriage, which was not the case before. However, this equation is not "complete" because the extramarital union is equated with the marital one in accordance with the law. Therefore, we conclude that this in fact means that the law will regulate the boundaries of equality and that it can regulate some issues related to cohabitation differently than issues related to marriage. The Constitution explicitly prohibits discrimination on any grounds, but does not explicitly mention the prohibition of discrimination based on sexual orientation and gender identity, although it is implied because it derives from the general wording of the prohibition of discrimination. However, we believe that it is necessary for the Constitution to guarantee equality and non-discrimination against the LGBT population in a precise and unambiguous manner.

Also, the Constitution regulates the freedom to decide on the birth so that everyone has the right to freely decide on the birth of children. We believe that the Constitution, in determining the subjects to whom the right to decide on birth is guaranteed, used a very clumsy formulation - "everyone" has the right to decide on the birth of children, although the constitution-maker probably meant every parent and not other persons who could interfere in their relationships. Therefore, it is important that the Constitution explicitly emphasizes that each individual, man and woman individually, have the right to freely decide on childbirth and that the consent of both partners, ie future parents, is not required for the exercise of certain powers from the complex right to family planning. that each individual decides on his own. Thus, e.g. and according to the Law on Biomedically Assisted Insemination, although the subjects of the right to conception can as a rule be only spouses or extramarital partners, an independent subject can also be a woman without a marital or extramarital partner, as we have already stated in the paper. This example also confirms our position that the Constitution should clearly and unambiguously define the subjects of the right to freely decide on the birth of children as independent subjects in order to avoid doubts and possibilities of different interpretations. On the other hand, the Family Law adopted a provision that reserved the right to free decision only for women, and it is in conflict with the Constitution. The new Constitution also introduced some special rights for children, among which is the significant right of the child to know his / her origin, which is also contained in the Family Law. And of special importance when it comes to children who were conceived with biomedical help are their rights to find out information about their biological parents. There is also a new constitutional provision that children enjoy human rights appropriate to their age and mental maturity, as well as a provision that the rights of the child and their protection are regulated by law. The Constitution also separates some rights and duties that make up the content of parental rights, such as maintenance, upbringing and education, and they are equal in that. The constitutional provision that envisages special protection of the family, mother, single parent and child is especially important, because in that way the principle of special protection of the family is affirmed.

## LITERATURE:

1. Cvejić-Jančić, O. (2009a). Brak i razvod između prošlosti i budućnosti. *Zbornik radova Pravnog fakulteta, Novi Sad*, 43(2), 63-88
2. Cvejić Jančić, O. (2009b). *Porodično pravo*. Novi Sad, Pravni fakultet
3. Draškić, M., & Popović-Obradović, O. (1998). Pravni položaj žene prema Srpskom građanskom zakoniku (1844-1946). u: *Srbija u modernizacijskim procesima 19. i 20. veka. 2, Položaj žene kao merilo modernizacije: naučni skup*. Beograd, Institut za noviju istoriju Srbije, 11-25
4. Etinski, R. (2007). Odnos ustava, međunarodnog i komunitarnog prava u oblasti ljudskih prava. *Pravni život*, 56(13), 905-918
5. Konvencija o pravima deteta, Ujedinjene Nacije (A/RES/44/25) od 20. novembra 1989, ratifikovana 18. decembra 1990
6. Pajvančić M., (2008). *Pravni okvir ravnopravnosti polova*. Novi Sad, Zavod za ravnopravnost polova
7. Pajvančić, M. (2009). *Komentar Ustava Republike Srbije*. Beograd, Fondacija Konrad Adenauer
8. Pajvančić, M. (2011). *Ustavno pravo*. Novi Sad, Pravni fakultet
9. Pavlović, D. (2011). Obaveza izdržavanja između roditelja i dece. *IMK-14 - Istraživanje i razvoj*, 17(1), 63-67
10. Počuča, M. (2010). *Porodično pravo*. Novi Sad, Pravni fakultet za privredu i pravosuđe
11. Porodični zakon, *Sl. glasnik RS*. br. 18/05, 72/11 - dr. zakon i 6/15

12. Randelović, D. (2017). Vanbračna zajednica u Republici Srbiji. *Megatrend revija*, 14(2), 127-144
13. Rašević, M. (2002). Voljna sterilizacija u Srbiji: nezadovoljena potreba?. *Stanovništvo*, 40(1-4), 15-33
14. Ustav Republike Srbije. *Službeni glasnik RS*. br. 35/06
15. Zakon o biomedicinski potpomognutoj oplodnji. *Sl. glasnik RS*, br. 40/17 i 113/17 - dr. zakon
16. Zakon o braku i porodičnim odnosima, *Sl. glasnik SRS*. br. 22/80, 24/84 - dr. zakon i 11/88, *Sl. glasnik RS*, br. 22/93, 25/93 - ispr., 35/94, 46/95 - dr. zakon i 29/2001
17. Zakon o matičnim knjigama, *Sl. glasnik RS*, br. 20/09, 145/14 i 47/18
18. Zakon o postupku prekida trudnoće u zdravstvenim ustanovama. *Sl. glasnik RS*, br. 16/95 i 101/05 - dr. Zakon



## REGIONAL ECONOMICS AS A PART OF REGIONAL SCIENCES

**Davor Zmegac**

*Libertas International University  
Trg J. F. Kennedy 6b, Zagreb, Croatia  
dzmegac@libertas.hr*

### ABSTRACT

*Regional science is a multidisciplinary field which started to develop significantly in the 1950s. The development of regional sciences relies on the study of theories and tools that explain the mutual interactions of time and space (location) and their impact on society and its activities in a defined space. A significant part of research in regional sciences focuses on economic issues. As this is an aspect of the economic study, which is defined and relates to a specific area or space (segment or region), we can say that regional economics is one of the fundamental elements of regional science. In terms of its structure, regional economics can be examined from a macroeconomic standpoint (economic growth, employment, etc.) and microeconomic one (location issues). The full development of regional (spatial) economics is based on two major theory groups, namely: (i) location theory, and (ii) regional growth and development theories. Location theory, the driving force behind regional economics, which was developed in the early 1900s, addresses the issues of economic laws of spatial distribution of economic activities, whereas regional growth and development theories mainly focus on the planning aspect of economic growth and spatial distribution of income. Another term for regional economics is spatial economics and the use of the terms in literature is related to the main line of research in which these synonyms are used – the term spatial economics is more often used in geographical, architectural and sociological research, whereas the term regional economics is found in economy-oriented research.*

**Keywords:** *regional sciences, regional economics, space, location*

### 1. INTRODUCTION

Since the very beginnings of human societies, space has been, and still is, one of the existentially most important conditions for survival and development of the civilisation. The question of how to utilise the space where we live and adjust it to our needs provided us with answers that have led to great innovations, with the aim of controlling and adjusting space for the purpose of the development of the humanity. All human activity takes place in a space. The human-space interaction is of great importance and is manifested in both people's attitude to space, and *vice versa*. Different people and groups have treated space differently throughout the course of history. The development of technology, primarily transport and communication means, have led to the exchange of knowledge and skills that resulted in greater efficiency in the use of space and more intensive and systematic knowledge transfer from one group or community to another. Despite these interactions, spaces vary in their natural, geographic, demographic, historical, climate and other features, which has led to different space segmentation. That is, space segmentation is a result of both natural and human factors. Human-space interaction has resulted in the fact that although different spaces have different natural predispositions, with the application of human skills and knowledge, some spaces, although less favourable in terms of spatial factors, are better adjusted to a particular community. The processes and laws in any space segment can be studied from different aspects (sociology, politology, geography, infrastructure...) and if any space segment is studied primarily from an economic point of view, we are in the area of regional (spatial) economics.

## 2. REGIONAL ECONOMICS AS A SCIENCE

A practical interest for space is accompanied by a theoretical one (Bogunović, 2011): “Throughout history, space has been a subject of both direct and indirect, theoretical and practical interest, as an universal presumption of existence. Partial interests in early stages of the development of civilisation have through technological advancements become planetary, or global interests.” From the economic aspect, any activity is intertwined with the space in which it occurs and develops, as emphasised by (Capello, 2007): “Space influences the workings of an economic system. It is a source of economic advantages (or disadvantages) such as high (or low) endowments of production factors. It also generates geographical advantages, like easy (or difficult) accessibility of an area, and a high (or low) endowment of raw materials.” With time and as a result of a number of new viewpoints, the observation of space has shifted from its static nature and a static economic aspect based on a location approach, towards a new, dynamic approach that connects location theories with development theories, while adding knowledge, social capital, planning and other dynamic elements to resource distribution, natural advantages and other traditional location advantages. Therefore, contemporary development successfully compensates unequal distribution of raw materials and imperfect mobility with technological development, with the convergence of geography and economic activity in the scientific approach, as emphasised by (McCann, 2013): “Acknowledging that geography plays a role in determining economic behaviour, many discussions about the performance of particular local, urban, or regional economies are, in fact, fundamentally questions about the relationships between geography and the economy. Geography and economics are usually interrelated issues.” It is this relationship between geography and economy that has resulted in the development of regional science, with regional economics being one of its fundamental pillars.

### 2.1. Regional sciences

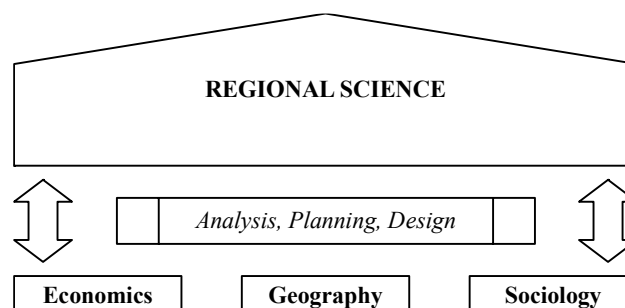
Scientific disciplines are characterised by a joint group of research questions, and values applied when determining the main questions and research methods, or as (Kuhn, 1966, 1970) called it – “a disciplinary matrix“. However, regardless of scientific disciplines’ common characteristics and boundaries, in time changes (separations and mergers) occur in the boundaries areas, as identified by (Schaefer, Jackson, & Bukenya, 2011): “No definition of a discipline should be considered final because its boundaries and core are subject to change, as are its objects of study.” A multidisciplinary area of regional sciences began developing in the 1950s, due to a “perceived shortcomings in the social sciences” (Mulligan, 2014). The beginnings of regional sciences is connected to a classic written by Walter Isard, *Location and Space-Economy* (1956). “Walter Isard (1956, p. vii), for one, was dissatisfied that time and especially space were not satisfactorily incorporated into “... a comprehensive theory of society or economy.” The sentiment also existed that while economics largely ignored the consequences of space, geography and planning were not sufficiently rigorous in dealing with those matters. Evidently this cleavage still persists: economists favour abstraction, analysis, and generalization; geographers and planners favour description, synthesis, and specificity.” (Garretsen and Martin, 2011). Although regional sciences are a relatively young discipline, due to their application in practice and a wide range of interests, scientists have developed a number of theories and methods, “which provide a relatively comprehensive theoretical and methodological toolbox for spatial analysis” (Capello, 2008). The interaction of space (location) and its community and the result of their relationship in the area of socio-economic development is the main interest of regional science. Given that the economic development in a macro area (state) does not occur equally in its subnational territorial and organisational units, by using a set of research questions regional sciences attempt to analyse and explain why that is the case.

These research questions that regional sciences apply, according to (Mulligan, 2014), are “seen to be spread across six overlapping areas of analysis: (i) demographic, (ii) environmental, (iii) location, (iv) regional, (v) transportation, and (vi) urban.” Overview of traditional (classical) topics and according to (Stimson, 2016) “new development of regional science and the challenges it has faced” is shown in Table 1.

Traditional topics in regional sciences	New regional sciences research directions
Location problems (optimisation) Transport problems (optimisation) Regional analysis (growth and development) Demographic analysis (optimisation) Environmental analysis (optimisation) Urban analysis (optimisation)	Behaviour and heterogeneity Global urbanization Metropolitan sorting Neighbourhood change Networks Non-metropolitan living Regional creativity Resource inequality A shift from tangible spatial interactions to intangible cognitive interwovenness The complimentary interface between physical material and virtual digital spatial interaction Complexity of governance systems Economic transitions and industry restructuring.

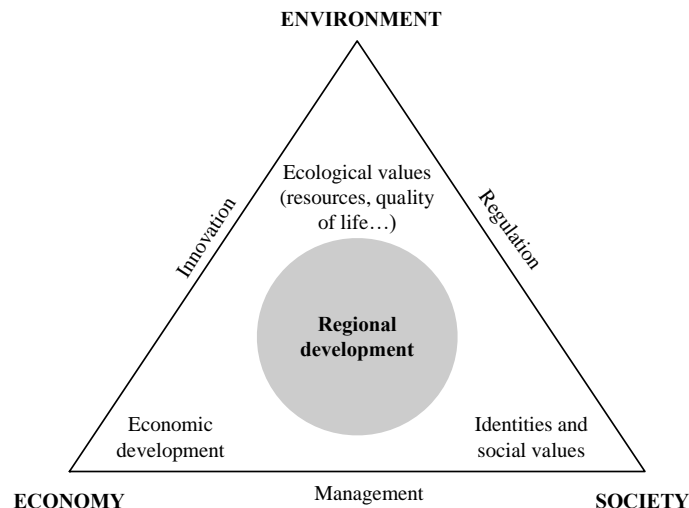
*Table 1: Overview of traditional topics and new interests in regional sciences*  
 (Source: Author's systematisation according to: Mulligan, G. F. (2014) 'Regional Science At Sixty: Traditional Topics and New Directions', *Australasian Journal of Regional Studies*, 20(1), pp. 4–67.; Stimson, R. J. (2016) 'Some Challenges for Regional Science Research', *Investigaciones Regionales*, 2016(36Specialissue), pp. 11–34.)

The fundamental elements of regional science are shown in Figure 1, clearly demonstrating that regional science is a multidisciplinary area that develops on the foundations of geography, sociology and economics, with the main tools of analysis, planning and organisation (design) of space and economic and social activities.



*Figure 1: Fundamental elements of regional science*  
 (Source: Author's systematisation)

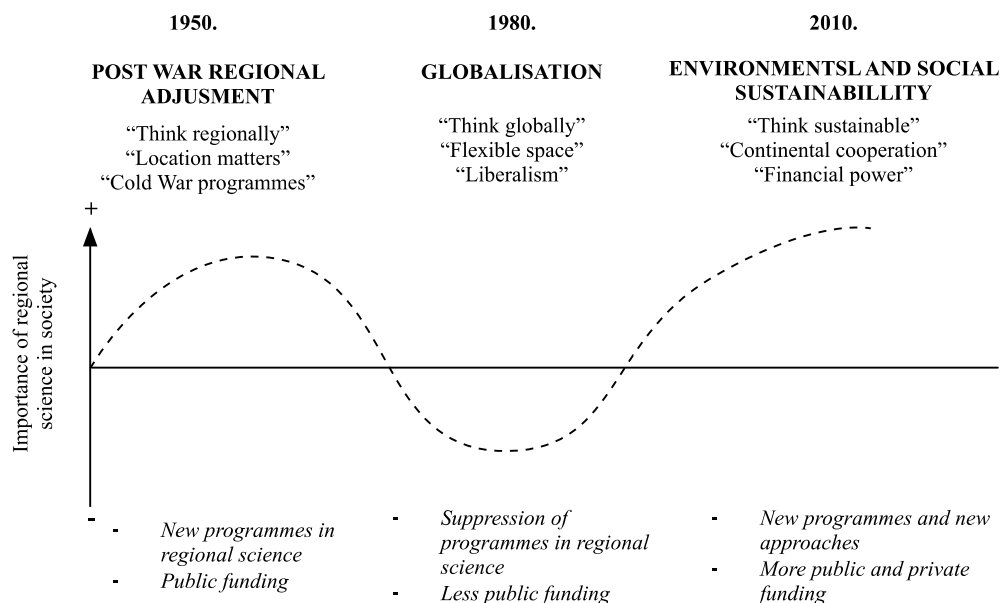
Research in the areas of regional sciences is focused on a particular area (region) which is smaller than the national area, and the interrelations of the main elements of regional economics can be shown as stated by (Bailly, Gibson, Batey, & Simones, Lopes, 2005), with a triangle of regional sciences (Figure 2).



*Figure 2: The Regional Science Triangle*

(Source: *The role of Universities in the development of Regions: Teaching regional science in 2005* (Bailly, Gibson, Batey, & Simones, Lopes, 2005))

The development of regional sciences on these bases aims at developing theories and tools that explain the interactions of time and space (location) and their impact on social science, as well as the activities in that particular area. Economic issues make a significant part of research in regional sciences, and given that it includes an aspect of economic study which is determined and relates to a specific area or space (segment or region), we refer to regional economics as one of the basic elements of regional science. A renowned regional economics scientist *Peter Nijkamp* said the following for the position of regional economics in relation to regional sciences: „Next to regional economics in a strict sense, we may also distinguish regional science as a broader interdisciplinary approach to spatial phenomena, including also geography, planning, architecture, political science and so forth.“ (Nijkamp, 1997). Regional sciences have so far gone through three main periods in their development, graphically shown in Figure 3.



*Figure 3: The three periods of Regional Science*

(Source: *Portuguese publication in the aim of Regional science: A study of articles published in RPER from 2003 to 2015* (Ribeiro Cadima & Remoaldo, 2015))

The first period of the development of regional sciences coincided with post-World War II. The second one began in the 1980s, and as globalisation affected most economic trends, the interest for regional research declined. Finally, the third period covers the last decade and is marked by the questions of sustainable development, with increased interest in regional policies.

## 2.2. Regional economics

Increasing societal, social and economic differences among different areas, resulting in significant changes and processes in demographic trends, social status, economic regional differences, etc., as well as the strengthening of urban centres and some regional spaces that take over national level management attributes, has led to the increased interest in researching regional sciences. Now, more than ever before in its history, cities, settlements and regions as entities in the global economy have an opportunity to have an impact on and shape their own future. On the global level, the impact of cities and regions is one of the key elements and tools for increasing citizens' quality of life, promoting sustainable development, having an role in solving social and economic problems, the problems of migrations, and a number of other important issues for the life of humanity. As concluded by (Leigh G. and Blakely J., 2013), "This is true for the poorest as well as the wealthiest localities. In reality, the forces of nature, demography, technology, and industry are such that no local economy can ever count on an achieved position of stability and security." Within the trend of revived interest for regional sciences, research in regional economics has become more prominent, related to the need for finding new methods to reduce economic inequalities, which result in the ever more prominent "regional problem".<sup>1</sup> The first work on regional economics was written in the 19<sup>th</sup> century (Johann Heinrich von Thünen), the interest then increased in the first half of the 20<sup>th</sup> century (Weber, Hotelling, Christaller, Losch et al), but „the real genesis started in the 1950s“ (Nijkamp, 1997). Walter Isard was the first to consider the problem of distance and transport costs on the one hand, and the economics of agglomeration on the other hand, and concluded that those relations were significantly responsible for the heterogeneity in spatial location distribution of households and businesses. With this research, regional economics became one of the pillars of what will develop into a wider term of regional science. Regional economics usually focuses on researching the following issues: (a) problems of selecting locations in the context of inhabitants and industry; (b) transport costs; (c) space planning and economising; (d) location and planning problems of urban agglomerations, and (e) regional growth and development. When considering developments in space, regional economics conditions the formation of three flows (Bogunović, 2011), namely: (i) intra-regional flow; (ii) interregional flow within the national space, and (iii) interregional flow outside the national space. Considering the aforementioned structure, regional economics can be observed through a macroeconomic aspect (economic growth, employment, etc.) and microeconomic one (location problems). In these considerations, the emphasis is on researching occurrences related to the decision on location selection (households and businesses), urban system configuration and the reasons why some regions progress more than others. Capello explains in his work (Capello, 2007): „Answers to these questions have been put forward by the two large groups of theories that make up regional economics: (i) location theory, the oldest branch of regional economics, first developed in the early 1900s, which deals with the economic mechanisms that distribute activities in space; (ii) regional growth (and development) theory, which focuses on spatial aspects of economic growth and the territorial distribution of income.“ In their classic work *An Introduction to Regional Economic* (1984), when defining regional economics, Hoover and

<sup>1</sup> „A "regional problem" (Griffiths, Wall, 2004) is usually acknowledged when a region deviates from "national average" in some important issues, such as: (1) high and permanent unemployment; (2) low level and slow growth of the GDP *per capita*; (3) high level of reliance on a narrow industrial base; (4) sudden drop in production; (5) inadequate infrastructure; (6) high migrations from the region; (7) low level of the quality of housing, health and accessibility of education; (8) unfavourable effects of industrial technology change.“ (Čavrak, 2011)

Giarratan emphasise that regional economics is a framework without which it is impossible to explain the spatial characteristics of economic systems, concluding: "Thus, regional or "spatial" economics might be summed up in the question "What is where, and why—and so what?" (Hoover and Giarratani, 1984). The importance of understanding spatial problems and regional economics is emphasised also by (Nijkamp, 1997): "The awareness of spatial frictions and opportunities in the behaviour of economic actors induced also a profound interest in urban economics." Standard definitions of regional economics are derived from the aforementioned fundamental pillars of regional economics, such as: „The economic study of regions based on the consideration of space, transportation cost, and location in production and consumption decisions. Regional economic studies a wide variety of topics, including the migration of labour, the macroeconomic activity in cities and states, and the location choices of firms. A closely related area of study that focuses on economic activity within and between cities is termed urban economics."<sup>2</sup> It has already been stated that regional economics introduces the dimension of space in the process of making economic decision, as identified by (Nijkamp and Ratajczak, 2013): "Space is the centrepiece of regional science." Space and the relevant economic processes can, therefore, merge, and lead to an economic space, as, according to (Ponsard, 1983): "Space is not economically neutral." Although geography has an important impact in regional economics, which is a logical consequence from the aspect of studying space, these are nevertheless different approaches to studying space and its activities. Economic approach to studying space from the aspect of regional economics is analytical and is based on developed quantitative analysis methods. Different aspects of geography and regional economics in relation to space are the subject matter of the work of Friedmann and Alonso (Friedmann and William, 1964) who define economic space in the following way: "The space that is a major part of our research is economic space. It is defined by the economic relations that occur between economic elements. Economic space can be summarized in three types: (1) economic space determined by the plan; (2) economic space as a field of forces and (3) economic space as a homogeneous group." (Friedmann and William, 1964). Friedmann and Alonso base their approach to economic space on an influential Growth Poles Theory (Perroux, 1955). According to Perroux, economic space has an abstract character and is not identified with geographic area. Later on, J. Boudeville (1966) and other scientists transform the concept of shifting the "growth poles" from abstract economic space into a specific geographical (real) space. In these discussions, economic space determined by the plan includes the space with boundaries set by economic relations, activities and interest of firms, the space as a field of forces is economic space that developed under the influence of significant regional centres (agglomeration or settlements), whereas economic space as a homogenous group is a system in which firms of identical or similar structure group in a specific area as a result of homogeneity (it need not be a homogeneity of products, means of production, etc., but also defined by buyers, transport, or other influences that led to a homogenous positioning of a type of economic subjects in a specific area). Literature has shown that the term regional economics has a synonym in the expression of spatial economics, and the use of these two terms in literature depends on the main research direction. That is, geographic, architectural and sociological research use the term spatial economics more, whereas economic research use regional economics. Regional (spatial) economics is in its core more focused on the impact of space on economic and social subjects, and in time it has been divided into two areas, namely: (i) regional economics and (ii) urban economics. Why did this micro-division occur? The main reason is the strengthening of urban agglomerations in the past 25 years. That is, as already stated, regional or spatial economics gained momentum in the 1950s, at the time before globalisation processes and in the environment of the world strongly divided into blocks. However, with the workings of globalisation and technology, as well as the economic, social and technological

<sup>2</sup> <http://glossary.econguru.com/economic-term/regional+economics> (31.11.2020.)

migrations, the majority of population in developed countries became concentrated in cities, which have become the centres of development. Therefore, with their economic, social and technological impact, they have taken over the national level attributes as well (large cities today have a global social and economic impact, for instance New York, London, Hong Kong, Brussels, etc.). Strong urbanisation also initiated the need to research a wide array of economic problems concerning specifically urban centres, which led to the specialisation of regional economics (which treats space as a combination of urban and rural areas) to a more narrow field of urban economics.<sup>3</sup> Due to problems that relate to regional and urban inequalities, which are usually analysed separately, decision makers had to identify the interrelation between regional and urban inequalities. “Because the fields of regional and urban economics developed separately, the literature on spatial inequality treats regional inequality and urban inequality as two separate phenomena. Once again, the most important reason for this dichotomy is due to theory – namely, it is extremely difficult to develop a unified theory of regions and cities in a satisfactory manner (see Fujita et al., 1999)” (Kim, 2008). For all these reasons, in the past two decades we have seen more intensified research regarding smart cities (and regions) in the context of adjusting to globalisation processes, which demand additional efforts of both regions and cities in increasing competitiveness, by increasing efficiency and using new technologies (Pevcin, 2019; Bogdanov et al., 2019; Ruso et al, 2019). A good example of differentiating urban and regional economics is provided by McCann: „Traditionally, spatial economic analysis has broadly been split into two sub-fields, namely urban economics and regional economics. These are by no means mutually exclusive categories and many analyses will fall into both categories. The distinction between these two categories has arisen as a result of asking slightly different questions. Urban economics, by definition, is generally concerned with asking questions about the nature and workings of the economy of the city. As such, the models and techniques developed within this field are primarily designed to analyse phenomena that are confined within the limits of a single city. Regional economics, on the other hand, tends to ask questions related to larger spatial areas than single cities, and the models and analytical techniques developed generally reflect this broader spatial perspective. In essence, urban economics tends to emphasize issues or relationships operating primarily at a place, whereas regional economics tends to emphasize issues or relationships operating primarily between places. Moreover, the central questions of regional economics therefore focus on the reasons why individual spatial parts of the same country or of groups of adjacent countries behave differently to one another whereas the central questions in urban economics tend to ignore areas which are primarily rural or primarily a mixture of smaller urban and rural localities.” (McCann, 2013). Figure 4 shows the relationship and a systematisation of spatial, regional and urban economics.

*Figure following on the next page*

---

<sup>3</sup> These trends are not relevant only for economy, but also for geography, sociology, architecture and other fields (author's note).

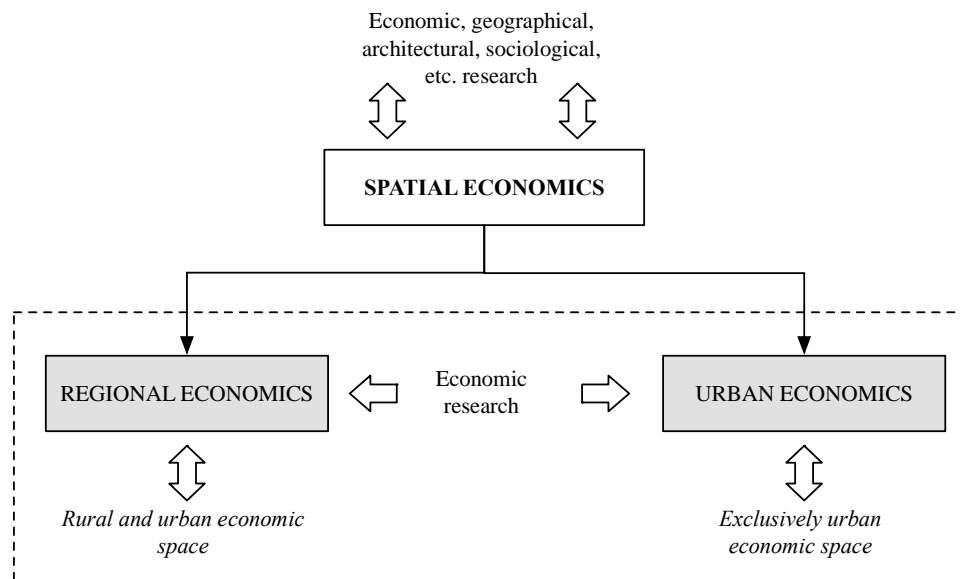


Figure 4: Systematisation of regional (spatial) economy  
(Source: Author's systematisation)

If one was to synthesize a short overview of research related to the development of regional economics as a science, the following views could be adopted: (a) Regional economics is a framework without which spatial features of economic systems can not be explained satisfactorily; (b) Globalisation processes led to strengthening urban centres which rose to the level equal to wider spatial units (regions) in terms of economic, spatial and social characteristic, which in turn led to the specialisation of regional economics into a narrowly specialised issues concerning urban areas, i.e. urban economics; (c) Urban economics and regional economics together make a wide framework which we call spatial economics, within which regional economics is focused on wider urban and rural structure units, as well as the correlation between such similar spatial units both and with relation to a national space, whereas urban economics is focused on studying the problem of large urban settlements/cities, and (d) standard definitions of regional economics need to be considered in a wider context.<sup>4</sup>

### 3. CONCLUSION

A significant development of multidisciplinary area of regional science started in the 1950s, relying on the foundations of geography, sociology and economics. Regional science studies theories and tools that explain mutual interactions of time and space (location) and their impact on social community and their activities in that defined area. Research questions that are the subject matter of regional sciences are characterised by a group of six main areas with overlapping interests, namely: (i) demography, (ii) environment, (iii) location, (iv) regional growth, (v) transport, and (vi) urban economics and planning. A significant part of research in regional sciences are economic problems, and given the aspect of economic study that is clearly defined and relates to a specific area or space (segment or region), we talk about regional economics as one of the fundamental elements of regional science. Given the structure of

<sup>4</sup> R. Capello wrote about a wider context of considering regional economics in her work *Regional Economics* (2007): „Regional economics is not the study of the economy at the level of administrative regions, as is often superficially and erroneously believed. Regional economics is the branch of economics which incorporates the dimension 'space' into analysis of the workings of the market. It does so by including space in logical schemes, laws and models which regulate and interpret the formation of prices, demand, productive capacity, levels of output and development, growth rates, and the distribution of income in conditions of unequal regional endowments of resources. Furthermore, regional economics moves from 'space' to 'territory' as the main focus of analysis when local growth models include space as an economic resource and as a independent production factor, a generator of static and dynamic advantages for the firms situated within it - or, in other words, an element of fundamental importance in determining the competitiveness of a local production system. (Capello, 2007).



regional economics, it can be studied through a macroeconomic aspect (economic growth, employment, etc.) and microeconomic one (location problems). In these considerations, the emphasis is on researching events related to the decision about location selection (households and businesses), urban system configurations, and the reasons why some regions progress more than others. A full development of regional (spatial) economics is based on two large theory groups, namely: (i) location theories, and (ii) theories of regional growth and development. Location theory, as a driving force of regional economics was developed in early 1900s, and considers the issues of economic laws of the distribution of economic activities in space, whereas the regional growth and development theories focus on the planning aspect of economic growth and spatial income distribution. As literature suggests, the term regional economics has a synonym in the expression of spatial economics, and the use of one of the terms in literature is connected with the main research directions in which synonyms are used. That is, geographical, architectural and sociological research use spatial economics more often, whereas economic research use the term of regional economics. Spatial economics is in its core focused on the impact of space on economic and social subjects, and has over time been divided into two areas: (i) regional economics and (ii) urban economics. Now, more than ever before in their history, cities, settlements, and regions as entities in global economy have an opportunity to have an impact on and shape their own future. It can most certainly be concluded that on the global level the impact of cities and regions is one of the key elements and tools for improving the quality of lives of citizens, promoting sustainable development, affecting social and economic problems, the problems of migrations and a number of other issues relevant for mankind. In that sense, the increased interest in regional science, especially regional economics that is looking for answers related to the understanding of economic problems in space, is regaining central position in the interest of not only researchers and scientists, but also economic policies.

## LITERATURE:

1. Bailly, A. *et al.* (2005) *The Role of Universities in the Development of Regions: Teaching Regional Science in 2005*. Faro.
2. Bogdanov, O. *et al.* (2019) 'Scrutinizing the smart city index: a multivariate statistical approach', *Proceedings of Rijeka Faculty of Economics and business: Journal of Economics and Business*, 37(2), pp.777-799
3. Bogunović, A. (2011) *Regionalna ekonomika i politika*. Zagreb: Ekonomski fakultet Zagreb.
4. Capello, R. (2007) *Regional Economics*. New York: Routledge.
5. Capello, R. (2008) 'Regional economics in its 1950s: Recent theoretical directions and future challenges', *Annals of Regional Science*, 42(4), pp. 747–767. doi: 10.1007/s00168-007-0185-8.
6. Čavrak, V. (ed.) (2011) *Gospodarstvo Hrvatske*. Zagreb: Politička kultura.
7. Friedmann, J. and William, A. (1964) *Regional Development and Planning: A Reader*. Edited by J. Friedman and A. William. M.I.T. Press.
8. Garretsen, H. and Martin, R. (2011) 'The Journal of Economic Geography a Decade On: Where do we go from Here?', *Journal of Economic Geography*, 11(1), pp. 207–213.
9. Hoover, E. M. and Giarratani, F. (1984) *An introduction to regional economics*. 3rd edn. New York: Knopf.
10. Kim, S. (2008) 'Spatial Inequality and Economic Development Theories, Facts, and Policies', *Urbanization and inequalities*, (16), p. 52. doi: 10.1596/978-0-8213-7573-0.
11. Leigh G., N. and Blakely J., E. (2013) *Planning Local Economic Development: Theory and Practice*. Fifth Edit. Sage Publications Ltd.
12. McCann, P. (2013) *Modern Urban and Regional Economic*. Oxford University Press Inc.

13. Mulligan, G. F. (2014) 'Regional Science At Sixty: Traditional Topics and New Directions', *Australasian Journal of Regional Studies*, 20(1), pp. 4–67.
14. Nijkamp, P. (1997) *ERIE Research Memoranda Environmental and Regional Economics*. Amsterdam.
15. Nijkamp, P. and Ratajczak, W. (2013) 'The Spatial Economy – A Holistic Perspective', *Research Memorandum, Faculty of Economics and Business Administration, Amsterdam*, (37).
16. Ponsard, C. (1983) *History of Spatial Economic Theory*. Berlin: Springer.
17. Ribeiro Cadima, J. and Remoaldo, P. (2015) 'Portuguese publication in the aim of Regional Science: A study of articles published in RPER from 2003 to 2015', *Revista Brasileira de Gestão e Desenvolvimento Regional*, 11(4), pp. 3–26.
18. Ruso, J. (2019) 'Do international standards influence the development of smart regions and cities', *Proceedings of Rijeka Faculty of Economics and business: Journal of Economics and Business*, 37(2), pp.629-652
19. Schaefer, P. V, Jackson, R. W. and Bukenya, J. O. (2011) 'Regional Science Reconsidered', *The Review of Regional Studies*, 41(2011), pp. 161–177. Available at: [www.srsa.org/rrs](http://www.srsa.org/rrs).
20. Stimson, R. J. (2016) 'Some Challenges for Regional Science Research', *Investigaciones Regionales*, 2016(36Specialissue), pp. 11–34.

## APPLICATION OF ENVIRONMENTAL TAXES IN THE REPUBLIC OF CROATIA NOW AND RECOMMENDATIONS FOR THE FUTURE

**Tomislava Majic**

*University North, Croatia  
Koprivnica, Žarko Dolinar sq. 1, Croatia  
tomislava.majic@unin.hr*

**Zvonimir Majic**

*University North, Croatia  
Koprivnica, Žarko Dolinar sq. 1, Croatia  
Zvonimir.majic@unin.hr*

**Georg Richter**

*Ipcenter.at GmbH, Austria  
Vienna, Schönbrunner Str. 218-220, Austria  
georg.richter@ipcenter.at*

### ABSTRACT

*Concern for the environment as a valuable good and the danger of climate change put environmental protection at the center of public consideration. In addition to the fact that environmental protection has become one of the main guidelines for action by governments around the world in recent decades, awareness of the need to preserve the environment and stop climate change is growing among the population, influenced by key social stakeholders. In this context, environmental taxes are the key to achieving sustainability in the economy. By raising the price of environmentally harmful goods relative to other goods, environmental taxes stimulate consumer habits in a more sustainable direction. However, although environmental taxes have been considered one of the most attractive instruments of environmental protection, their widespread application is still hampered by certain problems. In the first place, it is their dual effect on economic growth, where in certain circumstances they can make growth more sustainable and economically efficient, but also in some cases harm economic activity. The issue of environmental taxes is a particularly important issue for the Republic of Croatia, as Croatia's economic system relies heavily on natural resources, which best reflects the importance of tourism and related activities for the domestic economy, where revenue from this industry accounts for about a fifth of GDP.*

**Keywords:** *environmental taxes, sustainable economy, climate change, environmental protection, economic growth; natural resources, tourism*

### 1. INTRODUCTION

This paper intends to bring the concept of environmental taxes closer in the theoretical concept and practical implementation. The environmental tax is an instrument of government that seeks to influence people's behavior towards the environment at all levels: regional, national and international. This behavior is primarily aimed at protecting and improving the environment. In modern times, the preservation and protection of the environment has turned into a fight against various negative products of the world, such as: global warming, poor air and water quality, sources of various respiratory diseases, etc. Concern for the environment as a valuable good and the danger of climate change put environmental protection at the center of public consideration.

In addition to the fact that environmental protection has become one of the main guidelines for action by governments around the world in recent decades, awareness of the need to preserve the environment and stop climate change is growing among the population, influenced by key social stakeholders.

## 2. CONCEPT AND BASIC PRINCIPLES OF ENVIRONMENTAL TAXES

We can rightly call every modern state of the 20th century a tax state. (Jelčić, 2011, p. 15). Taxes are, simply put, the most important revenue of the state or a fundamental form of formation of public revenues. Ecological tax, ie "environmental tax", according to Regulation no. 691/2011 of the European Parliament and of the Council, means a tax whose tax base is a physical unit (or a substitute for a physical unit) of something that has a proven specific negative impact on the environment and which is defined in ESA 95 as a tax. Črnjar and Črnjar (2009, pp. 132-133) describe the environmental tax / fee as a state levy that can to some extent be considered a cost or price to be paid due to environmental pollution. In order for polluters to be able to use the "services" of the environment, they have to pay the price of air, water, land pollution, etc., which is included in the company's costs, ie in the internal cost of production of the economic entity. Economists have long advocated for environmental taxes as environmental policy instruments based on market mechanisms and integrate pollution costs into the economy, criticizing environmental command and control as economically inefficient (Stern and Kohlin, 2003).

### 2.1. Principles of environmental taxes

Financial and political principles are the generosity and elasticity of taxes, which imply that the collected taxes are sufficient to cover public expenditures, ie. that the tax system as a whole can adjust to changes in the amount of public expenditures. The same principle should apply to environmental taxes, although perhaps the first thought when introducing them is not fiscal impact, but environmental. Economic-political principles include the principle of choice of tax source and the principle of choice of tax form (Primorac et al., 2012), and these two principles are especially important in the context of environmental taxes because the choice of tax form and choice of tax source is a consequence of the desired tax objective. According to Wagner, socio-political principles include generality and tax equality (Primorac et al., 2012). When cutting environmental taxes, special emphasis is placed on socio-political principles, given that the focus of environmental taxes is the correction of certain negative externalities. The last group of principles, tax-technical, are very simple, do not conflict with other groups of principles, and require that taxes be fixed, convenient to pay and cheap to collect (Primorac et al., 2012).

#### 2.1.1. *Income tax*

The main purpose of taxation is to collect public revenues. However, it is often stated that this is not the main purpose of environmental taxes, but it is a correction of the behavior of economic actors that disturb the environment. This contradicts one of the principles that modern tax systems try to build, and that is tax neutrality, ie. the principle that taxes do not influence market decisions, do not stimulate or discourage a certain activity, but their purpose should be only to generate revenue. Nevertheless, it can be said that such a setting would be valid only in the absence of externalities (Barde, 1994, p. 18). The environmental tax, like most other taxes, flows into the state treasury. By introducing an environmental tax, the state can lower another tax, direct money, for example to the rehabilitation of old landfills, subsidize energy saving measures and the like. Total environmental expenditures are spent on (Črnjar, 1997, p. 254):

- prevention, protection and compensation of damage due to pollution;
- pollution control and monitoring;

- implementation of environmental policy measures;
- environmental management.

### 2.1.2. *Regulatory tax*

The environment is a public good and its pollution is caused by the negative externalities of various economic actors. Therefore, this is an area that is becoming more and more regulated. Instruments (means of measure) of environmental protection policy can be divided into four basic groups, according to Klarer et al. (2000):

- 1) regulatory (command, supervisory) instruments or legal measures;
- 2) economic instruments or economic financial mechanism;
- 3) self-regulatory instruments (voluntary agreements and contracts);
- 4) institutional mechanisms (measures).

## 3. APPLICATION OF ECOLOGICAL TAXES

Environmental taxes are relatively complex instruments. Their technical, economic and legal aspects must be mastered. The state administration must constantly balance between the different requirements set by the environmental economy, public finances and the political feasibility of the whole project. In addition, comprehensive experience in the application of environmental taxes is still lacking. Finally, they compete in application with simpler and more traditional environmental instruments. Therefore, this chapter deals with the basic forms and divisions of environmental taxes, as well as their application in practice, which often differs significantly from the theoretical considerations on which the idea of environmental taxation and combating externalities is based.

### 3.1. Basic forms of environmental taxes

Tax instruments (environmental tax) that seek to protect the human environment can be divided into three groups (Šinković, 2013):

- 1) Pigou-taxes or specific taxes, which have been mentioned before and which are the basic theoretical form of environmental taxes. They consist of taxes where the amount of the tax burden is measured in direct relation to the unit of emitted pollution. Through such a tax, the so-called external costs, which arise because environmental pollution creates significant expenditures to third parties, which are not included in the market at all, should be internalized.
- 2) Para-Pigou taxes, which should primarily include indirect taxes, such as customs duties, general sales tax, excise duties. Those goods and services that are considered to have no harmful effects on the environment during their production or consumption will be taxed at lower tax rates, while goods and services whose production or use is associated with environmental pollution would be taxed at higher tax rates.
- 3) Bilateral taxes, which are environmental taxes used to collect revenues that will be directed to some activities related to environmental protection, or to finance measures aimed at reducing environmental pollution.

For statistical purposes, at EU level, environmental taxes include four tax categories (Regulation EC 691/2011):

- energy taxes
- transport taxes
- pollution taxes
- resource taxes.

### **3.2. Practical solutions for the application of environmental taxes**

Ecological reform of the tax system included the following (Barde, 2004, pp. 5-6):

- reduction or complete abolition of subsidies that are harmful to the environment;
- restructuring of the existing tax system in accordance with environmentally sustainable criteria and / or
- introduction of new taxes related to environmental protection.

Green tax reform justifiably occupies the most prominent place in the arsenal of green formations. Its purpose is to establish a tax burden on the use of limited resources and environmental pollution, while removing the tax burden on desirable products and production factors (Crnković, 2005, pp. 888-889)

## **4. ECOLOGICAL FEES IN THE REPUBLIC OF CROATIA**

Although the care of the human environment, which means the financing of its protection, is primarily in the domain of the state, the role of local and regional self-government units in this area is also not insignificant. Local and regional self-government units, mainly municipalities and cities (counties only exceptions) are obliged to organize various communal activities, some of which are directly in the function of environmental protection. These are, for example, maintaining cleanliness, collecting, transporting and disposing of municipal waste in regulated landfills, remediation and closure of landfills, etc. In addition, local and regional self-government units are obliged to take measures to preserve and protect the environment before performing other municipal activities. The manner of financing communal activities, and therefore those activities that are performed for the protection of nature and the human environment, is specific and differs from the manner in which the state does so. Primarily, communal activities are performed as public services. Entities performing these activities may be companies, public institutions, own facilities of a local self-government unit and natural and legal persons to whom local self-government units have granted a concession. Funds for performing activities are provided only in part from the budget of local self-government units, and in part from the prices of utility services, utility fees and other sources. Knowledge of the economic causes of environmental destruction allows the prevention of these causes or limiting their negative consequences in the application of "specialized" institutions whose areas of activity are economic phenomena. Among these legal institutions, environmental protection funds have a distinct role, as exemplified in Croatia by the Environmental Protection and Energy Efficiency Fund, which is an extra-budgetary user that collects revenues from various fees. This shows that, in addition to the environmental taxes covered in the previous chapters, an important part of environmental benefits in Croatia are fees. They are the backbone of the environmental protection system in the Republic of Croatia. Therefore, it is extremely important to understand their scope and meaning, primarily fees under the EPEEF Act and the Waste Management Act, which will be discussed in the next two subchapters.

### **4.1. Fees paid under the Law on the Fund for Environmental Protection and Energy Efficiency**

Environmental funds are a form of financing environmental policy. They occur in various forms due to differently set goals, organizational structure, different allocations of resources and territorial organization. The common goals of environmental funds, regardless of their diversity and specificity, are (Carter, 2004):

- improvement of activities and investments for protection and improvement of environmental quality, minimization of waste generation;
- stimulating an ecologically favorable economic structure;
- assisting research and development projects and activities;

- improving the protection of natural values and natural habitats;
- preserving biological diversity and stimulating the acquisition of ecological education and environmental monitoring systems.

The Environmental Protection and Energy Efficiency Fund was established on the basis of the provisions of Article 60, paragraph 5 of the Environmental Protection Act (OG 82/94 and 128/99) and Article 11 of the Energy Act (OG 68/01). The Law on the Fund for Environmental Protection and Energy Efficiency was published in the Official Gazette no. 107/03, and applies from 1 January 2004 (EPEEF, available at [www.fzoeu.hr](http://www.fzoeu.hr)): The Fund manages and disposes of funds for activities and purposes determined by the Law on the Fund for Environmental Protection and Energy Efficiency. The Fund is liable for liabilities with all its assets. The Republic of Croatia is jointly and severally liable for the obligations of the Fund. According to the provisions of the Law on Environmental Protection, the Fund is established to provide additional funds for financing projects, programs and similar activities in the field of preservation, sustainable use, protection and improvement of the environment. Pursuant to the provisions of the Law on the Fund for Environmental Protection and Energy Efficiency, the Fund was established to finance the preparation, implementation and development of programs, projects and similar activities in the field of conservation, sustainable use, protection and improvement of the environment and energy efficiency and renewable energy sources. The Fund was established as an extra-budgetary fund in the capacity of a legal entity and with public authorities established by the Law on the Fund for Environmental Protection and Energy Efficiency. Public authorities refer to the adoption of administrative acts related to the payment of fees and special fees, keeping a register of taxpayers, prescribing the conditions that must be met by the users of the Fund's resources and the conditions for the allocation of funds. In addition to the provisions of the Law on the Fund for Environmental Protection and Energy Efficiency, the provisions of the Budget Act, the General Tax Act and the General Administrative Procedure Act apply to the Fund's operations. Founding rights and duties are performed on behalf of the Republic of Croatia by the Government (EPEEF, available at [www.fzoeu.hr](http://www.fzoeu.hr)).

These fees are (Official Gazette, 107/03 and 144/12):

- a) Pollutant charges - Pollutant charges mean charges for emissions into the environment and a special annual fee for greenhouse gas emissions;
- b) fees of environmental users - the fee of environmental users has not been introduced to date, given that the implementing regulations that need to regulate in more detail the manner and deadlines for calculating and paying the fee and the unit fee have not yet been adopted;
- c) fee for environmental pollution with waste - fees for environmental pollution with waste are understood as compensation for municipal waste and / or non-hazardous technological waste and compensation for hazardous waste. Obligors to pay fees for environmental pollution by waste are legal and natural persons who dispose of non-hazardous industrial waste in landfills and legal and natural persons who produce hazardous waste through their activities;
- d) special environmental charges for motor vehicles - special environmental charges for motor vehicles means the fee paid by legal and natural persons, owners or holders of rights to motor vehicles. A special fee is calculated and paid upon vehicle registration, ie. upon verification of the technical correctness of the vehicle based on the Fund's decision.

#### **4.2. Fees payable under the Waste Act**

In accordance with the Law on Sustainable Waste Management (OG 94/13), the producer of the product from which the waste is generated, ie the waste producer, bears the costs of waste

management, respecting the principles of environmental protection prescribed by the law governing environmental protection and the *acquis communautaire* for environmental protection and scientific knowledge, world best practices and rules of the profession and especially, among other principles, the principle of "polluter pays", according to which the waste producer or waste holder bears the costs of waste management measures and is financially responsible for implementing remedial measures (EPEEF, available at [www.fzoeu.hr](http://www.fzoeu.hr)).

The defined fees are as follows (EPEEF, available at [www.fzoeu.hr](http://www.fzoeu.hr)):

- a) fees for packaging and packaging waste - Rulebook on packaging and packaging waste (Official Gazette 88/15) stipulates that producers / importers / importers, when placing products packed in packaging on the market of the Republic of Croatia, pay Compensation fund, as follows:
  - compensation for the management of packaging waste in order to cover the costs of collection and processing of packaging waste in the system managed by the Fund, and
  - a refund paid as an incentive measure encouraging the owner to hand over the beverage packaging to the seller who has a beverage in his offer or to the person who manages the recycling yard and receives the prescribed amount of the refund;
- b) fee for waste tire management - The Ordinance on waste tire management (Official Gazette 40/06, 31/09, 156/09, 111/11, 86/13), among other things, prescribes the types and amounts of fees paid by taxpayers payment of fees, method and deadlines for calculation and payment of fees and other issues related to waste tire management. Pursuant to the cited Ordinance, the person liable to pay the fee for waste tire management is the manufacturer or legal or natural person - craftsman who produces and / or imports tires as a special product and produces and / or imports vehicles, aircraft and wheel sets whose components are tires, for its own needs and / or puts them on the market in the Republic of Croatia, regardless of the method of sale. The fee is used to cover the costs of waste tire management.
- c) Fee for the disposal of waste lubricating oils - The Ordinance on the management of waste oils (OG 124/06, 121/08, 31/09, 156/09, 91/11, 45/12, 86/13), among other things, prescribes taxpayers payment of fees, types and amounts of fees paid by taxpayers for waste oils, method and deadlines for calculation and payment of fees and other issues related to waste oil management. Pursuant to the cited Ordinance, the person liable to pay the fee for the disposal of waste lubricants is the oil producer or legal or natural person - craftsman who produces and / or imports fresh lubricating oils from Annex I of the cited Ordinance to the Republic of Croatia for their own needs and / or places on the market in the Republic of Croatia regardless of the method of sale and for its own or for the needs of another. The fee is used to cover the costs of managing waste lubricating oils;
- d) Fee for the management of waste batteries and accumulators - The Ordinance on batteries and accumulators and waste batteries and accumulators (OG 111/15) prescribes the procedures and objectives for the management of waste batteries and accumulators, conditions for the management of waste batteries and accumulators, requirements for separate collection and processing of waste batteries and accumulators, the content of the program for the collection of waste portable batteries and accumulators, the obligation to keep records and submit reports, requirements regarding batteries and accumulators that are the product, manner and conditions of labeling batteries and accumulators and packaging, obligations and fulfillment obligations of product manufacturers, types of products for which registration in the Register of Management of Special Waste Categories and the manner of mandatory conduct of product producers and waste holders and other issues related to the management of waste batteries and accumulators, all in order to achieve the objectives prescribed by this Law;



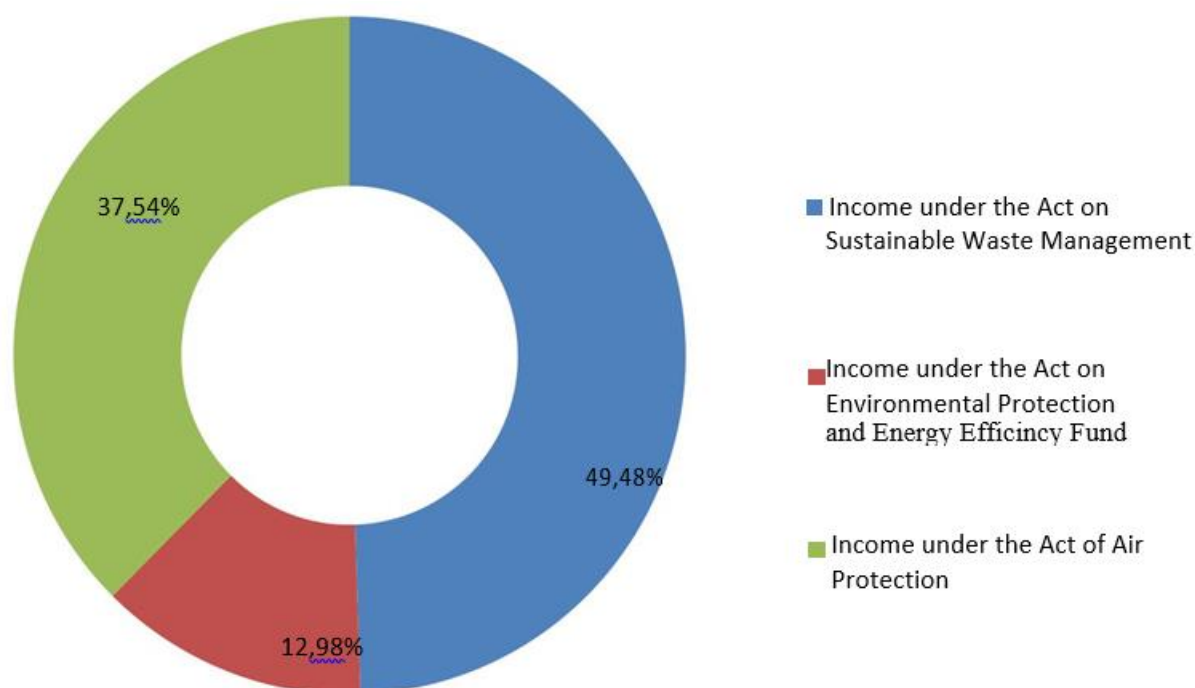
- e) fee for waste vehicle management - The Ordinance on waste vehicle management (OG 125/15) prescribes procedures and objectives in waste vehicle management, method of processing, requirements regarding collection, storage and transport, including marking and equipping of vehicles, requirements in regarding the treatment of waste vehicles and waste generated by treatment and related measurement procedures, the content of the program for performing the service of waste vehicle collection, the obligation to report and submit data, keeping records and submitting reports, obligations and manner of fulfilling vehicle manufacturer's obligations, requirements regarding vehicles on the market, the manner of obligatory conduct of vehicle manufacturers, owners, collectors and processors of waste vehicles. According to the Ordinance, the fee for waste vehicle management is the amount paid by producers and natural persons - citizens in order to cover the costs of collection and treatment of waste vehicles in the system managed by the Fund, when placing new or used vehicles on the market. The provisions of the Ordinance apply to vehicles which, in accordance with a special regulation determining vehicle categories, are classified in: M1 category - motor vehicles for the transport of persons with more than eight seats in addition to the driver's seat, N1 category - motor vehicles for the transport of goods greater than 3,5 tonnes and L2, L4 and L5 (except L5e) motor vehicle categories;
- f) fee for management of electrical and electronic (EE) waste - The Ordinance on the management of waste electrical and electronic equipment (Official Gazette 42/14 and 48/14) prescribes, inter alia, the obligations and manner of fulfilling the obligations of producers of EE equipment, list and at least quantities of certain types of products for which it is allowed to independently fulfill an individual own goal and other issues related to EE equipment and EE waste, in order to achieve the goals prescribed by this Ordinance. Pursuant to the cited Ordinance, the fee for EE waste management is paid by producers and / or importers and / or importers of EE equipment, ie legal and natural persons - craftsmen who place EE equipment on the market (import / input / production) in the Republic of Croatia;
- g) fee for municipal waste disposal - fee for municipal waste disposal has not yet been introduced, given that the implementing regulation which, among other things, prescribes the method of calculating the fee for municipal waste disposal has not yet been adopted;
- h) incentive fee for reducing the amount of mixed municipal waste - incentive fee for reducing the amount of mixed municipal waste has not yet been introduced, given that the implementing regulation prescribing, inter alia, the method of calculating incentive fees for reducing the amount of mixed municipal waste has not yet been adopted;
- i) construction waste disposal fee - construction waste disposal fee has not yet been introduced, given that the implementing regulation prescribing, inter alia, the method of calculating construction waste disposal fee has not yet been adopted;
- j) Fee for the operation of the management system for special categories of waste - the fee for the operation of the management system for special categories of waste has not yet been introduced given that the implementing regulation prescribing the method of calculating the fee for the management system for special categories has not yet been adopted.

#### **4.3. An alternative concept of environmental fees in the Republic of Croatia**

According to what has been seen, it is clear that the concept of environmental fees is not nearly sufficiently developed in Croatia, as exemplified by the fact that more fees have not yet been introduced, regardless of the fact that they are prescribed by law. In order to propose a new concept, it is necessary to finally determine the financial effects of the existing fees in the previous subchapters.

The following chart shows the structure of EPEEF revenues based on three basic laws that regulate the revenues of the Fund (Law on Sustainable Waste Management, Law on the Fund for Environmental Protection and Energy Efficiency, Law on Air Protection):

#### 4.4. The ratio of the three key sources of EPEEF revenue in 2015



*Figure 1. Relationship between the three key sources of EPEEF revenue in 2015  
(Source: prepared by the author according to the Report on the execution of the Financial Plan of the Fund for Environmental Protection and Energy Efficiency for 2015)*

HRK 778 million relates to revenues under the Sustainable Waste Management Act, HRK 204 million to revenues under the EPEEF Act, and HRK 591 million to those under the Air Protection Act. As mentioned, almost all revenue under the Air Protection Act falls on revenue from the sale of emission allowances, which is not the topic of this paper, so in this subchapter we will look primarily at revenues under the other two laws. Obviously, the first thing that is advisable is to implement existing solutions. In this sense, it is necessary to finally introduce the fees for environmental users provided by the Law on the Energy Efficiency and Environmental Protection Fund. Only with the introduction of these fees will environmental users start paying full or close to the full price of the environment they are exploiting. Thus, it is a fee that is not only income, but also corrects market inefficiencies resulting from the lack of private ownership of the environment, which leads to paying too low a price for its use, or not paying at all. Also, the fee for the operation of the special waste management system (PEC) should be introduced as soon as possible, in order to finally establish a stable and self-sufficient structure of the PEC management system. It is a system that has an exceptional financial volume, and its importance in improving the utilization of waste and the development of greenery, circular economy must not be neglected. In addition to these two not yet implemented fees, it is important to implement the municipal waste disposal fee as soon as possible, which in some countries, such as the United Kingdom and Sweden, has been a significant revenue for budgets for many years. The aforementioned fees certainly need to be strengthened. Consideration should be given to turning some into taxes or at least excise duties in order to become a much more significant instrument whose revenues would come into the budget.

Taxes on energy, together with a special tax on motor vehicles, are relatively the highest in the EU in Croatia, so it may not be wise to increase the fiscal burden of citizens and companies in this way at the moment. In the case of maintaining these taxes, it is necessary to consider updating them in the direction of greater focus on the number, manner and location of kilometers traveled, taking into account the consumption of vehicles, which is a trend in the most advanced countries. If you want to significantly change the structure and avoid increasing the tax burden, it would be advisable to increase the role of the aforementioned benefits and compensate for this increase in the tax burden by reducing excise duties on energy products that burden households, especially the poorer. Alternatively, in the case of a broad tax reform that would have an environmental direction, it is possible to consider reducing, for example, health contributions, which with their high rate significantly increase the cost of labor in Croatia. This direction would be logical given that the aforementioned environmental benefits generally increase the quality of life and have a public health role in terms of reducing the occurrence of harmful substances and gases. In general, collecting fees is quite inefficient. This is especially true for packaging fees and packaging waste, where there is considerable scope for increasing revenue through more complete and efficient collection. In this regard, it is necessary to establish a more sophisticated system in cooperation with the Tax and Customs Administration in order to reach all taxpayers and maximize the collection of fee income. As can be seen from the chart in Figure 1, revenues under the Law on Sustainable Waste Management are very generous, generated by fees for packaging and packaging waste, and the waste management system regulated by this law should not be substantially changed, but, as stated, billing mechanisms should be adjusted and planned fees implemented to improve its efficiency. Such a system is conducive to the development of a new, green, circular economy centered on quality waste recovery. On the other hand, fees based on the Law on the Fund for Environmental Protection and Energy Efficiency are well designed, but their implementation and significance is extremely deficient. These fees are crucial for environmental protection and the fight against climate change, as well as for wider Croatian participation in the global fight against negative climate trends. Their financial significance is far less than the fee in the waste management system, participating in revenues based on three laws with only 12.98 percent. Furthermore, the structure of revenues based on the Act in the EPEEF is quite devastating, bearing in mind that 94 percent is the environmental fee for motor vehicles, in the absolute amount of HRK 192 million. The amount itself is not disputed, given that such charges, as shown in Chapter 3, are a quality instrument to combat greenhouse gas (in this case carbon dioxide) emissions generated mainly by the combustion of fossil fuels, which is largely transport result. On the contrary, the optimal solution would be to increase it. However, even more problematic is the extremely low importance of emissions charges for greenhouse gases - carbon (CO<sub>2</sub>), sulfur (SO<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>), which together are treated as emissions of environmental pollutants. Together they result in revenue of less than HRK 12 million. As has been described many times, this form of giving is becoming increasingly important. Polluter compensation is the future of environmental taxation and its role needs to be significantly strengthened and this form of levying needs to be turned into a tax or excise duty, which will not necessarily be destined. It is a Pigouvian tax that should, in line with global trends, permeate a large part of the economy and provide a significant part of revenue and serve a regulatory purpose. This can be done by unifying the above pollutant charges and even the environmental charge for motor vehicles, in order to create a coherent and significant tax that would tax carbon dioxide emissions. In addition, like Slovenia, they can tax units of carbon dioxide and other greenhouse gases (which are equivalent to units of carbon dioxide). The tax rate, of course, should be set at a level that is considered to be the monetary cost of a unit of carbon dioxide per environment, ie. climate, which requires a scientifically based approach and interdisciplinary cooperation.

Only guidelines and parts of the environmental tax and tax system are listed, but for serious steps in this area, it is necessary to implement environmental tax reform that will fully address the issue and provide a framework for the fiscal aspect of environmental policy in the coming decades. As regards the introduction of new and changes to existing levies, a number of products that directly affect emissions of carbon dioxide and other harmful greenhouse gases and hazardous chemicals should be included as taxable items. In this regard, consideration should be given to introducing additional or amending existing excise duties or charges on chlorine solvents, ozone-depleting substances, etc., as well as water and sewage water, in order to continue to cover a wide range of environmental pollutants, but also in the case of water as it is recognized an extremely valuable resource, it discourages unnecessary use. In the case of an approach to serious environmental tax reform, similar to that of Germany in 1999 or those in the Nordic countries in the early 1990s, it is necessary to analyze its effects on different social groups and provide some temporary protections so as not to endanger the most vulnerable parts of the society, and that competitiveness of open sectors of the economy will be preserved. Finally, the direction of strengthening environmental benefits brings indisputable benefits for the environment as the most valuable public good, but also possible benefits for the economy, if in parallel to reduce the tax burden on labor, which would have beneficial effects on Croatia's competitiveness.

## 5. CONCLUSION

The paper concludes that environmental taxes are not negligible in terms of regulation, ie. that environmental taxes can be viewed as regulatory taxes and it should be emphasized that regulation in the field of environmental protection does not consist exclusively of administrative and technical measures and elements. Taxes as a regulatory instrument can be superior to direct regulation, the so-called Command and control regulations. Their logic leads to enabling economic actors to reduce environmental damage in the most economically efficient way, as opposed to a uniform approach to direct regulation. Then, the pragmatism of environmental taxation shows the main motive for the introduction of environmental taxes, the so-called. the dual benefit hypothesis, according to which environmental taxes have a positive effect on the environment, but also on economic growth by replacing more harmful taxes. However, there are great doubts about the actual existence of a double benefit. When it comes to the issue of application, the problem of acceptability of environmental taxes arises, which arises from the confrontation of two reasons. On the one hand, they are the most effective instrument for correcting market inefficiencies in solving environmental problems, and on the other hand, the fact that such environmental protection policy affects different groups of society unevenly, creating losers (poorer citizens and companies in the international market) which provide great resistance to the introduction of new environmental taxes. When it comes to the forms of environmental taxes used, it should be emphasized that in the practice of taxation a clear distinction is drawn between environmental taxes in the narrower and broader sense. Namely, environmental taxes in the narrower sense are those that include levies imposed on goods that contribute to environmental pollution (for example, fossil fuels, waste materials, etc.), or produced goods that are not enough for consumption due to the level of their pollution (for example, water for drinking). Environmental taxes in a broader sense imply different environmental and other similar benefits (for example, registration fee). Finally, a review of the situation in Croatia shows that the system is flawed, despite the many types of benefits derived from several different laws. This indicates that, in addition to environmental taxes, an important part of environmental taxes in Croatia are fees. They are the backbone of the environmental protection system in the Republic of Croatia. However, a number of fees have not yet been introduced even though they are prescribed by law. Therefore, the paper briefly proposes an alternative concept of fees and environmental benefits.

Its basic features are to finally introduce previously planned fees, to increase the role of fees, to introduce new fees for harmful substances and the new system focuses on carbon tax as the most economically efficient instrument for environmental protection and combating climate change. It would be desirable, with the influence of significant social stakeholders, to devise a serious and complex environmental tax reform focused on the aforementioned forms of taxes and other benefits, which will reduce the workload, which could have significant effects on Croatia's international competitiveness.

## LITERATURE:

1. Zakon o Fondu za zaštitu okoliša i energetske učinkovitost, Narodne novine, 107/03, 114/12.
2. Zakon o održivom gospodarenju otpadom, *Narodne novine*, 94/13.
3. Zakon o posebnom porezu na motorna vozila, Narodne novine, 15/13, 108/13, 115/16.
4. Zakon o trošarinama, Narodne novine, 22/13, 32/13, 82/13, 100/15, 120/15, 115/16.
5. Uredba br. 691/2011 Europskog parlamenta i vijeća, 6. srpnja 2011.
6. Uredba o tvarima koje oštećuju ozonski sloj i fluoriranim stakleničkim plinovima, Narodne novine, 90/14.
7. Pravilnik o ambalaži i otpadnoj ambalaži, Narodne novine, 88/15.
8. Pravilnik o gospodarenju otpadnim gumama, Narodne novine, 40/06, 31/09, 156/09, 111/11, 86/13.
9. Pravilnik o gospodarenju otpadnim uljima, Narodne novine, 124/06, 121/08, 31/09, 156/09, 91/11, 45/12, 86/13.
10. Pravilnik o baterijama i akumulatorima i otpadnim baterijama i akumulatorima, Narodne novine, 111/15.
11. Pravilnik o gospodarenju otpadnim vozilima, Narodne novine, 125/15.
12. Pravilnik o gospodarenju otpadnom električnom i elektroničkom opremom, Narodne novine, 42/14, 48/14.
13. FZOEU, [www.fzoeu.hr](http://www.fzoeu.hr)
14. Institut za javne financije, [www.ijf.hr](http://www.ijf.hr)
15. Izvješće o izvršenju Financijskog plana Fonda za zaštitu okoliša i energetske učinkovitost za 2015. godinu
16. Bovenberg, A. L., De Mooij, R. A. (1994). Environmental levies and distortionary taxation. *The American Economic Review*, 84(4), str.1085-1089.
17. Bovenberg, A. L., Goulder, L. H. (2002). Environmental taxation and regulation. *Handbook of public economics*, 3, str. 1471-1545.
18. Bovenberg, A. L., Goulder, L. H. (1996). Optimal environmental taxation in the presence of other taxes: general-equilibrium analyses. *The American Economic Review*, 86(4), str. 985-1000.
19. Bovenberg, A. L., van der Ploeg, F. (1996). Optimal taxation, public goods and environmental policy with involuntary unemployment. *Journal of public economics*, 62(1), str. 59-83.
20. Črnjar, M. (1997) Ekonomija i zaštita okoliša, Zagreb-Rijeka, Školska knjiga.
21. Črnjar, M., Črnjar, K. (2009). Menadžment održivoga razvoja; Ekonomija-ekologija-zaštita okoliša. Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji Sveučilišta u Rijeci, Rijeka, Glosa.
22. UNEP (2004). The Use of Economic Instruments in Environmental Policy: Opportunities and Challenges. United Nations Publication.
23. Jelčić, B. (2011), Porezi, Zagreb, Visoka poslovna škola Libertas.
24. Šinković, Z. (2013). Environmental taxes. *Zbornik radova Pravnog fakulteta u Splitu*, 50(4), str. 953-976.

25. Barde, J. P. (1994). *Economic Instruments in Environmental Policy: Lessons from the OECD Experience and their Relevance to Developing Economies* (No. 92). OECD Publishing.

## STRUCTURAL CONVERGENCE OF SELECTED SOUTH-EAST EUROPEAN ECONOMIES TO THE EUROZONE

**Nikolay Velichkov**

*University of National and World Economy – Sofia , Bulgaria*

*Department of Economics*

*nn\_velichkov@unwe.bg*

**Dimitar Damyanov**

*University of National and World Economy – Sofia , Bulgaria*

*Department of Economics*

*ddamyanov@unwe.bg*

### ABSTRACT

*The paper analyzes the GDP expenditure and production structure of EU members Bulgaria, Romania and Croatia, comparing it with that of the Eurozone and tracing the presence or absence of convergence processes. Empirical results show that until the crisis of 2009, all three countries have a tendency to increase the divergence in the GDP expenditure structure, with net exports showing the strongest divergence from the Eurozone. After 2009, the negative trend towards divergence of the GDP expenditure structure of Bulgaria, Romania and Croatia from that of the Eurozone turns into a positive one – towards convergence. This also applies to the separate expenditure components, which show stronger convergence after the crisis year of 2009. Contrary to that, convergence of the production structures is faster during the first half of the period, with Bulgaria and Romania showing the highest rates, and the agricultural sector contributing most strongly. After the 2009 recession the process is slower and more uneven, with some reversal patterns also emerging.*

**Keywords:** *economic integration, monetary unions, structural convergence*

### 1. INTRODUCTION AND LITERATURE REVIEW

Interest in convergence has grown significantly in recent years. The reason for this is the ever-deepening process of integration of European Union economies and in particular those of the Eurozone. The debate on the need for stronger convergence of individual Member States in order for the Eurozone to function more effectively is intensifying. In this regard, empirical research on convergence in the Eurozone is quite diverse in terms of the different dimensions of that convergence. These studies focus primarily on nominal convergence and real income convergence, while structural convergence analyses are more limited. Even in studies on structural convergence, the focus is usually primarily on the production structure of GDP. This paper focuses on the evolution of both the expenditure and output structures of the three newest EU members – Bulgaria, Croatia and Romania – towards their synchronization with those of the Eurozone and attempts to evaluate the process from the perspective of their future membership. The countries appear to show some of the largest differences from the Eurozone averages, which can be related to their specific economic background, and raise the importance of the matter of their convergence. Interest in structural convergence dates back many years (Chenery, 1960, Kuznets, 1971) but it has strengthened in the last two decades, primarily in relation to the establishment and the expansion of the Eurozone. Convergence of the production (output) structures is regarded as a major factor behind the process of real convergence (Angeloni, et al., 2005), as well as the synchronization of business cycles within the EU and the effectiveness of the monetary policy of the ECB through its effects on inflation and monetary transmission (MPC task force of the ESCB, 2004). Theoretical studies outline several important determinants of production structures along with their effects on convergence

processes in an EU context. On the supply-side, factor endowment and factor mobility are among the most important determinants. Wacziarg (2004) manages to explain about 1/3 of the observed structural convergence between a sample of countries with the increased factor mobility resulting from closer trade integration. However, factor mobility within the EU appears to be limited (Jauer, et al., 2014), which may slow down the convergence process. Similarly, large initial structural differences between economies may prove unfavourable for convergence as well (Barro & Sala-i-Martin, 1992). On the demand side, international trade can accelerate convergence by equalizing demand conditions for manufacturers in different economies. On the other hand, increasing integration may also have a negative effect on convergence through the “home market effect”, associated with economies of scale (Brülhart & Torstensson, 2007). Reductions in transport costs and other barriers to trade can contribute to this effect as well (Krugman & Venables, 1995). These contradicting theoretical views are reflected in the results of empirical studies on output structural convergence. Midelfart-Knarvik, et al. (2000) find unfavourable developments in the EU starting in the mid-1980s, and this is later confirmed by Palan (2013). When it comes to the new member countries, Miron, et al. (2013) find evidence of relatively weak convergence for Bulgaria and Romania. This is also confirmed by Stattev & Raleva (2006) specifically for Bulgaria. There are significantly fewer empirical studies that address convergence in the expenditure structure of GDP (Stattev & Raleva, 2006; Darvas & Szapary, 2004; Buiter & Grafe, 2002; Velichkov, 2020). This is largely unjustified, as convergence in the expenditure components of GDP has important macroeconomic projections related to the functioning of the Eurozone and is essential for the convergence of the basic characteristics of the Member States economies. It relates primarily to the various factors of macroeconomic dynamics and its cyclicity, which is also directly related to the resilience of the Eurozone to asymmetric shocks affecting individual Member States. This problem is significant given the supranational monetary policy and the tendency towards stronger coordination of national fiscal policies.

## 2. DATA AND METHODOLOGY

This study covers the period from 2000 to 2019 and uses annual data from Eurostat. Separate sub-periods are also differentiated in view of the existing specifics in the convergence processes. All data about the Eurozone refer to the currency area as consisting of 19 countries without adjusting for the variation in the number of members over time as it appears to have only an insignificant effect on the relevant indicators. When studying the convergence in the GDP expenditure structure, a differentiation of its individual components is made, while structuring the final consumption, gross investment and net exports. Final consumption includes individual and collective consumption, with individual consumption representing the sum of household and NPOSH consumption expenditures and government expenditures for individual consumption. Gross investment is equated with gross capital formation, which is obtained as the sum of gross fixed capital formation and changes in inventories. Net exports are presented as the difference between the value of exported and imported goods and services. Convergence of output structures is analyzed based on data for GVA and its distribution at the “industry” level, with industries being identified based on the standard classification applied by Eurostat.<sup>1</sup>

<sup>1</sup> The term “industry” is used here to represent economic activities / groups of economic activities on the NACE rev.2 classification. The industries are as follows: **A** – Agriculture, forestry and fishing; **B** – Mining and quarrying; **C** – Manufacturing; **D** – Electricity, gas, steam and air conditioning supply; **E** – Water supply, sewerage, waste management and remediation activities; **F** – Construction; **G-I** – Wholesale and retail trade, transport, accommodation and food service activities; **J** – Information and communication; **K** – Financial and insurance activities; **L** – Real estate activities; **M-N** – Professional, scientific and technical activities; administrative and support service activities; **O-Q** – Public administration, defence, education, human health and social work activities; **R-U** – Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies.



This gives us a total of 13 industries – one covering the whole AFF sector, five in the industrial sector, and seven in the services sector, and produces an appropriate level of detail without introducing too many small industries with only insignificant influence on business cycle synchronization and monetary policy effectiveness. The sigma ( $\sigma$ ) convergence approach is used to measure convergence in GDP structures. In this regard, the divergence index is used, which is obtained by the following formula:

$$Div = \sum_{x=1}^i \frac{(S_{nx} - S_{EZx})^2}{S_{EZx}}$$

where:  $x$  is the variable for which the divergence is calculated;  $S_{nx}$  and  $S_{EZx}$  are the respective relative shares of each individual component in the specific structure of the GDP of each country and the Eurozone;  $i$  is the number of variables. If  $Div = 0$ , then the structure of GDP in the specific country changes like that in the Eurozone. The closer the value of the coefficient is to zero, the higher the structural convergence towards the EU monetary union.

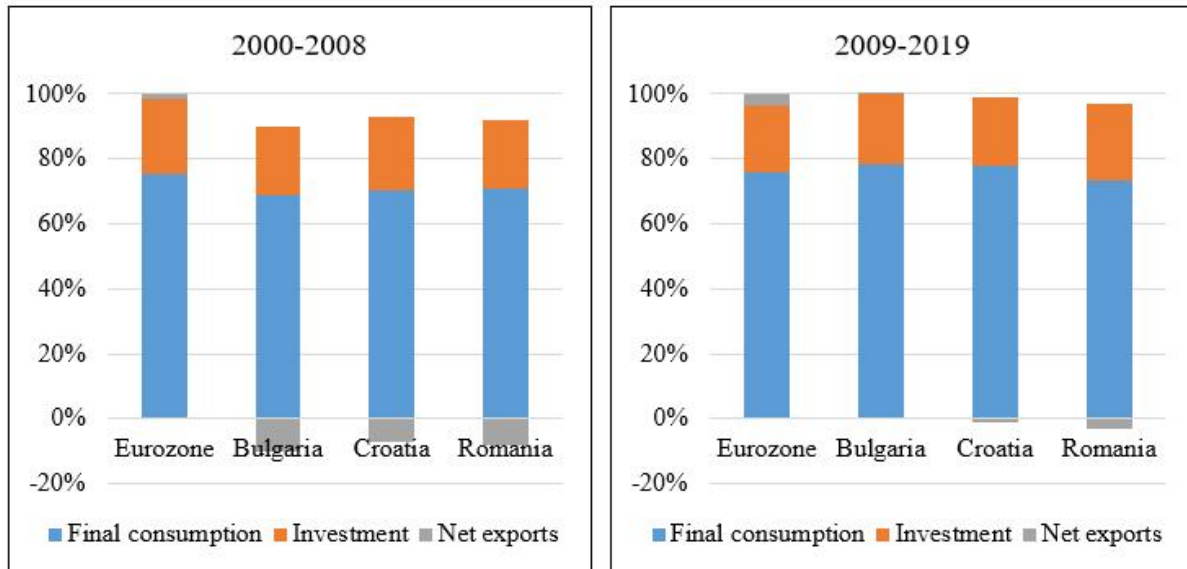
### 3. EMPIRICAL RESULTS

The specificities in the course of the convergence processes of the GDP structures in the studied countries to those in the Eurozone give grounds for differentiation of two time periods - before and after the crisis of 2009. These periods are characterized by opposite tendencies in terms of convergence in the two structures of GDP – expenditure and production.

#### 3.1. Convergence in GDP expenditure structure

In the GDP expenditure structure in the Eurozone and all three studied countries, final consumption traditionally has the highest share (see Figure 1). For the period up to the crisis year of 2009, final consumption in the Eurozone averaged 75.4%. In Bulgaria, Romania and Croatia, its relative weight in GDP was higher, with Bulgaria leading the way, with the share of final consumption being around 86.4%. For the 2009-2019 period, the average level of the relative share of final consumption in GDP for the Eurozone increased, and for the three analyzed countries - decreased. This decrease was the largest in Bulgaria (by 8.1 percentage points), followed by Romania (by 6.2 percentage points). Gross investment in Bulgaria, Romania and Croatia in the first period had an average relative share in GDP of 26.3%, 25.2% and 26.5%, respectively. These values are higher than those observed in the Eurozone. This high relative importance of investments in the studied countries of Southeastern Europe is directly related to their inherent relatively high growth of investments during this period. In Romania, investments increased by 15.9%, in Bulgaria - by 14.7%, and in Croatia - by 9.4%. For comparison, the observed growth of gross investment in the Eurozone was about 2.3%. The 2009-2019 period was characterized by a lower relative weight of gross investment in GDP, averaging 20.8% for the Eurozone. There was also a decline in the relative importance of investments in Bulgaria and Croatia, and this decline was more pronounced than the one reported in the Eurozone. At the same time, the average relative share of investments in Romania in the second period remained unchanged compared to the previous period. Gross investment in Bulgaria, Romania and Croatia in the first period had an average relative share in GDP of 26.3%, 25.2% and 26.5%, respectively. These values are higher than those observed in the Eurozone. This high relative importance of investments in the studied countries of Southeastern Europe is directly related to their inherent relatively high growth of investments during this period. In Romania, investments increased by 15.9%, in Bulgaria - by 14.7%, and in Croatia - by 9.4%. For comparison, the observed growth of gross investment in the Eurozone was about 2.3%.

The 2009-2019 period was characterized by a lower relative weight of gross investment in GDP, averaging 20.8% for the Eurozone. There was also a decline in the relative importance of investments in Bulgaria and Croatia, and this decline was more pronounced than the one reported in the Eurozone. At the same time, the average relative share of investments in Romania in the second period remained unchanged compared to the previous period.



*Figure 1: GDP expenditure structure*  
(Source: Authors' calculations based on Eurostat data)

Net exports in the first period were marked by strong differences in the three countries compared to the Eurozone. For Bulgaria, Croatia and Romania were typical negative relative shares of net exports in GDP, as their average absolute level was the highest in Bulgaria - 12.7%. This is directly related to the observed relatively high growth rates of imports in the three countries, as on average for the period they exceeded the growth rates of exports. It should be noted that the increase in the negative difference between exports and imports in Bulgaria, Romania and Croatia during the first period, which was characterized by relatively high rates of economic growth, was accompanied by an increase in the relative share of investment. This shows that the stimulus effect of higher investment on GDP growth in these countries is limited by the decline in net exports. In stark contrast was the situation in the Eurozone, where the relative weights of net exports in GDP in all years of the first period were positive and the average growth of exports was higher than that of imports. In contrast to the first period, during the second time period the three countries of Southeast Europe were characterized by higher values of the foreign trade balance, as in Bulgaria and Croatia for some years there are positive values of the foreign trade balance. For the Eurozone, net exports were positive throughout the period. Peculiarities in the dynamics and relative importance of the components of the GDP expenditure structure in Bulgaria, Romania and Croatia have an impact on their convergence with the Eurozone. The period up to the crisis year of 2009 was characterized by an increase in the divergence of the expenditure structure of GDP in Bulgaria, Romania and Croatia compared to the Eurozone (see Figure 2). The highest divergence was observed in Bulgaria, as the average value of the divergence index for this period was 158.3. It is followed by Romania, where the average value of the divergence index amounted to about 57% of that reported in Bulgaria. In Croatia, the divergence index was the lowest, averaging around 65.1, representing 41% of that in Bulgaria and 72% of that in Romania.

The strongest differences between the studied countries and the Eurozone were observed in 2008, when the values of the specific indices were the highest. It is interesting to note that within the first time period, among the different expenditure components, only in the final consumption there was a tendency towards convergence with the Eurozone. This is the reason for the reduction in the differences in the relative weight of final consumption in GDP in 2008 compared to 2000, with these reductions being most pronounced in Romania. At the same time, the relative share of investments was characterized by a clear divergence of Bulgaria, Romania and Croatia from the Eurozone. This is not surprising given the high growth of investment in the three countries, which was many times higher than reported in the Eurozone. The strongest divergence from the Eurozone in the first period was demonstrated by net exports, with Bulgaria leading the way in terms of the degree of divergence.

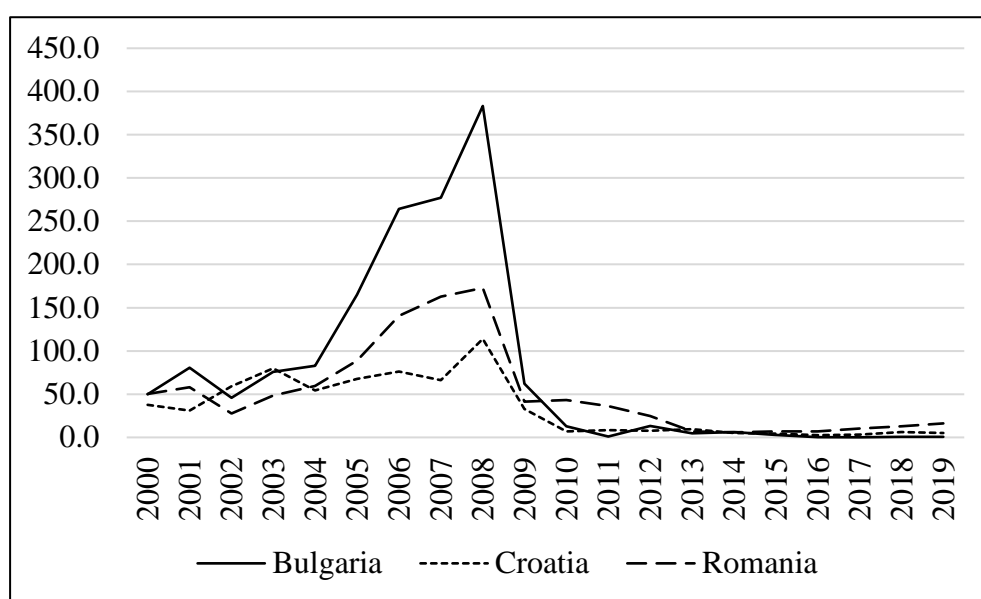


Figure 2: Divergence index of the GDP expenditure structure of Bulgaria, Romania and Croatia from the Eurozone  
(Source: Authors' calculations based on Eurostat data)

During the 2009-2019 period, the tendency of divergence of the GDP expenditure structure of Bulgaria, Romania and Croatia from that of the Eurozone reversed and a clear convergence was observed. The average values of the divergence indices in the second period were significantly lower than in the period up to the crisis year of 2009, with the largest discrepancy reported in Bulgaria. In the last year of the studied period, the strongest convergence in the expenditure structure of GDP with the Eurozone was observed in Bulgaria, and the weakest - in Romania. The specific values of the divergence indices show that in 2019 the index in Romania was about 31 times higher than in Bulgaria. Final consumption showed a stronger convergence towards the Eurozone during the second period, with the average value of the divergence index being lower than in the first period in all three countries studied. In the last year in Bulgaria there was the strongest convergence to the Eurozone of the relative weight of final consumption in the GDP. In terms of investment, the data show that on average for the second period the divergence index was the lowest in Croatia and the highest in Romania. Compared to the first year of the second period in 2019, the strongest decrease in the size of the divergence index was observed in Bulgaria. It should be noted, however, that the process of convergence of the relative share of investment in GDP to that of the Eurozone was accompanied by a negative effect related to the weakening of the role of investment in the three countries as a generator of higher economic growth.

This specificity may lead to the divergence of Bulgaria, Romania and Croatia from the Eurozone in terms of real incomes. The foreign trade balance in all three countries during the second time interval was characterized by convergence with the Eurozone. The average value of the divergence indices of net exports in Bulgaria, Romania and Croatia for the 2009-2019 period amounted to about 6%, 20% and 13%, respectively, of the same value for the previous period. The strongest convergence of the foreign trade balance in 2019 was reported in Bulgaria, where the divergence index was close to zero.

### 3.2. Convergence of output structures

When it comes to the convergence of output structures, the largest initial differences from the Eurozone were recorded in Bulgaria and Romania. They both had agricultural sectors whose shares were over 5 times larger compared to that in the Eurozone (see Table 1). In comparison, at just over 6%, the share of the sector in Croatia was less than half that of the other two. This implies significant differences in overall productivity levels as well as labour force characteristics.

Industries	Eurozone		Bulgaria		Croatia		Romania	
	2000	2018	2000	2018	2000	2018	2000	2018
<b>A</b>	2.3	1.7	12.5	3.9	6.1	3.6	12.0	4.8
<b>B</b>	0.4	0.3	1.8	1.9	0.7	0.4	2.3	0.8
<b>C</b>	19.4	16.9	13.8	15.5	20.4	15.2	21.9	20.7
<b>D</b>	1.7	1.7	4.4	3.2	1.9	2.6	2.8	2.8
<b>E</b>	0.8	0.9	0.9	1.0	1.7	1.3	0.7	0.9
<b>F</b>	5.7	5.2	5.1	4.2	4.9	5.4	5.8	6.1
<b>G-I</b>	19.2	19.0	21.1	23.1	19.9	23.7	20.3	20.0
<b>J</b>	4.5	4.7	3.2	6.8	4.8	4.9	5.4	6.0
<b>K</b>	4.9	4.5	2.4	6.7	4.4	6.0	4.5	2.7
<b>L</b>	9.8	11.3	11.5	10.6	9.4	9.1	8.1	8.3
<b>M-N</b>	10.0	11.5	4.3	6.5	4.6	8.2	2.7	8.5
<b>O-Q</b>	17.7	18.9	16.9	14.4	18.8	15.6	10.4	14.8
<b>R-U</b>	3.5	3.4	2.1	2.3	2.5	3.9	3.0	3.6

*Table 1: Percentage shares of industries in GVA of the economies  
(Source: Eurostat and own calculations)*

Within the secondary sector, Bulgaria showed some notable differences from the Eurozone in 2000. It had a much lower manufacturing share (13.8% vs. 19.4% in the EA) and a relatively high share of Mining and quarrying of 1.8%. These values can be characterized as unfavourable for growth, based on the typical productivity growth rates for individual industries as well as knowledge intensity and value-added levels.<sup>2</sup> On the other hand, Romania and Croatia had manufacturing shares slightly above the Eurozone average, but Mining and quarrying was also quite large in the former. The differences in that industry are also important because of the methodological characteristics of the divergence index, which is heavily dependent on large deviations between components with smaller shares in the benchmark economy. The remaining components in this sector showed relatively small deviations in the three countries compared to the Eurozone with only the Electricity and gas industry in Bulgaria and Romania (4.4% and 2.8% respectively; 1.7% for the Eurozone) and Water supply in Croatia (1.7%; with 0.8% in the Eurozone) displaying slightly bigger differences.

<sup>2</sup> See for example Jia, et al. (2020).

In the services sector, Croatia appears to be closest to the Euro area in 2000, with only Professional, scientific and technical activities having a much smaller share (4.6% compared to 10.0% in the Eurozone). Bulgaria's tertiary sector was about eight percentage points smaller than the Eurozone. Two industries had marginally larger shares in the country compared to the Eurozone average – Trade, transport and accommodation and Real estate activities, while Professional and scientific activities was again much smaller (4.3%). The other industry with a more pronounced deviation from the benchmark was Financial and insurance activities (2.4% compared to 4.9%). Romania's services sector value added in 2000 was just 54.5% of the country's total GVA, making it the smallest of the three economies (compared to 69.7% in the Euro area). This was mainly due to a very small Professional services industry (2.7%) and the small share of Public administration, education, healthcare activities (10.4%). The small share of Professional services, which appears in all three countries, is significant in light of its comparatively high value-added levels as well as the contribution of some of its sub-components to long-term growth (e.g. R&D activities). There were positive developments during the period when it comes to the convergence of output structures, but also some negative ones, as presented in Table 2, which contains annual growth rate averages for the individual industries for the subperiods identified above.<sup>3</sup> Bulgaria and Romania seem to show the biggest progress, especially in the agricultural sector. The fall of its share in total GVA from the initial level to just 3.9% and 4.8%, respectively, was the result of the low (even negative) average growth rates of the sector in the two countries. The process was much more pronounced in the pre-crisis period and contributes strongly to the overall convergence. Croatia's AFF sector also grew at a lower rate than total GVA, leading to a fall in its share, but the effect of this development was smaller due to the sector's lower starting share. Among the industries in the secondary sector, the highest growth rates in the first period in all three economies are found in Construction. Combined with the growth of total GVA, this resulted in the industry's share in 2008 substantially exceeding that in the Euro area in all three. This was then followed by negative average growth rates in the second period, so the overall result was in fact increased differences between Bulgaria and Romania, on the one hand, and the Eurozone, on the other. The high growth rates of Manufacturing in the two countries until 2008 are also worth noting. For Bulgaria this led to increased convergence which was then maintained in the second half of the period. This is also beneficial in the long run, because of the higher value-added levels that characterize this industry. In Romania, the growth rate of 7.3% until 2008 resulted in increased divergence from the Eurozone. Afterwards, the distance between the two remained stable. Croatia's Manufacturing closely followed the dynamics in the Euro area throughout the period. Among the smaller industries in the sector, we should note the comparatively high growth of Mining and quarrying in Bulgaria, especially during 2010-2018. This increased the gap to the Eurozone and in 2018 the industry's share in Bulgaria is over 7 times that in the EA. Similarly, the industry grew at a high rate in Croatia, but only in the first half, while the subsequent contraction brought its share close to the benchmark. Elsewhere, consistently lower growth of the Electricity and gas industry compared to total GVA in all three economies may reflect improved energy efficiency performance.

*Table following on the next page*

<sup>3</sup> For a better comparison, the year 2009 is excluded from these calculations. The analysis in this section is also limited to 2018 due to missing data for 2019.

Industries	Eurozone		Bulgaria		Croatia		Romania	
	00 – 08	10 – 18	00 – 08	10 – 18	00 – 08	10 – 18	00 – 08	10 – 18
<b>A</b>	0.7	0.6	-0.8	-0.3	2.3	-3.3	2.0	2.9
<b>B</b>	-0.8	-1.6	1.8	3.9	8.4	-12.0	-1.7	-9.8
<b>C</b>	1.6	3.0	7.4	3.3	3.0	0.5	7.3	2.9
<b>D</b>	1.1	-0.3	2.2	-2.2	2.6	2.5	3.7	2.3
<b>E</b>	0.8	0.7	7.2	3.3	-3.5	1.2	-0.8	-0.4
<b>F</b>	0.9	-1.1	8.5	-3.3	10.0	-4.0	15.8	-5.4
<b>G-I</b>	2.1	1.5	6.2	3.9	7.3	2.0	9.0	7.4
<b>J</b>	5.2	3.6	15.7	5.1	6.6	1.5	10.2	9.7
<b>K</b>	1.4	-0.1	23.4	1.7	4.7	0.5	4.2	3.2
<b>L</b>	2.3	1.1	2.9	3.6	2.8	0.3	6.5	0.7
<b>M-N</b>	2.4	2.3	7.5	1.9	6.3	1.6	9.9	7.4
<b>O-Q</b>	1.3	0.9	0.9	1.1	0.1	1.0	-3.0	1.8
<b>R-U</b>	1.6	0.2	10.7	1.3	4.5	2.1	3.0	-2.0
<b>GVA</b>	1.9	1.4	5.8	2.2	4.3	0.6	6.6	2.7

Table 2: Average annual growth rates of value added by industry (%)

(Source: Eurostat and own calculations)

During most of the period, growth of the largest industry in the tertiary sector – Trade, transport, and accommodation – in the three countries remained close to the Eurozone average, with Bulgaria's and Croatia's faster growth during the later years causing them to diverge slightly from the EA level. Both Bulgaria and Romania experienced impressive growth in their Information and communication industries throughout the period. As a result, they had much higher shares than the Eurozone at the end. Clear patterns of divergence are observed in Bulgaria and Croatia's Financial and insurance industries as well. They started with similar shares to the Euro area, but their fast growth during the first half increased these shares well above the benchmark level. Real estate activities do not seem to follow the developments in the Construction industry, experiencing only moderate growth, and causing Croatia and Romania to diverge from the Eurozone, while Bulgaria converged, having started with a higher share. The abovementioned differences in Professional and scientific activities were only partially closed during the period, to a higher extent in Croatia and Romania and less so in Bulgaria. The other notable change is related to Public administration, education, etc., where Bulgaria and Croatia moved away from the Eurozone, primarily in the early years, while Romania converged slightly as a result of stronger growth during the second half. Overall, there was a marked slow-down of the growth rate of most industries in the economies during the second half of the period to a level that was broadly similar to the Euro area. This affected the convergence process which appears to be much slower during that time compared to the first half. Some divergence patterns also emerge, which makes for a mixed overall picture. To evaluate the convergence process explicitly, we have once again calculated the divergence index for the three countries (Figure 3). This reveals a strong convergence process in Bulgaria and Romania, especially during the first half of the period. The two countries' initial positions are very similar and indicate the existence of a significant structural gap to the Eurozone. This can be attributed mainly to their large agricultural sectors and, to some extent, to the Mining and quarrying industry. Other structural differences are just as important from an economic standpoint (e.g., in Manufacturing, Professional and scientific activities, among others), but because of the characteristics of the index their influence is not as strong. Progress during the period also appears to be driven by the same industries, helped by Manufacturing in Bulgaria and Mining in Romania, with contributions by some activities in the services sector (Finance and insurance in Bulgaria, Professional services in Romania).

Croatia started from a position of much higher structural similarity to the Euro area, but also made little progress towards convergence, with the value of the index in 2009 being only marginally lower than 2000. Nevertheless, the country remained the closest to the Eurozone in terms of its output structure.

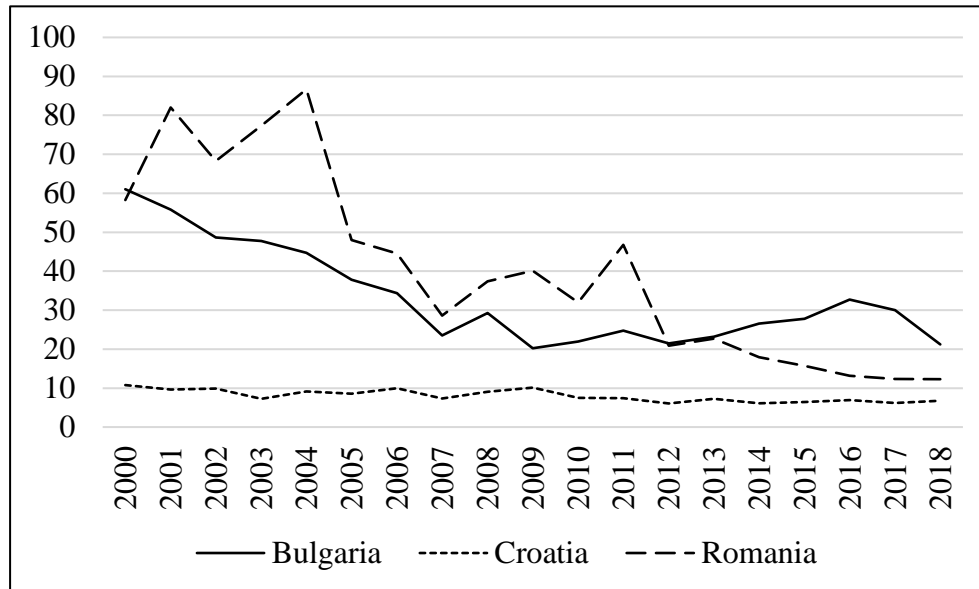


Figure 3: Output divergence index for Bulgaria, Croatia and Romania, 2000 – 2018  
(Source: Authors' calculations based on Eurostat data)

Variations of the index during 2009 – 2018 indicate a much slower convergence process for Bulgaria and Romania, compared to the previous period, but an improvement in Croatia. In fact, Bulgaria even went through a period of slow divergence for most of the time, until a late reversal returned the country to the 2009 level of the index. As a result, the country's output structure was the most different from the Eurozone in 2018. Romania performed better and moved much closer to the EA than Bulgaria at the end of the period. These changes were driven by a variety of industries but Mining and quarrying had the strongest negative effect in Bulgaria, while Electricity and gas production was an underperformer in Romania. On the positive side, Construction converged strongly in both countries and was helped by Professional services in Romania. Croatia's improvement happened mainly in the first few years of the second period and came as a result of the falling gaps in the Construction and Information and communication industries, while divergence patterns emerged in Electricity and gas production and Water supply.

#### 4. CONCLUSION

From the conducted empirical analysis, it can be concluded that there are clear specifics in the structural convergence of Bulgaria, Romania and Croatia to the Eurozone. These features apply both to the individual structures of GDP and to the course of convergence processes over time. Until the crisis year of 2009, a strong divergence of the expenditure structure of the gross product compared to that of the Eurozone was typical for all three countries. Among the separate expenditure components, only the relative weight of final consumption was characterized by convergence, while the foreign trade balance was characterized by the strongest divergence from the Eurozone. During the 2009 - 2019 period there was a tendency to converge the expenditure structure of GDP in Bulgaria, Romania and Croatia to that in the Eurozone, and at the end of the period the strongest convergence was reported in Bulgaria. This convergence was typical of final consumption, investment, and net exports.

At the same time, however, stronger convergence with the Eurozone is also associated with a weakening of the importance of investment as a source of growth, which induces negative effects on long-run macroeconomic dynamics. The story on the output convergence side also points to increased overall convergence but appears to be different when it comes to the internal dynamics of the process. After starting with some significant structural differences from the Eurozone, Bulgaria and Romania saw clear trends towards increasing similarity to the bloc, especially during the period 2000 – 2009. They were mainly driven by the reduction of the size of the agricultural sector and several other industries, primarily in the secondary sector. Croatia was much closer than the other two to the Eurozone in 2000 and also converged to it but this happened mainly in the second half of the period after 2009. The main drivers behind this process were Construction and Information and communication and, to some extent, Mining and quarrying. From the perspective of better business cycle synchronization among Eurozone members and more effective monetary policy of the ECB, and in light of the countries' future membership in the Eurozone, these developments are generally positive and contribute to the economies' abilities to successfully integrate into the common currency area. The remaining deviations are still significant in many industries, but overall, we should not expect excessive differences in the impact of monetary policy in the future compared to old Eurozone members.

## LITERATURE:

1. Angeloni, I., Flad, M. & Mongelli, F. (2005). Economic and Monetary Integration of the New Member States: Helping to Chart the Route. *ECB Occasional Paper No. 36*.
2. Barro, R. J. & Sala-i-Martin, X. (1992). Convergence. *Journal of Political Economy*, 100(2), p. 223–251.
3. Brühlhart, M. & Torstensson, J. (2007). Regional Integration, Scale Economies and Industry Location in the European Union. In: M. N. Jovanovic, ed. *Economic Integration and Spatial Location of Firms and Industries, vol. I*. Cheltenham: Edward Elgar.
4. Buiter, W., Grafe, C. (2002). Anchor, Float, or Abandon Ship: Exchange Rate Regimes for Accession Countries. *EBRD Working Paper*.
5. Chenery, H. B. (1960). Patterns of Industrial Growth. *American Economic Review*, 50(4), p. 624–654.
6. Darvas, Z., Szapary, G. (2004). Business Cycle Synchronization in the Enlarged EU: Comovements in the New and Old Members. *Magyar Nemzeti Bank Working Paper, 1*.
7. Jauer, J., Liebig, T., Martin, J. & Puhani, P. (2014). Migration as an Adjustment Mechanism in the Crisis? A Comparison of Europe and the United States. *OECD Social, Employment and Migration Working Papers, No. 155*.
8. Jia, F., Ma, X., Xu, X. & Xie, L. (2020). The Differential Role of Manufacturing and Non-manufacturing TFP Growth in Economic Growth. *Structural Change and Economic Dynamics*, 52(1), p. 174–183.
9. Krugman, P. & Venables, A. J. (1995). Globalization and the Inequality of Nations. *Quarterly Journal of Economics*, 110(4), p. 857–880.
10. Kuznets, S. (1971). *Economic Growth of Nations: Total Output and Production Structure*. Cambridge: Harvard University Press.
11. Midelfart-Knarvik, K.-H., Overman, H. G., Redding, S. J. & Venables, A. J. (2000). The Location of European Industry. *Economic Papers No. 142*.
12. Miron, D., Tatomir, C. F. & Alexe, I. (2013). Do Central and Eastern European Countries Become More Similar in Terms of Sectoral Structures as Their Real Convergence with the Euro Area Increases? Analysis on the Last Decade. *Economic Computation and Economic Cybernetics Studies and Research*, 47(1), p. 5–26.
13. MPC task force of the ESCB (2004). Sectoral Specialisation in the EU: A Macroeconomic Perspective. *ECB Occasional Paper No. 19*.



14. Palan, N. (2013). *Structural Change and Convergence: An Empirical Analysis of Production Structures in Europe*. Frankfurt am Main: Peter Lang.
15. Stattev, S. & Raleva, S. (2006). Bulgarian GDP Structures – Convergence with the EU. *South-Eastern Europe Journal of Economics*, 4(2), p. 193–207.
16. Velichkov, N. (2020). Convergence of the GDP Expenditure Components in Bulgaria to the Eurozone. *Business Directions/Bulgarian Journal of Business Research*, Issue 1, pp. 54–65 (in Bulgarian).
17. Wacziarg, R. (2004). Structural Convergence. *CDDRL Working Paper No. 8*.

## FOOD SECURITY IN AZERBAIJAN: TRENDS, PROBLEMS AND PROSPECTS

**Susen V. Farzalieva**

*Azerbaijan State University of Economics (UNEC)*

*İstiqlaliyyat 6, Baku, Azerbaijan*

*Vergi3m@gmail.com*

### **ABSTRACT**

*Food security is a complex and multifaceted problem that is both international and national in nature and affects every single person, every social group and the population of the state as a whole. For Azerbaijan, this task remains one of the central in political, economic and social life, along with the tasks in the field of defense, general economic and national security. Since the 1970s, food security has been viewed by the world community as an integral part of sustainable development. The UN system and its specialized agencies, along with other international institutions and the nongovernmental sector, have begun the process of developing global strategies and policies on food security. For Azerbaijan, food security is one of the central in the system of economic security, where one of the main indicators is economic accessibility and the ability of the population to purchase food in accordance with physiological norms with the existing consumption structure, price system, income level, benefits and benefits, since without reliable supplying the population with food, the state is unable to ensure the protection of the vital interests of society and the individual.*

**Keywords:** *food security of Azerbaijan, economic accessibility of food, food supply mechanism, Agro-industrial complex, world food system, food reserves, food independence*

### **1. INTRODUCTION**

Food security is a state of the economy in which the population of the country is guaranteed access to food, drinking water and other products necessary for the physical and social development of the individual and the expanded reproduction of the country's population. Thus, the country's food security is determined by the agro-food policy and the general macroeconomic development of the country. One of the priority tasks in the conditions of independence of modern Azerbaijan is to ensure food security, which is becoming not only the subject of scientific research, but also the object of close attention of the executive and legislative authorities, in order to ensure the stability and stability of the republic. The purpose of the study is to analyze the impact of internal and external factors on ensuring food security in Azerbaijan to develop and justify means to increase its level. Providing Azerbaijan with food is an urgent and important issue, and our attention should be paid to the prompt adoption of radical measures to correct the situation in the agricultural sector of the economy.

### **2. INTERNATIONAL APPROACHES TO ASSESSING FOOD SECURITY**

The concept of food security in world literature arose in connection with the processes of starvation in various countries of Africa, Asia and overproduction of food in developed countries. Since the 1970s, food security has been viewed by the world community as an integral part of sustainable development. The UN system and its specialized agencies, along with other international institutions and the nongovernmental sector, have begun the process of developing global strategies and policies on food security. The main organization in this regard is the United Nations Food and Agriculture Organization (FAO), founded in 1945 in Quebec, when representatives of forty-four countries signed the FAO Constitution. FAO has become the main UN entity, specializing in all aspects of food quality and safety, as well as in all the different stages of food production, harvesting, storage, transport, processing and distribution.

At the same time, FAO is taking a food web approach, whereby ensuring food safety and quality recognizes the responsibility of all stakeholders to provide safe food. According to FAO, food security is a well-functioning system that provides all segments of the population with food products in accordance with accepted physiological standards [1, p. 104]. Thus, food security, reflecting on the health of the nation, its intellectual and production potential, social stability, is an integral part of economic, and in general, national security. The Committee on World Food Security (CFS) defines the food security strategy. It was established in 1974 as an intergovernmental body to review and take action on food security policy [see: <http://www.fao.org/cfs/cfs-home/cfs-about/ru>]. Among the main provisions of the Concept of Food Security FAO highlights the main ones: food security is not food security itself; a country must produce enough food for its needs if it has a comparative advantage; the country must be able to import the required amount of food and meet the needs of its citizens in it; governments must ensure the physical and economic accessibility of safe food. FAO has developed a system of indicators to assess the state of food security in four areas:

- 1) Availability of products (production, yield / productivity, stock levels, losses, etc.);
- 2) availability of food (the economic opportunity to purchase food in the required volume with the prevailing income of the population, the possibility of delivering food by assessing the share of paved roads in the total length of roads, density of railways, etc.);
- 3) stability of food supply (availability of a sufficient amount of food in different periods, changes in food prices, etc.);
- 4) tracing cases of natural disasters and social unrest due to problems associated with a possible shortage of food);
- 5) food consumption (assessed from the point of view of compliance of actual consumption with nutritional value norms: calories, protein, trace elements, etc.).

Food security is in the focus of attention of international organizations and intergovernmental bodies, of which Azerbaijan is a member [Шагайда, Н.И. В.Я. Узун., 2013, p.21]. A system for monitoring food security in Azerbaijan is being built in approximately the same areas.

### **3. GOAL AND OBJECTIVE OF FOOD SECURITY IN AZERBAIJAN**

The goal of Azerbaijan's food security is to provide the population with reliable, safe and high-quality agricultural, fish products, food products and raw materials. In Azerbaijan, food security is dominant, since the standard of living of the population and the state of the economy as a whole depend on its state. The main goal of ensuring food security is a guaranteed and stable supply of processing enterprises with raw materials, and the population with food, not subject to external and internal adverse influences. Food security as a system includes several subsystems:

- food independence (the country's ability to meet domestic food needs from the same domestic sources);
- social stability (access to food for all social groups of the population);
- demographic stability (public health, depending on the level of nutrition and nutrition);
- food production (the basis of all life support population).

Food security objectives are:

- 1) providing material and economic accessibility for any citizen of the country of high-quality and safe food in accordance with the established rational consumption standards, which are necessary for an active, healthy lifestyle;
- 2) support for the development of domestic production of basic food products, sufficient to ensure food independence of the country;
- 3) ensuring the safety of the quality of food consumed;

- 4) prevention of external and internal threats to food security, minimization of their negative consequences due to the constant readiness of the food supply system for the population in case of natural disasters and other emergencies [Султанова Р.Н., 2020].

Food security is one of the main directions of ensuring the national security of the country in the medium term, a factor in the preservation of its statehood and sovereignty, an essential component of demographic policy, a necessary condition for the implementation of a strategic national priority - improving the quality of life of citizens, life support. In the Concept of Food Security of Azerbaijan, the term is disclosed as the ability of the state to ensure the satisfaction of food needs at a level that ensures the normal functioning of the population. Providing Azerbaijan with food is an urgent and important issue, and our attention should be paid to the prompt adoption of radical measures to correct the situation in the agricultural sector of the economy.

#### **4. INSTITUTIONAL CAPACITY TO ENSURE FOOD SECURITY IN AZERBAIJAN**

Food security is a condition for the economic well-being and independence of any state, regardless of whether it is an exporter or importer of agricultural products, raw materials and food. Achievement of this state is possible if there is effective legislative support. Strengthening institutional capacity to ensure food security is one of the strategic objectives within the framework of the "Strategic Roadmap for the Production and Processing of Agricultural Products in the Republic of Azerbaijan", adopted by the Order of the President of the Republic of Azerbaijan dated December 6, 2016 [ <https://static.president.az/pdf/38542.pdf>]. The state helps to provide producers with seeds of high-yielding crops and purebred livestock in order to guarantee fair and equitable distribution of existing genetic resources and receive corresponding benefits for producers. For scientific breeding and breeding and to improve the livestock population on farms, highly productive livestock producers are imported from the state budget, which are then sold to producers on a three-year lease with a 50% discount on their initial cost. State support covers the following areas:

- Subsidizing the production of wheat and rice - in accordance with Decision No. 32 of February 15, 2007 by the Cabinet of Ministers, agricultural producers receive a subsidy in the amount of 40 Azerbaijani manats per hectare for wheat and rice. The same decision provides for the allocation of subsidies to agricultural producers for fuel and motor oil in the amount of 50 Azerbaijani manats (in 2011-2014, 40 manats) per hectare.
- Subsidizing the sales of mineral fertilizers - in accordance with the above-mentioned Decision of the Cabinet of Ministers, the state covers 70% (in 2011–2014 - 50%) of the cost of mineral fertilizers applied on one hectare of land.
- By Decision No. 103 of the Cabinet of Ministers dated June 25, 2001, subsidies are provided to farmers in the approved amount for the primary and secondary purchase of seeds and seedlings.
- In addition, the cost of production of standard, pre-basic and basic seeds is covered from the state budget on the basis of the following quota established by the Cabinet of Ministers in Decision No. 273 dated August 13, 2014: upon payment of 20% of the initial cost of agricultural equipment leased from OJSC " Agroleasing ", is paid by the state at 40% of its initial cost.
- In accordance with Decision No. 226 of the Cabinet of Ministers dated September 22, 2008, pedigree cattle imported from the state budget are sold to agricultural producers on leasing terms with a 50% discount. added value created in agriculture also contributed to an increase in the share of this sector in the country's GDP.

In Azerbaijan, food policy is considered as a set of measures designed to systematically and effectively solve the problems of developing not only production, foreign trade, storage and processing, but also the fair distribution of basic food products, as well as the social development of rural areas. In order to further deepen economic reforms in the country, increase agricultural production and improve the food needs of the population, the "Food Security Program of the Republic of Azerbaijan" was approved. This program provides for large-scale measures carried out in the Republic of Azerbaijan to ensure a more complete and sustainable supply of the population with high-quality and safe food products. At the same time, such requirements as an increase in production and import / export of food and agricultural products in the country, health protection and consumer protection, oblige to improve the system of state regulation and control in the field of food safety.

## **5. THE MAIN DIRECTIONS OF MODERNIZATION OF THE AGRO-INDUSTRIAL COMPLEX IN AZERBAIJAN**

In order to modernize the economy, effectively implement its goals and objectives in our country, by the decree of the head of state dated December 29, 2012, the Development Concept "Azerbaijan 2020: a look into the future" was approved. The concept adopted an export-oriented economic model as a basis, envisaged increasing the competitiveness of the economy and improving its structure, increasing oil exports, etc. To achieve this goal, strategies have been prepared taking into account industries with potential comparative advantages, resources and other factors [Гусейнова, 2019]. Strengthening the competitiveness of the economy, increasing food security, developing regions and increasing oil exports make it necessary to modernize the agricultural sector. Azerbaijan's economy, which has strengthened its position due to oil revenues, on the eve of qualitatively new transformations. In 2009-2018, the volume of GDP of the Republic of Azerbaijan increased by more than 2.4 times (from 35 601.5 million manat in 2009 to 79 797.3 million manat in 2017). In 2018, compared with 2017, Azerbaijan's GDP grew by 13.4%, including gross agricultural output by 16.8%, food industry by 2%. Azerbaijan is carrying out reforms in the agricultural sector, the main tasks of which are to increase grain production and ensure food security. The main parameters of the development of the country's agro-industrial production in the near future are determined by the Order of the President of Azerbaijan dated April 11, 2017 "On additional measures for the development of agriculture in the Republic of Azerbaijan." According to this document, in order to ensure food security, the most important tasks for its structures are: improving financing mechanisms in the field of agriculture in Azerbaijan, developing agricultural insurance and encouraging investment in the agricultural sector.

## **6. MEASURES TO ENSURE FOOD SECURITY**

In developed countries, there are two main approaches to improving food security:

- 1) High priority to support national agricultural producers (EU);
- 2) Equal support for both agricultural producers and food consumers (USA).

Although Azerbaijan has been trying to actively support its agricultural producer in recent years, nevertheless, it is necessary to work out in more detail the legislative mechanisms for expanding economic access to food for all groups of the population and the quality of food to solve food security problems. The following ways of solving this problem are possible:

- providing priority support to the people most in need;
- more effective use of mechanisms to support regions with insufficient food production or that face extreme situations;
- improved system of food safety and quality and its control along the entire production chain.

With regard to activities aimed at eliminating internal and external threats to food security, it looks as follows: the optimal combination of state and market regulation of prices for agricultural products; a progressive reduction in imports of those food products that can be produced in Azerbaijan. External threats to food security include:

- 1) increasing risks of instability of the world economy;
- 2) the problem of the competitiveness of domestic food products;
- 3) volatility of the exchange rate;
- 4) reduction of world food supplies;
- 5) Restrictions on the global market for trade in food products in the context of the 19 pandemic;
- 6) strengthening the integration of the national market into the world economy.

We believe that the following measures should be taken to ensure the country's food security: stimulation and support of the most important sectors of domestic production of basic food products; increasing the competitiveness and productivity of agricultural production; seek international recognition of the national quality system by confirming the quality of domestic goods, so that this does not become a technical barrier to trade; increasing employment in rural areas in the processing of agricultural products and creating jobs for large-scale production; creation of a modern warehouse and logistics infrastructure; improvement of land legislation; improvement of credit policy in the direction of stimulating the development of medium and large-scale commodity production; state support for the development of Agro export potential and, first of all, enterprises for deep processing of agricultural raw materials and production of final products.

## 7. CONCLUSION

Speaking as an important basic life support, food security reflects the social orientation of the implementation of human rights - ensuring its existence. In our opinion, food security at the national level is presented as a system of ensuring predominantly own production of good-quality food and accessible to all segments of the population in accordance with accepted physiological standards. We would like to highlight three components based on international experience:

- 1) food security is the state of the country's economy that ensures food independence and stability;
- 2) physical and economic provision of food in accordance with physiological norms for the population of the country;
- 3) Food security is the quality and safety of the food consumed.

So, it is necessary to ensure the sustainable development of domestic production of basic types of food, sufficient to ensure food independence, ensure the safety and quality of food products, to neutralize existing and emerging threats that can lead to a decrease in production volumes, deterioration of the population's access to important types of food.

## LITERATURE:

1. Алтухов А.И., Дрокин В.В., Журавлев А.С. От стратегии обеспечения продовольственной независимости к стратегии повышения конкурентоспособности агропродовольственного комплекса // Экономика региона. 2016. № 3. С. 853.
2. Алтухов А.И., Дрокин В.В., Журавлев А.С. От стратегии обеспечения продовольственной независимости к стратегии повышения конкурентоспособности агропродовольственного комплекса // Экономика региона. 2016. № 3. С. 853.

3. Гусейнова С.Г. Основные направления модернизации аграрной отрасли в Азербайджане // Экономические отношения журнал. Том 9. Номер 2/ Апрель–июнь 2019. Р. 19-26
4. Султанова Р.Н. Экономика, предпринимательство и право / Том 10. Номер 6. Июнь 2020.
5. Ревенко, Л.С. Параметры и риски продовольственной безопасности / Л.С. Ревенко // Международные процессы. — 2015. — Т. 13, № 41. — С. 6–20.
6. Шагайда, Н.И. В.Я. Узун Продовольственная безопасность: проблемы оценки // Вопросы экономики. — 2015. — № 5. — С. 63–78.
7. Федоров М.В., Курдюмов А.В. Механизм обеспечения продовольственной безопасности Российской Федерации. Екатеринбург.: Изд-во Урал. гос. экон. ун-та, 2013. С. 19.

# BUILDING A RESILIENT TENDENCY: TRADITIONAL ECONOMY AND SHARING ECONOMY IN TERMS OF THE COVID-19

**Ali Ilhan**

*Szechenyi Istvan University, Hungary*  
*ilhan.ali@sze.hu*

## ABSTRACT

*The current pandemic COVID-19 plays a crucial role today in several businesses, and it is a chance for a "great reset" for the economies. There are assumptions about how the traditional economy suffers significantly during the pandemic. Adversely, a couple of authors anticipate an excellent bounce-back of the sharing economy after the pandemic. However, we cannot neglect the negative impacts of pandemic upon two growing economies. This study aims at how these economies show resilience in challenging COVID-19. The study also focuses on which one of those economies adapt to the new normals during a pandemic. Moreover, The increase in the delivery sector, the creation of Uber Hub, and a great adaptation of "Work From Home" (WFH) are significant indications. On the other hand, the reader may obtain the most significant impact of the pandemic in the traditional economy, such as government policies, financial instruments, savings, and tourism. The essential impacts of the pandemic in the sharing economy are also discussed, such as Contract issue, California Assembly Bill 5 (AB5), strategical changes, and adaptation. Furthermore, this study includes assumptions through potential solutions and future changes, for instance, "robotics" and "global social contract." Finally, this study discloses that the sharing economy performs better adaptation in current economic challenges than the traditional economy.*

**Keywords:** COVID-19, gig economy, gig economy users, independent contractor, pandemic, policy, sharing economy, traditional economy

## 1. INTRODUCTION

The traditional economy is facing several challenges dramatically. It also derives from advanced technology and changing people's attitudes. The traditional economy is a concept that delivering goods and services is intensely exchanged with a middleman's existence. The production provides the seller with a retail chain and arrives for the end-user as a product or service. The sharing economy is one of the trend areas in the early 2000s. It is highly possible to hear the sharing economy with different names. Such as collaborative consumption or peer-to-peer economy. Practically, the sharing economy targets the means of the shares, swaps, and the things that can be idle or expensive to obtain. Critically, it derives from the person-to-person transaction. On the other hand, the current pandemic, COVID-19, significantly influences the traditional economy and sharing economy. The pandemic situation also affects the structure of the entire economic system gradually. The government policies, public responses, and enterprises' and workers' concerns are the key players in this dramatic challenge. The study's main objective is to analyze the traditional economy's challenges after the pandemic crisis (Covid-19). Additionally, another phase of this research is to apply the challenges into the sharing economy to a better comparison.

## 2. METHODOLOGY

This paper reviews the available sources regarding the pandemic impact (COVID-19) with the traditional economy and the sharing economy. Therefore, the database includes mainly Google Scholar, Scopus, and Science-Direct platforms. Additionally, Gale and Ebsco sources are included for further literature review. The specific keywords, such as sharing economy, traditional economy, and Covid-19, have been chosen for the distinct research area.



The period of literature is aimed between 2019 to 2020 as proof of the fresh and new topic. Therefore, the future of the traditional economy and the sharing economy discussed in performance with the current pandemic. Moreover, the research aims to follow a qualitative approach by highlighting focused areas: economic growth, government policies, and tourism. The research collection consists of the latest articles between 2019-2020 publications.

### **3. IMPACT ON TRADITIONAL ECONOMY**

This research mainly focuses on the pandemic impact on both the traditional economy and the sharing economy. A couple of main drivers are classified and discussed under relevant sections.

#### **3.1. Government role and policies**

There are circumstances that governments intervene in the economy directly and indirectly. The pandemic situation leads nations to take relevant actions for further protection. In this section, the unexpectedly arising threats are discussed. The protective policies are also shared. Williams, C. C., & Kayaoglu, A. (2020) predominantly focus on national authority policies and their approaches towards individuals and corporations affected by the pandemic. Governments seek to facilitate temporary financial supports for enterprises and workers to help financial volatility. Financial support became inevitable, especially after restriction movements and closing particular enterprises during the pandemic period. However, the financial facility's parameter implies only registered employers, such as tax or social securities. Even though the authorities aim to stimulate the economy and protect the workers, particular conditions are greatly affected. Governments, therefore, focused on further interferences, such as tax reliefs and loans. The author, Slater, A. (2020), highlights that government responses play a crucial role in these differences. The speed of policies and people's reaction applies the direction of pandemic spread and belonging health systems. Germany and Brazil are examples of different outcomes that occurred by government responses. Moreover, the regulations and their responses impact economic growth in the long term. Additionally, globalization and trade-openness lead to an increase the economic growth. However, pandemic highlights the vital role of governments. In this case, the current study emphasizes that government intervention is essential to protect economic and social ills. (Five ways the pandemic could alter the economy. 2020). On the other hand, König, M., & Winkler, A. (2020) explore countries' economic growth with the performance of the current pandemic impact (COVID-19). The outcomes of pandemic vary differently between countries. The GDP growth rate forecasts show that countries with better government performance indicate a stable growth rate. In contrast, other countries show a substantial revision of growth forecasts based on less government performance. Another research focuses on the employment data in Spain, Italy, Germany, and the United Kingdom. The pandemic situation hardly affected the small enterprises and vulnerable sectors, such as tourism agencies. Therefore, uncertainty and unemployment ratio raised gradually. (Fana, M., Pérez, S. T., & Fernández-Macías, E., 2020).

#### **3.2. Tourism**

Tourism is one of the most negatively impacted sectors during the current pandemic. Gössling et al., (2020) assume that travel bans directly affect 90% of the world population. Moreover, uncertainty is a crucial factor in future pandemic impacts, especially for tourism. Global tourism organizations, such as UNWTO, claim that 20% to 30% of international travel is assumed to decline shortly. The research exposes the antagonistic connection between total confirmed cases and international total daily flights. On the other hand, G., & Slobodanyk, A. (2019) exposes the word "pandoeconomic" by indicating the changing of the traditional economy besides the ongoing pandemic. The exchange rate primarily impacts economic growth, especially for a couple of countries, such as Ukraine and Georgia.

The research highlights both countries as proof of a sensitive exchange rate, directly impacting their international trade and tourism. Therefore, small economies are promptly being affected during a pandemic, and it impacts the wages negatively. Another research highlights the impact power of online tourism platforms and tourist comments during the pandemic. The pandemic period leads people to communicate through online platforms to share their experiences. Meanwhile, the online platform (Tripadvisor) retrieves 75.000 comments between December 2019 – March-2020. The analysis shows that tourist comments are essential and play a significant role in people's behavior. The authors examine the tourists' comments using the "text mining" technique on "Tripadvisor." The most popular keywords affect ongoing tourism: "people, travel, virus, day, case, time and cancel" based on the research results. Moreover, the advertisement for tourism slightly focuses on different locations for highlighting different areas and cooperating with influencers (Uğur, N. G., & Akbiyik, A. 2020). Consequently, the research highlights the need for consideration of the global value of tourism growth. There might be an expectation of normalization for the ongoing growth of tourism. However, the solution should be the transformation of tourism globally. Therefore, international tourism organizations must incorporate the united nations' sustainable development goals (SDG). On the other hand, new challenges should be considered with the transformation of tourism growth, such as border restrictions, domestic tourism recovery, tourists' behavioral demands, and video conference cases besides business travels (Gössling et al., 2020).

### **3.3. Behavioral changes**

In addition to that, the private sector's responses are highly essential during recessions. The firms' and householders' reactions for their savings and investments are dramatically changing. The study also includes the impact of the mothball approach in the economy, where the supply aimed to be higher for particular products in high quantity for future usage. Finally, the paper combines the economic trend's significant impacts by comparing the previous samples (Slater, A. 2020). The other research identifies the two classifications despite the current pandemic. Some people respond positively to government policies, whereas some oppose these restrictions with protests and disobey of rules. Therefore, the study identifies them as both "risk-taking tendencies" and "pro-social tendencies." The behavioral approach plays an essential role in economic growth significantly (Howard, M. C. 2020). The new concept and behavioral attitude already start changing. Based on research by Kim, J., & Lee, J. C. (2020), most hesitated from viruses demands exclusive services from restaurants or pubs. People start seeking preferably private rooms in restaurants or pubs that they may secure themselves hygienically. Consequently, individual attitudes and behavioral reactions are expected to change on financial instruments and savings. Moreover, a shift occurs from collectivity to individualism on attitudes due to the physical distance and privacy for hygienic purposes.

### **3.4. Future expectations**

Slater, A. (2020) observes the midterm impact of the economy during the current crisis COVID19. Currently, the economic trend is affected negatively. There are shreds of evidence that economic trends might follow a curve shape that has been seen previously, such as the Japan 2011 earthquake, the Haiti hurricane in 2010, and the 2005 Asian tsunami (Slater, A. 2020). Therefore, although a pandemic's outcome is negatively affecting the economy in the short term, adverse relationships can be seen in the midterm economy. However, there are essential concerns that may not support this approach directly. The duration of lockdown plays a crucial role in the economic direction. McKinsey & Company publishes the report of business outlook during a pandemic in an array. The current survey shows that several executives worldwide expect a positive shift from now on for the upcoming six months.

The survey was created in April 2020. Particular indicators underline these expectations, such as a vaccine, healthcare, and digitalization (COVID-19: Implications for business. 2020).

### 3.4.1. Expected economic conditions in respondent' countries in the next six months, % of respondents by office location

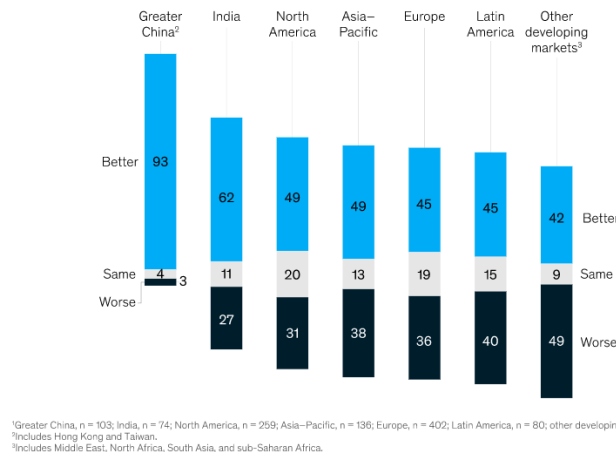


Figure 1: (Source: COVID-19: Implications for business 2020)

Today, the industry grows with the essence of human power and technology. Moreover, automation becomes more critical for competition. Exceptionally, the current pandemic promotes the growth of robotics and protects the spread of viruses in the future. The following researches discuss globalization and robotics. More prominent production companies, such as the automotive sector, may easily be affected negatively in the long term. Teleworking, where people connect to work anywhere but offices, became more popular and inevitable in the pandemic's short and middle term. However, the future expectations are on the increase of robotics that exist at the production level. The reason occurred by the belief that the spread of further contagious may affect the production in a limited level comparing the human-based workers (Fana, M., Pérez, S. T., & Fernández-Macías, E. 2020).

## 4. IMPACT ON SHARING ECONOMY

The sharing economy is one of the trends that are growing as part of the digital economy. Meanwhile, the current pandemic intervenes the economy negatively through restrictions and hygiene purposes. The covid-19 impact might be classified into three-phase: financial loss, such as losing jobs and new normals; such as remote working, guarantees, and long term planning; such as seeking more stable occupations (Hossain, M. 2020).

### 4.1. Employment contract status

Gig workers are assigned as independent contractors. They do not obtain the same social and financial supports as any employer in the traditional economy. "Sick-leave" and "healthcare" are a few of these supports. Therefore, Insurance companies must support gig workers for better opportunities and relief, especially during a pandemic period (Katta et al., 2020). Hossain, M. (2020) highlights that many investors resigned from their full-time job and trusted their entire investments, such as a mortgage for renting in Airbnb. Today, they anticipate a recovery package as they become direct-dependent on the gig economy. Uber company has already taken action by offering supportive payments to drivers within the covid-19 period. However, there is considerable vagueness and difficulty that drivers do not know how to apply for financial support.

Most of the gig workers may face extreme financial difficulty as they do not receive sick leave. Moreover, they have short contracts with self-employed situations. Therefore, gig workers may nearly face with their primary income (Douglas et al., 2020). However, Uber's strategy indicates that being drivers as independent workers allows Uber to deprive itself of regulations, such as minimum wage and sick leave. However, the successful strategy currently faces critical issues. Drivers recognized the essential need of having minimum employment standards thanks to the pandemic situation. It is also discussed that Uber's strategy lacks employment rights that make drivers labor power rather than human quality (Katta et al., 2020).

#### *4.1.1. California assembly bill 5 (AB5)*

Legislative discussions about gig workers' status are already taken place in California. Specific law called California Assembly Bill 5 (AB5) obligates the companies to provide significant standards for their gig workers and employees (California Legislative Information, 2019). The researchers and policymakers should focus on the institutional regulation frame to protect all gig workers disregarding their work classification (Katta et al., 2020). The subject for the regulation of the digital economy is started in discussions within several countries. Employers' rights are specially placed on ILO's Global Commission's agenda on the Future of Work (Rani, U., & Dhir, R. K. 2020). There are still valid differences in employment contracts that vary from regular employment agreements, such as employee benefits. The gig workers do not receive the same financial support as the traditional economy workers (Visible and vocal; The gig economy 2020). In contrast, Uber's CEO, Dara Khosrowshahi, highlights the gig economy's status as a nascent trend. It exposes the vagueness between full-employment status and flexible working opportunities besides the AB5 regulation. The CEO forecasts the current regularity as a tailwind getting closer to gig workers into the traditional economy's employment status, whereas the gig workers adhered to the flexibility (Finley, A. 2020). Uber's chief executive, Dara Khosrowshahi, raised a lack of benefits and a need for government action by writing a letter to Mr. Trump. The letter aimed to support 1.3M Uber drivers and delivery people, and the result was positive. However, the reimbursement procedure asked to cope with essential legislative gaps by Uber company. Finally, the discussion had taken by California's AB5 level for further solution. (Lobel, O., 2020).

#### **4.2. Precautions**

Sanitizing and Hygienic purposes are the critical elements that the market appeals to minimize the risks since encouraging the customer will. Therefore, sanitizing technology started to create specific tools, especially for car industries. Special devices are designed to kill viruses and potential bacterias around the car's surface thanks to ultraviolet light. However, sanitizing companies also focus on new solutions to reduce users' physical contact to avoid dangerous pathogens. Therefore, users' gestures and voice control are expected to play a role in this nascent technology in the future (Vousden M. 2020). Additionally, specific training regarding hygienic matter might be applied for gig users. Moreover, the validity of training can be checked regularly. (Hossain, M., 2020). Airbnb and Booking companies already applied for the new regulations. These regulations require hosts waiting for the room to unbook for 24 hours between cleanings. Moreover, they must use specific cleaning products that favorably impact possible coronavirus transmission (Farmaki, et al., 2020).

#### **4.3. Delivery**

The current pandemic bolsters delivering sectors in an immense amount. Food delivery has turned into a lifeline by growing panic restrictions. Today, people are named food delivery workers as "heroes" in China. Moreover, it fosters gastronomy as a pandemic hasten food delivery.

Meanwhile, companies seek other solutions to avoid viruses and ensure consumer protection during delivery. Therefore, many companies check their delivery worker's fevers twice a day, and the results are applying to applications. By doing so, users can overview the delivery guy's last fever status (Visible and vocal; The gig economy 2020). The example of the Uber company combats with the mired economy by shifting through Uber Delivery business. (What's mine is yours; The sharing economy 2020).

#### **4.4. Accommodation**

Hossain, M. (2020) highlights the most significant risks for sharing purposes in the gig economy. The "anxiety" is primarily an indicator that leads to significant obstacles for several fields in the sharing economy. Moreover, "Booking cancellations" play a direct role in Airbnb, where a fully-refund option creates immense difficulty in sharing business hotels. Additionally, Airbnb is one of the sharing economy companies striving to halve the financial trouble amid pandemics. The initial action is a public offering, leading to resilience in the stock market, primarily tech start-ups. Furthermore, Airbnb anticipates a lively bounce back in summer through the tendency to renting private homes (Griffith, E. 2020).

#### **4.5. Future Expectations**

Proserpio, D. (2020) highlights the hasty actions that focus predominantly on sanitizing purposes. However, the travel industry reached the most challenging point that occurred by restrictions. The author expects those big companies to survive while small start-ups may not combat the risks for a further extended period. Moreover, suppose the gap between the two economies in terms of benefits and conditions slowly shrink. In that case, workers' motivation can be leveraged, such as the same demand for taxi drivers and gig drivers (Pandey, N., & Pal, A. 2020). On the other hand, some companies from the gig economy succeeded to keep the stable value and even managed the short increase against the negative financial impact. Korea's ride-sharing company "SOCAR" encourages customers by promoting its application in terms of paying attention to avoid traffic jams and regular fumigations. The Company lately declares its value as recorded as the previous year's value as well as increased car usage durations. Another example from Green Car company also displays its value at a 12 percent increase in February during the pandemic (Park, 2020). Additionally, Uber company used this pandemic challenge as a strategy change. The Company decided to create a hub consisting of myriad gig workers. Many workers can find alternative works based on their preferences (Rani, U., & Dhir, R. K. 2020). Cao, X., Zhang, D., & Huang, L. (2020) collect the data by an online education platform that native English speakers teach online English to Chinese children. Almost 100,000 gig workers are part of this platform, and their data are retrieved for this research results. The research also claims an increase of about 25% for the gig economy's labor supply arising from a survey result. It can be estimated that pandemic currently allows people to have more time for online teaching platforms. Pandey, N., & Pal, A. (2020). Exposes that the pandemic situation hastens the usage of the internet from 40 to 100 percent. Mostly, work-from-home (WFH) culture has adhered to the new normal. In combination, the digital economy and its importance emerge the new growth. In addition to that, the gig economy consists of short-term contracts depending on ad hoc opportunities. However, the restrictions and lockdown considerably harm the gig workers. However, the author anticipates that the gig economy will thrive and combat financial challenges. This progress requires adaptation to the WFH culture as well as new working attitudes, including a new work norm design. Moreover, trust, performance measurement, and collaboration will be necessary for the gig economy's future. Inevitable challenges are pushing the gig economy for the reboot and quick action. Financial loss is valid. Airbnb already announced of being for going public. However, current situations play a tailwind role for companies regarding their adaptation to new ideas.

Uber already start investing in food delivery. The Company also highlights the investment of self-drive cars on long term plans. Besides that, Airbnb company focuses on investing in an app that allows users longer-term rents (Siddiqui, F. 2020).

## 5. CONCLUSION

The traditional economy is facing crucial challenges during the Covid-19. Governments started to take action by changing policies and providing financial support. During this period, the distribution of financial help was faced with further challenges. Moreover, the governmental role's dominancy played a crucial role in the growth of pandemic and relevant cautions. Comparison of Germany and Brazil may expose the difference of cautions for pandemic and its outcome. Tourism is also affected negatively, and global protection becomes essential to recover the sector. Moreover, financial instruments are changed due to behavioral approaches after a pandemic. The solution of governments started with tax relief and financial support. Moreover, automation and robotics have become famous from a global perspective. The aim is to eliminate people's interaction, especially during the pandemic period. On the other hand, Slater, A. (2020) indicates the "curve" approach that the economic outlook may bounce back to normal after the recession. Adversely, another study expects both short-term and mid-term challenges, especially in terms of the sectors and production fields. There are also potential solutions believed to boost the economy and recover the deficits during and after the pandemic. The government's role is vital, especially its intervention approach to defeat and stimulate the economy despite any pandemic situation. Moreover, the structural reforms are also emphasized by different researchers during this paper. Additionally, a global approach is a crucial factor in recovery by merging countries without any limits. The author calls this approach a "global social contract" (Song, L., & Zhou, Y. 2020). In terms of the sharing economy, workers require financial support from governments as well. However, gig workers' employment status and their contract limit the way of benefits provided by nations. Therefore, people lost their job without specific reimbursements. Moreover, "sharing" and "collaborate" terms of the sharing economy shifted to "safety" and "trust." However, the pandemic situation shaped the sharing economy differently. Fundamental training for gig workers is handled as a new regulation. Sharing economy companies already shifted to the delivery industry as demand for the delivery sector is increased. Moreover, the remote working culture is grown in sharing economy. The demand for teaching online increased and several gig workers were taken in place. On the other hand, Uber company modified the strategy due to the current situation. The Company created a hub that enables several gig workers to meet in the same platform for further possibilities. Consequently, there are crucial open points and uncertainty of the future regarding the traditional and sharing economy. The expectations are both negative and positive bilaterally. However, this study discloses that the sharing economy performs better adaptation in current economic challenges than the traditional economy.

## LITERATURE:

1. Banis, D. (2020). How 'Zero-Rating' Offers Threaten Net-Neutrality In The Developing World. *Forbes*. <https://www.forbes.com/sites/davidebanis/2019/02/18/how-zero-rating-offers-threaten-net-neutrality-in-the-developing-world/?sh=31f5c7993b41>
2. California Legislative Information (Ed.). (2019, September 19). *AB-5 Worker status: employees and independent contractors*. [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200AB5](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB5).
3. Cao, X., Zhang, D., & Huang, L. (2020). The Impact of COVID-19 Pandemic on Gig Economy Labor Supply.

4. COVID-19: Implications for business. (2020). Retrieved October 4 2020, from <https://www.mckinsey.com/business-functions/risk/our-insights/covid-19-implications-for-business>
5. Dolnicar, S., & Zare, S. (2020, March 18). CORONAVIRUS AND AIRBNB – Disrupting the Disruptor. <https://doi.org/10.1016/j.annals.2020.102961>
6. Douglas, M., Katikireddi, S. V., Taulbut, M., McKee, M., & McCartney, G. (2020). Mitigating the wider health effects of covid-19 pandemic response. *Bmj*, 369.
7. 'Essential' Gig Workers Likely to Expect More Benefits Post-Pandemic. (2020, May 4). *Carrier Management*, <https://www.carriermanagement.com/news/2020/05/04/206262.htm>
8. Fana, M., Pérez, S. T., & Fernández-Macías, E. (2020). Employment impact of Covid-19 crisis: from short term effects to long terms prospects. *Journal of Industrial and Business Economics*, 47(3), 391-410.
9. Farmaki, A., Miguel, C., Drotarova, M. H., Aleksić, A., Časni, A. Č., & Efthymiadou, F. (2020). Impacts of Covid-19 on peer-to-peer accommodation platforms: Host perceptions and responses. *International journal of hospitality management*, 91, 102663.
10. Finley, A. (2020). Uber Adapts to Covid and 'Laborism'. *The Wall Street Journal*. <https://www.wsj.com/articles/uber-adapts-to-covid-and-laborism-11601678384>
11. Five ways the pandemic could alter the economy. (2020). *Economic Outlook*, 44(3), 5–9. doi:10.1111/1468-0319.12496
12. G., & Slobodanyk, A. (2019, December). Pandeconomic crisis and its impact on small open economies: a case study of COVID-19. In *Energy Management of Municipal Transportation Facilities and Transport* (pp. 718-728). Springer, Cham.
13. Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 1-20.
14. Griffith, E. (2020). Airbnb, 'Sharing Economy' Pioneer, Moves Toward a Public Offering. *New York Times*, B4(L). <https://www.nytimes.com/2020/08/19/technology/airbnb-ipo.html>
15. Hossain, M. (2020). The effect of the Covid-19 on sharing economy activities. *Journal of Cleaner Production*, 124782.
16. Hossain, M. (2020). The Effect of the Covid-19 on Sharing Economy Activities. *Journal of Cleaner Production*, 124782. doi:10.1016/j.jclepro.2020.124782
17. Howard, M. C. (2020). Who wants to reopen the economy during the COVID-19 pandemic? The daring and uncaring. *Personality and Individual Differences*, 168, 110335.
18. Jeon, S. H., & Ostrovsky, Y. (2020). The impact of COVID-19 on the gig economy: short- and long-term concerns.
19. Jeon, S.-H., Huju Liu, and Yuri Ostrovsky (2019).. *Measuring the Gig Economy in Canada using Administrative Data*. Analytical Studies Branch Research Paper Series. Catalogue number: 11F0019M No. 437. Ottawa: Statistics Canada.
20. Katta, S., Badger, A., Graham, M., Howson, K., Ustek-Spilda, F., & Bertolini, A. (2020). (Dis) embeddedness and (de) commodification: COVID-19, Uber, and the unravelling logics of the gig economy. *Dialogues in Human Geography*, 10(2), 203-207.
21. Kim, J., & Lee, J. C. (2020). Effects of COVID-19 on preferences for private dining facilities in restaurants. *Journal of Hospitality and Tourism Management*, 45, 67-70.
22. König, M., & Winkler, A. (2020). COVID-19 and Economic Growth: Does Good Government Performance Pay Off?. *Intereconomics*, 55(4), 224-231.
23. Lobel, O. (2020). We Are All Gig Workers Now: Online Platforms, Freelancers and The Battles Over Employment Status and Rights During the COVID-19 Pandemic. *San Diego Legal Studies Paper*, (20-475).

24. Pandey, N., & Pal, A. (2020). Impact of Digital Surge during Covid-19 Pandemic: A Viewpoint on Research and Practice. *International Journal of Information Management*, 102171.
25. Park, A. (2020). COVID-19 takes heavy toll on sharing economy. *Korea Times News* [Seoul, Korea]. [https://www.koreatimes.co.kr/www/biz/2020/04/175\\_288613.html](https://www.koreatimes.co.kr/www/biz/2020/04/175_288613.html)
26. Proserpio, D. (2020). How Has COVID-19 Impacted the 'Gig' Economy? *University of Southern California*. <https://phys.org/news/2020-06-covid-affected-gig-economy.html>
27. Rani, U., & Dhir, R. K. (2020). Platform Work and the COVID-19 Pandemic. *The Indian Journal of Labour Economics*, 63(1), 163-171.
28. Siddiqui, F. (2020). Coronavirus is forcing Uber to return to its start-up roots. *Washington Post*
29. Slater, A. (2020). After the pandemic: Medium-term growth uncertainties.
30. Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339.
31. Song, L., & Zhou, Y. (2020). The COVID-19 Pandemic and Its Impact on the Global Economy: What Does It Take to Turn Crisis into Opportunity?. *China & World Economy*, 28(4), 1-25.
32. Spurk, D., & Straub, C. (2020). Flexible employment relationships and careers in times of the COVID-19 pandemic. *Journal of Vocational Behavior*, 103435. doi:10.1016/j.jvb.2020.103435
33. Uğur, N. G., & Akbiyik, A. (2020). Impacts of COVID-19 on global tourism industry: A cross-regional comparison. *Tourism Management Perspectives*, 100744.
34. Visible and vocal; The gig economy. (2020, April 4). *The Economist*, 435(9188), 32(US). <https://www.economist.com/china/2020/04/03/delivery-apps-have-transformed-urban-life-in-china>
35. Vousden M. (2020). COVID-19 will force rethink of shared vehicle hygiene solutions. *just-auto.com*, [https://www.just-auto.com/comment/covid-19-will-force-rethink-of-shared-vehicle-hygiene-solutions\\_id194946.aspx](https://www.just-auto.com/comment/covid-19-will-force-rethink-of-shared-vehicle-hygiene-solutions_id194946.aspx)
36. What's mine is yours; The sharing economy. (2020). *The Economist*, 52(US). <https://www.economist.com/business/2020/06/04/the-sharing-economy-will-have-to-change>
37. Williams, C. C., & Kayaoglu, A. (2020). THE CORONAVIRUS PANDEMIC AND EUROPE'S UNDECLARED ECONOMY: IMPACTS AND A POLICY PROPOSAL. *The South East European Journal of Economics and Business*, 15(1), 80-92.
38. Zimmermann, K. F., Karabulut, G., Huseyin Bilgin, M., & Cansin Doker, A. (2020). Inter-country Distancing, Globalization and the Coronavirus Pandemic. *The World Economy*.



## FINANCIAL MARKET OF AZERBAIJAN: NEW CHALLENGES, OPPORTUNITIES AND PROSPECTS

**Zahid Farrux Mamedov**

*Director of «Organization and Management of Scientific Activity» Department,  
Azerbaijan State University of Economics (UNEC),  
İstiqlaliyyat 6, Baku, Azerbaijan  
zahid.mammadov@unec.edu.az*

**Vugar Namazov**

*Azerbaijan State Economic University (UNEC),  
PhD candidate of Finance and Financial Institutions department,  
AZ1001, 6, İstiqlaliyyat str., Baku, Azerbaijan  
vuqarnamazov@gmail.com*

**Elkhan N. Valiev**

*Director Consulting Business Centre, Baku, Azerbaijan  
e-valiyev@yahoo.com*

### ABSTRACT

*The article is devoted to the financial market of Azerbaijan and the issues of reforming, sustainability and increasing the efficiency of the financial market in the context of growing competition. The author highlighted the main trends in financial markets, identified and analyzed the development problems of the Azerbaijani market. Identify the main problems and prospects for the development of the country's financial system based on the state of the financial market in Azerbaijan over the past decade. Research shows that Azerbaijan needs a systematic financial market development program that takes into account milestones, new challenges, economic priorities and lessons learned. Thus, in terms of further development of the financial market in Azerbaijan, it is necessary to outline the following goals: introduction and improvement of corporate governance, taking into account world standards, contributing to greater stabilization of financial institutions; creation of an atmosphere of trust in the financial system on the part of investors, creditors and depositors, thanks to the protection of their rights and improvement of the quality of service, and the achievement of transparency in the activities of financial institutions.*

**Keywords:** *financial markets, banking sector, capital market, stock exchange, insurance market, cashless economy*

### 1. INTRODUCTION

Modern global challenges directly and indirectly affect the most diverse areas of the economy. Of course, the general characteristics of the Azerbaijani economy affect the level of its high sensitivity in terms of external shocks, which, in turn, certainly has an impact on the banking system. At the same time, the emerging factors of influence, as well as the rapid turnover of the internal and external conditions of macroeconomics, create certain prerequisites for further research of problems related to the development and increase of the stability of the Azerbaijani financial sector during the period of new challenges. Of particular importance within the framework of the issue under consideration are the problems that have a negative impact on the improvement of the activities of Azerbaijani banks, as well as on the establishment of defining directions and methods of their solution. The objective need for a comprehensive modernization of the financial sector in Azerbaijan has led to the adoption of new laws. Steps towards diversification of the Azerbaijani economy and concentration in the private sector lead to the

emergence and development of new institutions, instruments and services of the financial market. Macroeconomic institutionalization and financial flexibility are necessary to ensure free movement of capital in the real sector, including priority sectors of the economy, and financial inclusion. To this end, the creation of alternative financial instruments and mechanisms, along with traditional instruments, based on international experience, taking into account the properties of the domestic market, is of particular importance.

## 2. THE CURRENT STATE OF THE BANKING SECTOR

It should be noted that since the early 1990s, the banking system of Azerbaijan has gone through five stages in its development:

- 1) 1.190-1992 - the period of formation of the national banking system;
- 2) 2.1992 - 1994 - a period of rapid growth in the number of commercial banks in conditions of hyperinflation;
- 3) 3. 1995-2003 - optimization and restructuring of the banking system in the context of macroeconomic stabilization.
- 4) 4. 2003-2014 - The transformation of the country's large foreign exchange earnings into government investment as a result of business and consumer demand, as well as optimistic expectations associated with economic growth, further increased the demand for banking services. During this period, the financial depth (GDP of assets / non-oil sector) reached 77%, and the loan portfolio increased 30 times.
- 5) 5. Since 2014, as a result of a sharp decline in oil prices and the economic crisis faced by trading partners, against the background of processes taking place in the country, in particular, a decrease in the rate of economic growth, institutional and structural reforms, a deficit in the balance of payments and non-oil budget, changes in the financial and banking sectors, in Azerbaijan there was a need for a new approach to innovation and economic development of the financial services sector [Мамедов З.Ф., Валиев Э.Н., -2020. Р. 777].

In connection with the objective necessity of systemic modernization of the banking sector in Azerbaijan, amendments to the laws were adopted: - The Law of the Republic of Azerbaijan "On Banks"; Law of the Azerbaijan Republic "On the Central Bank of the Azerbaijan Republic"; Law of the Republic of Azerbaijan "On insurance of bank deposits". Based on the reinforcement of the principles, forms and methods of banking development by new laws of the banking system, a favorable ground was prepared for the optimal protection of the rights and interests of depositors and creditors, as well as for the implementation of banking control based on the Basel principles and increasing the reliability of the Azerbaijani banking system as a whole. As a result of the implementation of effective measures for the above period, the banking system of the Azerbaijani state turned out to be stable relative to economic shocks of various kinds in the world market. During 2016-2017, the licenses of Yunayted Kredit Bank, Bank of Azerbaijan, Gencebank, Texnikabank, Parabank, Zaminbank, Kredobank, Dekabank, Atrabank, Caucasian Development Bank, Bank Standard and DəmirBank were revoked [Mamedov Z. F. ,2020]. For the period of 2020, in the republic as a whole in the banking system, the average level of capital adequacy (i.e., the ratio of equity capital to assets) was 18 percent (the minimum level based on the Basel methodology is 8 percent, and according to the requirements of the CBA, 12 percent). As of May 31, 2020, 26 banks operated in Azerbaijan, of which 2 are state-owned and 24 are private. Banks with foreign capital - 12. Of these, in 7 the share of foreign capital is from 50 to 100%, in 5 banks - up to 50%, and there are also 2 local branches of foreign banks (a branch of the National Bank of Iran and a branch of the National Bank of Pakistan). In addition, VTB Bank (Azerbaijan) operates in Azerbaijan. The main objective of VTB Bank (Azerbaijan) is to help Azerbaijani businesses enter new markets in the countries where VTB Group operates, as well as support Russian companies operating in

Azerbaijan. VTB (Azerbaijan) is the main partner bank for Azerbaijani entrepreneurs doing business with Russia. The “International Bank of Azerbaijan”, “Pasha Bank” and “Kapital Bank”, being among the three leading credit and financial institutions of the country in terms of assets, still occupy a systemic importance in the domestic banking system. In the banking sector's loan portfolio, over 60% are loans to legal entities, 30% are consumer loans and 10% are mortgage loans. One of the main qualitative trends in the banking system is the growth in the level of microcrediting. Its main advantages are a high level of profit, the lowest risk, the scale of coverage of the economy both in terms of geography and customer base. The main macroeconomic significance of microcrediting is that it contributes to the growth of employment, in particular in rural areas. The growth in the level of microcredit increases the interest in Islamic banking at the global level. Azerbaijan is taking important steps to cooperate with the Islamic Development Bank (IDB), while a large role is assigned to the introduction of the Islamic Bank in Azerbaijan. However, as Moodys experts note in their report on the prospects for the development of Islamic banking in the CIS countries, "Despite the large number of Muslim population, the prospects for the development of Islamic banking in Azerbaijan are weak" [Мамедов З.Ф., Намазов Б., 2020. Том 8]. In our opinion, the problem of introducing Islamic banking needs to be thoroughly investigated, which is associated with the solution of two issues, the creation of a fundamental legislative framework and the training of professional personnel, the latter is especially important in order to make the process itself effective. The solution to the problem, which determines the high level of efficiency of the banking system of Azerbaijan, is to increase the competitiveness of banking institutions on the basis of their merger and increase in banking capital. However, all international experts, "including the IMF and rating agencies, believe that Azerbaijan still has insufficient capitalization in the banking system." [<https://interfax.az/view/778620>]. The reason for this situation can be considered, first of all, the fact that, firstly, the quality of the loan portfolio of banks in Azerbaijan is clearly skewed towards consumer lending, and secondly, the risk management and liquidity management system has not yet been widely implemented. It seems obvious that at the present stage of historical development, the Azerbaijani economy is experiencing the need for the efficiency and capitalization of the banking system, especially with regard to accession to the WTO. In terms of achieving this strategic goal, it is necessary not only to pursue a competent policy aimed at creating conditions for the support of the financial system by the state, but also to increase the level of capitalization of the banking system of Azerbaijan at the expense of various credit institutions. One of the most important problems ensuring the improvement of the banking system of the republic is the growth of the competitiveness of banks in the process of their gradual merger and the increase in bank capital. It seems obvious that the increase in the capitalization of banks is ensured by entering the IPO market. Unfortunately, we have to focus on the fact that the overwhelming majority of banks do not consider the securities market as a mechanism for attracting resources. Prof. Mamedov ZF, believes that one of the optimal ways to increase capitalization is the primary placement of shares (IPO) [Zahid Farruk Mamedov, Vidadi Zeynalov.- 2011, P175]. Thus, the fundamental goals of the future development of the banking system of Azerbaijan are to increase the stability of banks, to spread global standards of corporate governance in banks, to increase the confidence of investors, depositors and creditors in the banking system, which in turn should be achieved by protecting their rights, enhancing quality and, of course, the transparency of banking institutions. So far, in the international context, Azerbaijani banks are very small, and each of them individually is very insignificant. There are too many small banks in the domestic banking system of the country, whose business volume does not allow large-scale implementation of the savings effect.

### 3. STATE OF THE INSURANCE SECTOR IN AZERBAIJAN

The share of banks and non-bank credit institutions in the total assets of the financial system of Azerbaijan in 2019 amounted to 88% and 9.7%, respectively, and the share of insurance companies in total assets was 2.3%. The average annual growth rate of the insurance sector in Azerbaijan from 2010 to 2015 was 20%. In 2015, the volume of insurance premiums increased and amounted to 444 million Azerbaijani manats. However, the share of insurance premiums in GDP is only 0.8%. The level of high dependence on the banking sector poses a serious risk for insurance companies. The effective functioning of the insurance market in Azerbaijan depends, first of all, on the availability of the necessary regulatory framework. The insurance market is regulated on the basis of a number of normative acts, including the Civil Code of the Republic of Azerbaijan, relevant laws ("insurance activity", "health insurance of citizens", "compulsory insurance of passengers"), decisions and orders of the government of Azerbaijan, charters and regulations of the Ministry of Finance, Ministry of Economy and Central Bank as market regulator. Currently, there are 20 insurance and one reinsurance company operating in the insurance market of Azerbaijan, 4 of them are life insurance companies. By the end of 2020, the development of the insurance market in Azerbaijan is expected to continue, especially through real estate and agricultural insurance. The government already has a roadmap in this direction. Based on the expected increase in the amount of bank loans for the next year, especially for the retail car market, it is possible to predict a positive growth in the field of CASCO insurance services. Intellectual property insurance, which was introduced last year, is still not very popular with local organizations. Experts believe that the product may be of interest to foreign companies that export various products to Azerbaijan and fight counterfeit. Some foreign companies operating in Azerbaijan, such as Unilever, have already purchased this insurance product. For the organic growth of intellectual property insurance, it is necessary to simplify the process of obtaining patents, which, in fact, will increase the amount of intellectual property in general. The Law on Agricultural Insurance in Azerbaijan was adopted in June 2019. Therefore, it is important to apply an agricultural insurance model that is consistent with the characteristics of the local insurance market, agriculture and government policy. A year after the law came into force, in January 2020, the Agricultural Insurance Fund was launched. The purpose of the Fund is to ensure the organization, development and sustainability of the agricultural insurance system. Based on the research, it is also possible to predict growth prospects in the spheres of life insurance and compulsory health insurance in Azerbaijan.

### 4. AZERBAIJAN STOCK MARKET

The market is regulated by the Central Bank of the Republic of Azerbaijan, which is the mega-regulator of the entire financial market (banks, capital market institutions and insurance companies). All securities are 99% dematerialized and are held at the National Depository Center (NDC), which also acts as the central clearing and settlement organization. Settlement is carried out according to the DVP principle, where NDC members act as settlement agents. There is only one regulated market organized by the Baku Stock Exchange (BSE). The Baku Stock Exchange is a closed joint stock company owned by 20 shareholders, mainly local banks and investment companies, as well as the Istanbul Stock Exchange (Borsa Istanbul). The technical infrastructure for trading is based on the Korean Exchange trading system (Exture) developed by KOSCOM (a division of the Korean Exchange). Trading on the stock exchange is carried out by investment companies that are members of the BSE. Given the favorable economic conditions, there are promising prospects for the development of private sector financing through capital markets, especially through investments in corporate bonds and investments in fixed assets of companies, as a model of strategic investment (privatization). The state and the stock exchange use different platforms to attract the private sector to use market instruments based on free market methods based on real interest rates.

There is a huge potential for the introduction of derivatives based on agricultural products and foreign exchange interest rates. Parallel to this, there is well-developed CFD trading and the forex market (mainly based on currencies, commodities and stocks) as an over-the-counter market. This, in turn, contributes to the formation of an institutional framework for organizing trading in classical derivative financial instruments such as options and futures.

## **5. IMPACT OF COVID-19 (PANDEMIC) ON THE COUNTRY'S FINANCIAL SECTOR**

COVID-19 contributed to the financial insolvency of banks and companies in a number of countries, mass unemployment, the world economy going through a period of stagnation and, as a result, the transition of the global economy to recession. The pandemic came to Azerbaijan later than to other countries, but the phenomenon of cheaper energy prices began to be observed. Success in maintaining macroeconomic stability in Azerbaijan and decisions taken to prevent global risks have limited the risks of increased global volatility for the Azerbaijani market. There are three channels for transmitting the impact of the pandemic to the country's financial sector: the balance of payments channel, the income channel, and the credit channel. The decline in oil prices and the export of other goods affects the foreign exchange market through the balance of payments channel. Against the background of credit risks, the financial condition of banks may deteriorate, which will force banks to limit the issuance of loans and may have a negative impact on the economy through the credit channel. A decrease in the income of business entities will result in an increase in credit risk, a decrease in demand for financial services and a decrease in the income of the financial sector. An additional channel for the negative impact of the coronavirus pandemic could be a decrease in the potential for activities in the financial sector, primarily in the field of lending. A decrease in the income of economic entities reduces their creditworthiness, which may limit the desire of banks to continue lending to the economy. The impact of the coronavirus pandemic on the credit channel may be associated with the following risks:

- decrease in income of potential borrowers;
- limits your appetite for credit due to the narrowing of the possibilities for servicing loans;
- at the same time, there is serious uncertainty about the future recovery of incomes of citizens and companies;
- a deterioration in the quality of borrowers' loans may occur, may worsen, and an increase in credit risk;
- leads to an increase in interest rates on loans, which limits the demand for new loans;
- banks can tighten lending standards, including lowering the limits of loan products;
- Amid deteriorating financial conditions, some banks may face a lack of capital to increase lending.

According to the Presidential Order on a number of measures to reduce the negative impact of the coronavirus pandemic (COVID-19) and the sharp fluctuations occurring in the global energy and stock markets, on economy of the Republic of Azerbaijan, macroeconomic stability, issues of employment in the country and business entities, four Working Groups were established [<https://ru.president.az/articles/3622>]. The working group, chaired by the Chairman of the Central Bank, was instructed to assess the alleged negative impact of the pandemic on the financial sector and macroeconomic environment of Azerbaijan, prepare and submit to the Cabinet of Ministers proposals on additional measures to be taken to support the stability of the Azerbaijani manat exchange rate and consumer prices, for maintaining macroeconomic stability in the country.

A working group, created under the leadership of the Chairman of the Central Bank, was tasked with assessing the alleged negative impact of the pandemic on the financial sector and macroeconomic environment in Azerbaijan, including:

- 1) supporting the stability of the rate of the Azerbaijani manat;
- 2) supporting the stability of consumer prices
- 3) maintaining macroeconomic stability in the country.

Currently, both social and budgetary, monetary policy in Azerbaijan is mainly aimed at neutralizing the incomes of the population and business affected by the pandemic. The main goal of the measures taken by the Government and the Central Bank is to improve the financial system as a whole and to protect the interests of consumers, in particular their deposits in banks, and to prevent the threat of their loss, to create opportunities for their free use. To support the financial stability of the banking system, a number of preventive immunization measures were taken before the effects of the crisis began to be felt. That is, so to speak, during the economic and credit boom, measures of countercyclical prudential regulation were taken. So, in the years of boom in the growth of high rates of banking assets, the Central Bank of banks in an active dialogue:

- 1) called for a prudent credit policy,
- 2) ensured an increase in the level of capitalization and provisioning,
- 3) tightened prudential regulation standards,
- 4) applied the required reserves on foreign loans.

To expand access to financial opportunities in the real sector, a \$ 200 million Framework Agreement was signed with the European Bank for Reconstruction and Development. The implementation of the first tranche of more than \$ 50 million has already begun.

## **6. GLOBAL CHALLENGES FOR THE TRANSITION TO A "CASHLESS FINANCIAL ECONOMY"**

“There are three types of effects that the country's economy gets from an increase in the share of non-cash money in the economy: transparency, sustainability and growth”. The transition to a “cashless economy” is officially one of the priorities of financial regulators in a number of countries. The increase in the share of non-cash money up to the complete exclusion of cash circulation has become one of the most discussed topics on the world financial agenda in recent years. Azerbaijan is no exception in this global process. Recently, the governments of developed countries have also been actively using regulatory restrictions on monetary settlements in order to reduce the corruption component, operating expenses of financial organizations and simplify taxation mechanisms. It should be noted that since April 1, 2016, the Central Bank of Azerbaijan (CBA) has put into operation an interbank card center in order to increase the efficiency of card transactions, strategically regulate the cost of services in accordance with market requirements, as well as to improve the efficiency of non-cash payments. All banks in the country, as well as processing centers and postal operators are connected to this center. Providing an interface between the infrastructures of all organizations involved in the processing, this center allows you to process transactions made within the country using payment cards issued by resident banks without resorting to VISA and MasterCard [Mamedov Z. F. Aliyev Shefa, 2020]. One of the most widespread methods in world practice to stimulate the use of non-cash payments has become the return of a certain amount from the purchase of goods on bank cards, for example, in the form of a discount or redemption of VAT interest. The Azerbaijani government has taken measures to induce the population to give preference to cashless payments. We are talking about the refund of 15% value added tax (VAT) when buying with payment cards and 10% when paying in cash.

“The number of non-cash transactions with payment cards in Azerbaijan in March-April 2020 amounted to 17.5 million, which is 71% more than in the same period last year” [<http://interfax.az/view/804054>]. On September 26, 2018, the President of the Republic of Azerbaijan approved the State Program for the Expansion of Cashless Payments in Azerbaijan for 2018-2020. "The strategic goal of the State Program for the Expansion of Cashless Payments in Azerbaijan for 2018-2020" is to significantly expand the sphere of non-cash payments among citizens, business entities and government agencies, to minimize cash turnover. volume and, as a consequence, strengthening the financial resource base of the banking sector” [ Mamedov Z. F., Qasimov A. 2020]. Through the implementation of this program, the Central Bank of Azerbaijan expects to reduce the share of cash transactions in the economy from 74% (in 2017) to 40% (in 2020). So, the expansion, application and use of non-cash settlements will ensure the transparency of economic turnover, help reduce cash expenses, operating expenses of banks and institutions, which will give an impetus to expanding opportunities for the tax base, as well as access of the population and institutions to financial services and, as a result, economic growth. The Azerbaijani government has repeatedly announced a strategic step towards a cashless financial economy. The level of development of non-cash payments in Azerbaijan, as well as preferences in the use of non-cash payment instruments, are determined by several factors: the level of economic development of the state, the achievements of information and communication technologies, as well as legislative regulation.

## 7. CONCLUSION

Thus, the fundamental goals of the future development of the financial system of Azerbaijan are to increase the stability of the financial market, spread the world standards of corporate governance in financial institutions, increase the confidence of investors, depositors and creditors in the financial system, which in turn should be achieved by protecting their rights, enhancing the quality and, of course, the transparency of the activities of financial institutions. So far, in the international context, Azerbaijani banks are very small, and each of them individually is very insignificant. There are too many small banks in the domestic banking system of the country, whose business volume does not allow large-scale implementation of the savings effect. Given the current economic conditions in Azerbaijan, there are prospects for a financing model, especially through the issuance of corporate bonds and shares to finance the private and public sector (including privatization). One of the main qualitative trends in the financial system is the growth in the level of microcredit. The growth in the level of microcredit increases the interest in Islamic banking at the global level. Azerbaijan is taking important steps to cooperate with the Islamic Development Bank, with a large role being assigned to the introduction of Islamic banking in Azerbaijan.

## LITERATURE:

1. Mamedov Z. F., Abbasbeyli M.A, Valiyev E.N. Banking sector of azerbaijan: trends, problems, prospects // Economic and Social Development (Book of Proceedings), 60th International Scientific Conference on Economic and Social Development - XX International Social Congress (ISC 2020). - Moscow, 20-21 October, 2020. P. 59-62
2. Мамедов З.Ф., Валиев Э.Н. Современные особенности развития банковского сектора Азербайджана // Экономические науки. 2020.- №7 (188). 131-137
3. Moody's отмечает слабые перспективы развития исламского банкинга в Азербайджане // <http://interfax.az/view/774919>, 15.08.2019
4. МВФ рекомендует финрегулятору Азербайджана решить проблему недокапитализированных банков// <https://interfax.az/view/778620>, 23.09.2019

5. Mamedov, Vidadi Zeynalov. Küresel Mali Kriz Ortamında Azerbaycan Bankacılık Sektörünün Yapısı, Özellikleri Ve Sorunları Amme İdaresi Dergisi.2011. 44. № 3. P. 173-203
6. Mamedov Z. F. Aliyev Shefa. Digitalization of the economy: analysis of influence on the banking sphere in Azerbaijan in the context of world experience// 55th International Scientific Conference on Economic and Social Development, Baku, Azerbaijan.: 25 June 2020, Book of Proceedings Vol. 2/4. P 584-591
7. Mamedov Z. F., Qasimov A. Challenges and opportunities of the non-cash payment systems development: global experience and azerbaijan practice // Economic and Social Development (Book of Proceedings), 60th International Scientific Conference on Economic and Social Development - XX International Social Congress (ISC 2020). - Moscow, 20-21 October, 2020. P. 59-66



# WORKING FROM HOME BEFORE PANDEMIC: CASE OF CROATIA 2008-2018

**Marija Becic**

*University of Dubrovnik, Croatia  
marija.becic@unidu.hr*

## ABSTRACT

*COVID-19 pandemic impacted not only health systems but also economies and businesses around the world. In an attempt to deal with the disease, countries adopted number of measures such as lockdown, social distancing, and stay-at-home orders what consequently reflected into labour markets. Working from home became new normal way of performing job tasks and this topic became the focus of interest of professionals and academics. The aim of this paper is to explore the characteristics, both demographic and firm related, linked to work from home in the pre-pandemic period 2008-2018, as well to establish a relationship between home-based work and the level of income. Examining the characteristics of individuals who can work from home, identifying vulnerable groups and industries can help policymakers to target policies towards particularly affected workers in the post COVID-19 pandemic period. Incidence of home-based working in Croatia is not a large one. In 2018, only 6% of workers stated that they usually or sometimes work from home. In order to explore the probability of home-based work, logistic regression is used on the basis of the data from Labour Force Survey for the period 2008-2018. Correlation coefficient is used to establish relationship between income levels and working from home.*

**Keywords:** *Croatia, home-working, income, socio-demographic characteristics*

## 1. INTRODUCTION

Since March 2020 coronavirus disease COVID-19 impacted not only health systems but also economies and businesses around the world. In an attempt to deal with the disease, countries adopted a number of measures such as lockdown, social distancing, and stay-at-home orders which consequently reflected into labour markets. These new circumstances imposed the necessity to change the way that jobs are done. Working at home has enabled workers to continue working, and, at the same time, to reduce close interactions with co-workers and to keep social distance. Although working at home had been in the slow rise even before the pandemic, it has now become a new “normal” way of doing business whenever possible, and even after measures are relaxed, many employees may continue working at home. Dey, Frazis and Loewenstein (2020) suggest that management, professional, and administrative support jobs are examples of jobs where working at home is generally feasible. Oettinger (2011) also suggests that jobs transferred to home are those for which that kind of a transfer is less costly than for jobs with immobile physical capital, large number of interactions with coworkers and/or supervisors. However, there are many jobs that require individuals to be physically present at workplaces and unsuitable to be performed remotely (for example jobs involving interaction face to face with customers or involving actual physical work, such as sales, construction, etc.). Dey, Frazis and Sun (2020) suggest that workers with less education are those in jobs for which work from home is less feasible, for example in most service, construction or transportation jobs. The aim of this paper is to explore the characteristics, both socio-demographic and firm related, linked to work from home in the pre-pandemic period of 2008-2018 in Croatia, as well as to investigate the relationship between work from home and income. Exploring recent trends can help to identify the vulnerable industries and to draw implications for the future. The structure of the paper is as follows. After the introductory part, some theoretical aspects and previous researches about home-working are given.

In the third part research sample and methodology are explained followed by the research results and discussion. Paper ends with concluding remarks.

## 2. WHAT DO WE KNOW ABOUT WORK FROM HOME?

Work from home can be seen as a form of non-standard employment since it doesn't fit the standard of 'eight hours, five days a week in a certain workplace' definition. It also contributes to labour market flexibility, contemporary labour market requirement. Theoretical approaches to the subject are focused on three major areas (Felstead et al., 2002): family-friendliness of the employment, benefits in business related to home-working and adoption of work-life balance. Even before the current extraordinary circumstances of COVID-19 pandemic, homeworking around the world had been in a rise since technological and IT advances enabled job tasks to be performed in a variety of locations. These increasing trends are more felt in more developed countries than in Croatia where the share of people working from home in 2018 was approximately 6%. Widespread lockdowns and social distance measures that started from February 2020 have rapidly increased the incidence of people working from home in Europe, as well as in Croatia. Unfortunately, pandemic also caused the incidence of unemployment to increase, especially in industries and occupations in which working at home is not feasible. To prevent large employment losses, Croatian government introduced a set of policy measures providing monthly financial aid to firms with high losses subsidising wages per each worker not fired. Consequently, the increase in unemployment was not so high as it would otherwise have been. One could expect unemployment to increase in the future, especially in those industries in which working from home is not a feasible option. Exploring existing previous trends in Croatian labour market and related work from home provide useful information on vulnerable groups in this pandemic era. Dingel and Neiman (2020) emphasise the importance of identifying jobs that could be based at home as it represents a significant contribution to predicting the economic trends in the periods following social distancing. Fadinger and Schymik (2020) provide information on the share of jobs that can be performed at home by economic activity classified according to NACE Rev 2 (Figure 1). According to them, and with the assumption that only jobs performed at home were to remain, GDP loss would be 1,6% per week. Ability to work from home will be critical in reducing economic losses of the current situation (Jones, Philippon and Venkateswaran, 2020) that will inevitably hit all economies.

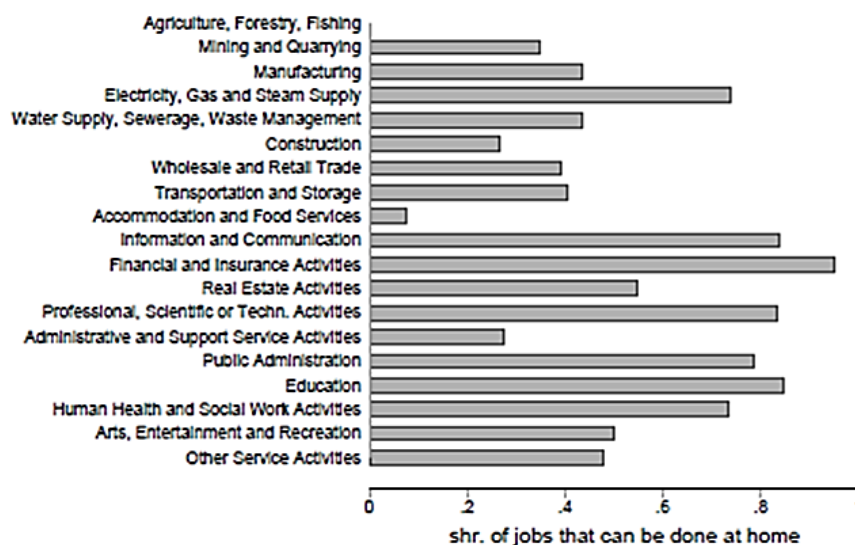


Figure 1: Share of Jobs that can be Performed at Home  
(Source: Fadinger and Schymik (2020, p.110))

Performing job tasks at home includes a strong interference between work life and non-work life: a situation which puts additional pressure on individuals to achieve balance and set boundaries between the two (Peeters et al., 2005). Consequently, this interference can influence individual willingness to accept the chance of home-working when offered. Oettinger (2011) suggests that basing work at home is related to workers with high opportunity costs of being away from home. Haddad, Lyons, and Chatterjee (2009) list some of the elements relevant to the willingness to work from home such as wasting time in traffic, working longer hours and other household members appreciating the employee's staying home and working. Dey, Frazis and Loewenstein (2020) suggest that, from the employers' point of view, willingness to offer the practise of home-working may be limited. Firms may be unwilling to let their employees to work from home since it may require additional investments in internet access and/or computers. Another concern that employers might have is monitoring the behaviour of employees working at home and the ethics of the use of surveillance software in order to control the workers' habits. Another issues interesting to the economists is the link between home based work and income. This relationship is derived from the worker's productivity that may differ if the worker is working at home rather than in the usual workplace (Mongey, Pilossoph, and Weinberg, 2020). These authors find that who are not able to work from home are more likely to be lower income and without college degree. Dingel and Neiman (2020) find a strong positive correlation between median household income and the share of jobs performed at home. On the sample of 85 other countries, they also found a lower share of home based jobs in lower-income economies.

### 3. RESEARCH SAMPLE AND METHODOLOGY

The paper is done based on the micro-data from Croatian Labour Force Survey (LFS) undertaken by Croatian Bureau of Statistics for the period 2008-2018. LFS is done in accordance with EU Council Regulation and gives the information about the number of people usually or sometimes working from home, their demographic characteristics (gender, age, educational level, marital status and the number of kids in the family), as well as the data about the firms (firm size, economic activity). Average number of observations per year is 10266, with a maximum of 13200 and minimum of 8499 observations.

How many Croatian workers were working remotely before the pandemic? Table 1 sums the evidence from the LFS on the number and share of people usually, sometimes, or never working from home per year.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Person usually works at home</b>	157	136	106	117	113	108	165	175	160	170	194
	0.9%	0.9%	0.7%	0.9%	0.9%	0.9%	1.3%	1.3%	1.4%	1.5%	1.5%
<b>Person sometimes works at home</b>	382	350	315	301	310	343	277	377	415	498	605
	2.3%	2.2%	2.2%	2.2%	2.4%	2.9%	2.2%	2.8%	3.6%	4.3%	4.6%
<b>Person never works at home</b>	16392	15495	14056	12961	12298	11278	12389	12910	10951	10954	12395
	96.8%	97.0%	97.1%	96.9%	96.7%	96.2%	96.6%	95.9%	95.0%	94.3%	93.9%

*Table 1: Incidence of work from home among workers in Croatia  
(Source: LFS 2008-2018)*

As it can be seen from table 1, the share of people working from home in Croatia is not a large one. However, the trend of home-based work had a slight tendency to increase. Share of people usually working at home increased from 0,9% in 2008 to 1,5% in 2018. In 2008 only 2,8% of workers were sometimes working from home, compared to 2018 when this share almost doubled reaching 4,6%.

Still, there were more than 90% of the examinees that never worked from home. The aim of this paper is to explore the characteristics of workers working from home, including also available firm characteristics. Table 2 provides insights into variables used in the model.

Dependent variable		
Work from home (usually or sometimes)	0 – Person never works from home	
	1 – Person sometimes or usually works from home	
Independent variables		
Gender	Binary variable	1 - Male
		2 - Female
Age	Categorical	5 year categories
Educational level	Categorical	1 - Low
		2 - Medium
		3 - High
Marital status	Categorical	0 – Widowed
		1 - Single
		2 - Married
Children younger than 15 in household	Binary	0 - No
		1 - Yes
Self-employment	Binary	0 - No
		1 - Yes
Economic activity	Categorical	Industries classified by NACE Rev.2 from 2008
Size if the firm	Categorical	1 – Less than 10
		2 – 11-49
		3 - More than 50
Region	Binary	3 – Adriatic Croatia
		4 – Continental Croatia

Table 2: Variables in the model  
(Source: LFS 2008-2018)

Generally, the function explored in the paper is as follows:

- *Probability of home-work =  $f(\text{gender, age, educational level, marital status and number of kids younger than 15, part-time/temporary employment, self-employment, firm size, economic activity})$*

To examine thoroughly the elements influencing probability of work from home, panel logistic regression is estimated. Reference category of variables is always the first one.

Further analysis is focused on establishing the link between home-working and income level. Home-work variable is defined as a dummy variable, taking a value of 1 if a person is working from home. Income levels proxy is defined as monthly pay from the main job divided into deciles. For establishing relationship between variables, correlation coefficient was used.

#### 4. RESEARCH RESULTS AND DISCUSSION

Despite the low prevalence of home-based work in Croatia in the pre-pandemic era, examining the characteristics of individuals who can work from home can help policymakers to target policies towards particularly affected workers in the post pandemic period.

Table 3 provides insights on elements influencing the probability of homeworking in Croatia for the 2008-2018 period.

Log likelihood = -12800.973		Wald chi2(40)		= 3637.06	
		Prob > chi2		= 0.0000	
HOMWK_dumy	OR	Std. Err.	z	P> z	[95% Conf. Interval]
GENDER	.9861016	.0406825	-0.34	0.734	.9095039 1.06915
AGE					
22	.7530943	.2198723	-0.97	0.331	.4249461 1.334642
27	.8900442	.250211	-0.41	0.679	.5130032 1.544198
32	1.311636	.3694343	0.96	0.335	.7552049 2.278044
37	1.622575	.4578469	1.72	0.086	.9332942 2.820921
42	2.178457	.614008	2.76	0.006	1.253816 3.784984
47	1.736305	.4913752	1.95	0.051	.9970931 3.023546
52	1.582024	.4499923	1.61	0.107	.9059343 2.762674
57	1.841829	.525713	2.14	0.032	1.052667 3.222609
62	2.383135	.6865717	3.01	0.003	1.354943 4.191567
EDUCLEVEL					
Medium	1.375592	.1319526	3.32	0.001	1.139827 1.660124
High	4.279761	.415006	14.99	0.000	3.538987 5.175592
MARSTAT#CHILDREN					
0 1	1.429698	.2050532	2.49	0.013	1.079348 1.89377
1 0	.8800852	.0785961	-1.43	0.153	.738768 1.048435
1 1	.9200985	.1421084	-0.54	0.590	.6797779 1.245379
2 0	.7789149	.0597229	-3.26	0.001	.6702311 .9052226
2 1	.7985812	.0665281	-2.70	0.007	.6782773 .940223
PARTTEMP	1.097602	.0617238	1.66	0.098	.9830538 1.225497
SELF_EMPLOYED	3.12808	1.058408	3.37	0.001	1.611639 6.071387
NACE1					
B	2.763924	.9497753	2.96	0.003	1.40937 5.420346
C	2.771913	.517537	5.46	0.000	1.922445 3.996735
D	1.836521	.5402378	2.07	0.039	1.031819 3.268801
E	1.241525	.375854	0.71	0.475	.685909 2.247215
F	2.20583	.4491297	3.89	0.000	1.479989 3.287649
G	2.449947	.4637918	4.73	0.000	1.690512 3.550544
H	1.937807	.3972752	3.23	0.001	1.296592 2.896128
I	1.916994	.3958121	3.15	0.002	1.278994 2.873247
J	14.84621	2.834171	14.13	0.000	10.21221 21.583
K	3.969093	.8179351	6.69	0.000	2.650202 5.944339
L	20.95506	5.125864	12.44	0.000	12.97402 33.84567
M	7.613955	1.455515	10.62	0.000	5.234692 11.07464
N	1.860368	.4562645	2.53	0.011	1.15037 3.008571
O	2.153363	.4243896	3.89	0.000	1.463391 3.168647
P	8.947394	1.65615	11.84	0.000	6.225014 12.86035
Q	4.817875	.9113563	8.31	0.000	3.325378 6.980235
R	4.750545	1.01175	7.32	0.000	3.129381 7.211548
S	5.37871	1.156768	7.82	0.000	3.528704 8.198627
FIRM_SIZE					
11-49	.5794703	.028518	-11.09	0.000	.5261872 .638149
More than 50	.4974149	.0238054	-14.59	0.000	.4528786 .5463311
REGION	.7000597	.0267073	-9.35	0.000	.6496234 .7544117
_cons	.0159228	.0061521	-10.72	0.000	.0074669 .0339546
/lnsig2u	-3.023952	.4564409			-3.918559 -2.129344
sigma_u	.2204739	.0503167			.1409599 .3448409
rho	.0145602	.0065491			.0060034 .034885
Likelihood-ratio test of rho=0: chibar2(01) = 124.51 Prob >= chibar2 = 0.000					

Table 3: Research results  
(Source: Author's calculation based on LFS 2008-2018)

Parameter estimates and odds ratios are shown in Table 3. Most of the relationships in the model appear to be significant: certain age groups, educational level, marital status combined with the existence of children in the household, type of employment, industry, firm size and region of the household. According to the results, young people, in their early twenties, are less likely to work from home, similarly as in Dey et al. (2020). At the same time, there is a high possibility for the people in their late thirties and early forties to relocate the job tasks at home. As expected, there is the highest possibility of home working for highly educated workers, even four times higher than for those with low levels of education. Generally, working from home is more feasible in jobs with high educational requirements (such as management) and this is in accordance to Mongey and Weinberg (2020) research about vulnerable groups in COVID-19 environment. Low-educated workers are less likely to be able to work from home and, in that sense, more vulnerable in the presence of social distancing. Haddad, Lyons, and Chatterjee (2009) suggest that the presence of small children, and the number of people in the household are related to attitudes towards homeworking. Table 3 shows that marital status combined with the presence of children in the household is statistically significant but, in this case married people with or without children are less likely to work from home. This also implies a possible interference between home and job tasks and handling both at the same time. According to this research, homeworking is more likely to be among self-employed workers in micro sized firms, which is also as expected since micro firms are more flexible and easier to reorganise when needed. Industries that indicated a high probability of home working even before COVID-19 are Information and Communication and Real Estate Activities, both highly digitised. Following digitalisation trends, the Information and Communication sector is rapidly increasing and it is to be expected for the share of people working in this sector to increase even in the future. One more element's influence of homeworking is investigated, and that is the region in which households are situated. According to the results it is more likely for people in Adriatic Croatia to be working from home, compared to those in Continental Croatia. The next step was to investigate the relationship between home-working and income levels in Croatia. Table 4 provides the results of the test.

Income Decil	Work at home	
	No	Yes
1	97,4%	2,6%
2	98,0%	2,0%
3	99,1%	0,9%
4	98,8%	1,2%
5	98,6%	1,4%
6	98,2%	1,8%
7	97,4%	2,6%
8	96,0%	4,0%
9	94,6%	5,4%
10	92,5%	7,5%
Kendall's tau_b	,077**	
Spearman Correlation	,090**	

Table 4: Relationship between income levels and work from home

\*\* Correlation is significant at the 0.01 level (2-tailed).

(Source: Author's calculation and LFS 2008-2018)

Previous table provides insights of homeworking distribution against income levels. Income level is divided into deciles and it can be seen that the share of people working from home increases with income levels.

Among people earning the highest income there is 7,5% of them working from home, which is in accordance with previous researches (Saltiel, 2020). Dingel and Neiman, (2020) also find that home based jobs typically pay more compared to jobs that cannot be done at home. Correlation coefficients are also statistically significant, showing a small and positive relationship between the variables.

## 5. CONCLUDING REMARKS

This research makes several contributions to the Croatian literature on the feasibility of home-working. Firstly, it provides the information on the recent trends in the labour market concerning working from home along with related workers' characteristics. In the period from 2008 share of people performing job tasks at home was steadily increasing and in 2018 approximately 6% of workers were usually or sometimes working from home. Importance of home based job tasks performance became evident during 2020 when many workers were unable to travel to work. In that sense, identifying the jobs that can or cannot be done from home is useful for predicting future trends and for future policy making. Furthermore, research showed that there are several socio-demographic and economic characteristics influencing the probability of home-working. More educated workers, in their late thirties and early forties, self-employed and in micro firms are more likely to be working from home. Sectors in which home work is especially pronounced are Real estate activities and, of course, sector of Information and Communication. This trend is expected to continue in the future, especially concerning widespread digitalisation and rapid development of IT sector. Finally, the link between home based work and income is established. Correlation analysis showed a statistically significant and positive relationship between the two, implying that jobs performed from home typically pay more than those at a traditional workplace. This research provides grounds for the further analysis of the matter. Main limitation of current study is lack of the data for LFS 2020 which are still not available.

## LITERATURE:

1. Bick, A., Blandin, A., & Mertens, K. (2020). Work from home after the COVID-19 Outbreak.
2. Dey, M., Frazis, H., Loewenstein, M. A., & Sun, H. (2020). Ability to work from home. *Monthly Labor Review*, 1-19.
3. Dingel, J. I., & Neiman, B. (2020). *How many jobs can be done at home?* (No. w26948). National Bureau of Economic Research.
4. Fadinger, H., & Schymik, J. (2020). The costs and benefits of home office during the covid-19 pandemic: Evidence from infections and an input-output model for germany. *COVID Economics: Vetted and Real-Time Papers*, 9, 107-134.
5. Felstead, A., Jewson, N., Phizacklea, A., & Walters, S. (2002). Opportunities to work at home in the context of work-life balance. *Human resource management journal*, 12(1), 54-76.
6. Haddad, H., Lyons, G., & Chatterjee, K. (2009). An examination of determinants influencing the desire for and frequency of part-day and whole-day homeworking. *Journal of Transport Geography*, 17(2), 124-133.
7. Haddad, H., Lyons, G., and Chatterjee, K. (2009). An examination of determinants influencing the desire for and frequency of part-day and whole-day homeworking. *Journal of Transport Geography*, 17(2), 124-133.
8. Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. *Family relations*, 50(1), 49-58.

9. Mongey, S., & Weinberg, A. (2020). Characteristics of workers in low work-from-home and high personal-proximity occupations. *Becker Friedman Institute for Economic White Paper*
10. Mongey, S., Pilossoph, L., & Weinberg, A. (2020). *Which workers bear the burden of social distancing policies?* (No. w27085). National Bureau of Economic Research.
11. Oettinger, G. S. (2011). The incidence and wage consequences of home-based work in the United States, 1980–2000. *Journal of Human Resources*, 46(2), 237-260.
12. Peeters, M. C., Montgomery, A. J., Bakker, A. B., & Schaufeli, W. B. (2005). Balancing work and home: How job and home demands are related to burnout. *International Journal of Stress Management*, 12(1), 43.
13. Saltiel, F. (2020). Who can work from home in developing countries?. *Covid Economics*, 7(2020), 104-118



## KNOWLEDGE GOVERNANCE IN THE TERMS OF CHANGE

**Mariya Peeva**

*Economic Research Institute at Bulgarian Academy of Sciences, Bulgaria  
mpeeve@mail.bg*

### **ABSTRACT**

*A key aspect of the nowadays high dynamically transforming world is the wide range of issues related to knowledge governance. The focus of the article is put on identifying main aspects of organizational adaptation in business organizations in the terms of continuous change of the external environment. The aim of the author is to reveal and evaluate the interaction between the infrastructural elements of knowledge governance in a dynamically changing surrounding. The main thesis is that speed of application of knowledge, combined with organizational flexibility, applied in a synergistic combination of information processing capacity, information technology and creative potential of people in organizations significantly contributes for overcoming critical changes. The ability to govern effectively the assets of knowledge will determine the identity and competitiveness of modern organizations.*

**Keywords:** *change, knowledge governance, organizational resources, human factor*

### **1. INTRODUCTION**

Public development in today's interconnected and interdependent world is dominated by high dynamics in the economic and social space. Technological change and globalisation of markets turn industrial enterprises into knowledge-based systems. At the same time, crisis phenomena arise that change the established social and economic order. The changes become an integral part both for the development of organizations and for preserving their existence, as they foster self-analysis and hold the potential for transformation. Organisations that respond quickly and effectively to their ever- changing surroundings will be able to turn uncertainty into a strategy and find direction by redirecting priority areas of activity. Solutions focus on adapting through flexibility, acquiring new competences, increasingly skillfully combining information technology with the creative, innovative capabilities of people and organisations. For the modern organization, the totality of the processes of generation, application and management of knowledge combined with skillful analysis of the ever- changing environment, in a skillful choice of strategic direction by senior management is imperative. This article aims to present key components of the organizational adaptation of business organizations in a dynamic and ever-changing external environment. In this regard, knowledge management and the speed of its application are considered, combined with organisational flexibility applied in a synergistic combination of information technology and creative potential of people in organisations in overcoming critical changes.

### **2. KNOWLEDGE AND CHANGE MANAGEMENT–CONCEPTUAL HIGHLIGHTS**

Knowledge is a resource for economic development. Its meaning is reflected in modern economic paradigms and is based on basic ones from the works of Joseph Shumpeter, Peter Drucker, Michael Porter and others. Looking at the nature of the knowledge economy, Peter Drucker points to three main ways of applying knowledge "in order to create changes in the economy and also in society", which "must be used together and simultaneously." [2]. The author shall take into account the continuous improvement of the product and service process, the use of existing knowledge and the original innovation. Knowledge is essential "as a source of economic development in the form of ideas – knowledge that reflects the essence and content of the objective processes and phenomena of the surrounding reality, containing not only contemplative but active, actual elements, namely the purpose, perspective of knowledge and

practical transformation of reality" [8]. Knowledge is a key resource, and its creation, absorption and use is the foundation through which change can take place and accelerate economic growth. It is important to note that "for the modern knowledge economy, personality becomes the most important resource and source of its development" [7]. Knowledge is embodied in people and in the structure of the organization. This suggests that any deviation from the established order can seek hidden reserves in people in organizations and achieve positive or negative changes. Knowledge management is inherently based on the assumption that a person fails to fully develop the capacity of his brain, and that the organizations themselves fail to make the most of the potential at their disposal. Thus, if the organization can increase the effectiveness of the use of knowledge, then the benefits for overall organizational performance will be significant. It is important to note that "for the modern knowledge economy, personality becomes the most important resource and source of its development" [7]. Knowledge is embodied in people and in the structure of the organization. This suggests that any deviation from the established order can seek hidden reserves in people in organizations and achieve positive or negative changes. Knowledge management is inherently based on the assumption that a person fails to fully develop the capacity of his brain, and that the organizations themselves fail to make the most of the potential at their disposal. Thus, if the organization can increase the effectiveness of the use of knowledge, then the benefits for overall organizational performance will be significant. Information and knowledge are a significant resource for adaptation in changing economic conditions and a source of economic value. Knowledge management is a complex and far-reaching concept. The overall concept of knowledge management took shape in the 1980s, when senior managers were forced to study the use of knowledge as a resource in the field of intellectual assets. Knowledge management is seen above all in two main aspects: as information systems for information management and as human resources capable of generating, disseminating and applying knowledge in all areas of the organisation's activities. For both complementary approaches, the role of a person with his potential and an inherent propensity for creativity and an unconventional approach to problem solving is at the forefront. From this point of view, knowledge management is first and foremost an active use of human potential to achieve organisational goals and strategic advantages. The concept of knowledge management must be applied taking into account its overall nature in relation to other areas of governance. Generally accepted theoretical concepts of knowledge management focus on individual processes, functions and models and bring out the possibility of achieving competitive advantages for the organization by creating and applying new, more effective knowledge. The importance of knowledge management also lies in the following:

- through human capacity in organisations to effectively manage changes and changes, because managing the human side of change is key to achieving the objectives.
- In a dynamic environment, the problem of changes in organisations is particularly relevant and should be addressed in its specificity: changes take place in all major social and economic spheres and directly and/or indirectly affect the external and internal environment of organisations.

Among the factors causing changes are: changes in the economic and/or political situation; changes in legislative or state regulation; technological change; innovations affecting organisational behaviour; unforeseen events, crises. The change is seen as an opportunity for survival in response to changes in the environment. On the other hand, organisations that are in a continuous process of change generate a continuous process of development. Effective ways of managing change are needed. In this regard, management actions should be seen as a structured process configured by a comprehensive set of tools for individual and organizational change.

The effectiveness of management impact must be focused on changing people's perceptions and behaviours in order to achieve complete dedication and reduce resistance to change through communication, training and motivation until the new way of performing the work tasks is perceived. The results are related to the creation of a new working environment, the introduction and design of new technological and working processes and the attraction of people to all areas of the activity of the organizational unit. The lack of organizational readiness to carry out the change can cause a crisis, because the changes caused by the influence of the external environment reflect on the organization by destroying the system from its interconnected elements. The management of change is also a process of management of knowledge, experience gained, preliminary preparation and specific competencies in the exclusive role of senior management in reaching a new state of the organizational unit. "Everyone has already accepted that change is inevitable," P. Drucker [3] writes, and emphatically emphasizes that "leaders of change are the only ones who survive in times of speedy, structural change. The leaders of change see it as an opportunity and know how to benefit, both within and outside the organization." [3]. In response to the challenges that have arisen as a result of changes, the author shall indicate the uncon wordless need for policies of change [4] through the formulated principles:

- to abandon the past – if we do not break away from the past, it would not be possible to create a future;
- organized improvement – systematic and continuous improvement of everything a company does externally and internally, which results in transformation of activity, innovation and fundamental change;
- exploiting success – focusing efforts on opportunities to exploit their own successes to serve as the basis for future successes;
- creating change – the implementation of this policy fosters awareness of change as an opportunity by the whole organization.

The leaders of change play a key role in transformation in the orientation of the organization in the face of rapid changes in technology, technology, organization and management of the activity. Their quest for change puts every product, every service, every process, every market, every distribution channel, every customer and application to check, and this is done on a regular basis. People of strong character and proven qualities are needed. Especially important in the context of dynamic changes is the concept of "flexibility", theoretically formed in three main directions: flexibility of management, flexibility of production and flexibility of products. The concept is especially applicable in conditions of intermittent and variable working environment, shortened product life cycles, the presence of technological innovations and changed requirements and expectations of potential customers. Flexibility is an opportunity to respond to environmental uncertainty by purposefully configuring all elements of the organisational system in order to preserve the stability of the organisation as a whole. The implementation of this complex tool takes into account the parameters of a specific business environment, and its potential depends on specific organizational, informational, human and technical factors. The results of the implementation of flexible solutions are related to the creation of a new working environment, the introduction and design of new technological and working processes and the attraction of people to all areas of the activity of the organizational unit. The lack of organizational readiness to conduct change can cause a crisis because the changes caused by the influence of the external environment reflect on the organization by destroying the system from its interconnected elements. The importance of implementing a concept of knowledge management relates both to the internal organisational structure (increasing the efficiency and flexibility of governance, developing people and enhancing creative performance) and to the external environment (effective adaptation to change, positive

image of the organisation, successful partnerships, etc.). In order to achieve the expected benefits of the implementation of the concept of knowledge management, the organisation needs to ensure an adequate and reasoned attitude on the part of human resources as the most important infrastructure element of the system and as a carrier of knowledge. In this regard, a valuable contribution is the successful implementation of:

- organizational structures – it is appropriate to build on a team principle to interact between the external environment in relation to organizational goals and company strategy;
- training – specialized training approach, focused on speed transfer of knowledge; exchange of ideas between specialists and experts from different fields of knowledge; building an adequate attitude towards changes in the organisation;
- organizational and corporate culture – these are the so-called invisible values of the organization, which contribute to both external adaptation and internal integration in a dynamic and variable socio-economic environment;
- forming teams of people with creative potential, striving to improve and share knowledge, teamwork abilities and a dynamic environment.

Revealing the motivating role of culture in the organization, P. Naydenova notes that "the culture of the organization is a force that guides group behavior in order to adapt it to its surroundings"[5]. In this regard, it was found that organisations that create a strong culture are able to meet the needs of the dynamically developing consumer-oriented world because propose a new governance paradigm aimed not only at improving the efficiency of work, but also to increase the satisfaction and well-being of the people who are their productive capital" [6]

The importance of implementing a concept of knowledge management relates both to the internal organisational structure (increasing the efficiency and flexibility of governance, developing people and enhancing creative performance) and to the external environment (effective adaptation to change, positive image of the organisation, successful partnerships, etc.). In order to achieve the expected benefits of the implementation of the concept of knowledge management, it is necessary for the organisation to ensure an adequate and reasoned attitude on the part of human resources as the most important infrastructure element of the system and as a carrier of intellectual and creative capacity.

### **3. INFORMATION AND INFORMATION TECHNOLOGY - INFLUENCES IN THE CONDITIONS OF CHANGE**

Among the main drivers of the knowledge-based economy are information and communication technologies, which, by supporting information exchange, allow for an exceptional increase in the speed of the transfer of all types of information and knowledge. The ability to respond quickly and efficiency in providing real-time decision-making information accelerates all workflows. Artificial intelligence and the digitization of more and more activities dictate interdependencies between humans, machines and technology. Flexible approaches are needed in the broad scope of the IT paradigm, given its widespread deployment in the field of human action. A material basis of modern technological change are the scars described by Manuel Castells in "The Rise of the Network Society": [1]

- the information is raw material - information is not just information affecting the technology; technologies influence information;
- penetrating power of the effects of new technologies – all processes of our existence, as well as any human activity are directly influenced by the new technological environment;
- the network logic of each system or set of connections - the morphology of the network is reported as well adapted to the increasing complexity of interaction and unpredictable patterns of development created by creative power;

- the flexibility – it is argued that not only are processes reversible, but organisations and institutions can be changed and fundamentally transformed by regrouping their components. Distinctive is the ability of the reconfiguration structure - a crucial property for a society characterized by continuous change and organizational inconsistency;
- bringing together individual technologies into a highly integrated system – technological pooling will increasingly expand towards increasing interdependence.

Today, the role of information technology in accelerating all business processes and activities is indisputable, and information is a significant capital for organizations based on information platforms. By building information domains, information exhibits its intrinsic strategic value, which gives significant advantages to modern organizations and contributes to their high adaptability and competitiveness. In an environment of uncertainty and change, the need for reliable information and management technology to make decisions, take action and deliver results is increased. A coherent implementation of a conceptual framework based on strategic thinking is needed. From the skills at the heart of strategic thinking to modern information approaches depends on providing quality data for operational decision-making in a limited time. At the same time, the search for problem points can be combined with different techniques and methods of cognitive and informational improvement of the domain. The interaction between human potential and the effective use of information depends on defining complex problems and seeking solutions. Internet technologies can thus contribute significantly to improving the organizational management system in critical situations. The intrinsic characteristics of information technology provide important and reliable information in real time (sometimes at the first, critical hours), people are real participants in events and communication and become real participants in the exchange of ideas through provided feedback channels. In this way, the management system becomes flexible, open to complicity in the information flow, and people are involved in the processes of generating ideas, planning actions and activities. Through Internet communication it is possible to organize microforums, microgrids to discuss specific cases and problems by experts with specific expertise. Thus, the possibility of providing expert solutions increases, and at the same time increases the likelihood of overcoming unwanted changes/ changes. It is also widely known the experience of carrying out online training and training of people in organizations. The effectiveness of the use of information technology is also associated with other characteristics: easy portability and mobility, ease of use of software and technology, minimal cost of using technology, reduced training and communication costs, flexibility and stability. The importance of the so- called "no- fly zone" is growing. "Big data" in making informed decisions to overcome externally driven circumstances and changes. This type of data can provide a huge amount of information related to events and hazards occurring or imminent and therefore provide more adequate responses. The listed advantages are reliable means of intervention in circumstances dictated by a non- standard environment. It is appropriate, in the circumstances of changes, to improve the organisation's information approach and information strategy, to improve the quality and reliability of information, to reduce management efforts to access the volume, quality and reliability of information; promote the development of information and communication skills at all levels of implementation of activities. In a dynamic and volatile environment, the interaction between the IT achievements and the creative solutions of people in organisations with a justified strategic and operational vision can significantly contribute to a successful adaptation of the organisational system. Sufficient flexibility, conviction and motivation is needed in the implementation and implementation of the decisions taken.

A possible approach to merging key elements of a changed environment into synergy is:

- collection and analysis of data and information from the external and internal environment for the organization;
- description of the problems and opportunities in the dominated participation of the interpreted information;
- generating new proposals and solutions using the knowledge and experience available to the organization and newly acquired information;
- taking a strategic direction to take action;
- diagnostics of the environment in order to monitor its current and modification;
- making corrective changes in response to new developments.

The implementation of such an approach, strongly dominated by the participation of the human factor as a carrier of specific and creative capacity, can significantly contribute to achieving change and a new state in an unstable environment. There is additional potential in analyzing the interconnections between the processes of: analysis of the external versus the internal environment; acquisition, retention and systematisation of knowledge; transfer and application of knowledge. When setting up interdisciplinary teams of specialists, it is possible to review and systematize valuable information that can be re-invented into new knowledge and serve future projects or in other circumstances. In the presence of organizational processes aimed at implementing a synergy complex of knowledge management, capacity (above all expert) of people and information technologies, the possibility of transformation and shaping a distinctive identity in adaptation in a changed environment is real. For the speed transformation, it is important that the resource provision of the processes by management and the appropriate (depending on the specifics of the activity) selection of information and communication technologies is important. The main resources in the implementation of the adaptation processes are people and the knowledge they have in growing professional and personal competencies. Well-known companies such as McKinsey, KPMG, Xerox, Shell and others can be identified as organisations applying the value of knowledge. Their company philosophy is oriented towards selection and investment in people, flexibility, adaptability and dialogue with the environment in which they operate. This way they connect more closely with the end user, create an active dialogue, and get feedback on the dynamics of changes. Key achievements of information and smart technologies are their modifying role in terms of thinking and decision-making approaches. Modern network and interactive technologies put awareness at the heart of communications and dynamize the implementation of informed choices. People's opportunities are growing through renewal and knowledge creation. In turn, these processes lead to continuous improvement, through which prerequisites arise for the implementation of improvements, change and development.

#### **4. CONCLUSION**

Change is usually about progress. For modern knowledge management, a number of challenges are outlined in the context of change, but also numerous perspectives – economic, social, management, personal and educational. The advancement of technology proves its ability to create touchpoints between individual technological areas through a common digital language. Trends in the development of new technologies will outline their direct or indirect impact on organization management approaches and knowledge in an unstable environment. The presence of intelligent information and communication systems such as cloud services, automated knowledge retrieval processes, intelligent communication and communication platforms is growing. The importance of these technological solutions is palpable at an individual, group and management level, and turning them into tools to overcome a critically changed environment will certainly strengthen their role and presence in all organizational and

management and societal spheres. The focus in the organizations that will function successfully in the future will be in the management of key in- house factors and intellectual assets. The digitization of activities and business processes will be prioritized, and the growing interaction between people and technology will require flexible approaches in the management, preparation and motivation of collaborators in the organization. In such conditions, a person's strength is determined by his teamwork abilities, the interdisciplinaryity of the knowledge and competencies possessed, the mental resilience of working in a dynamic environment, digital skills, individual flexibility and adaptability, emotional intelligence. Change from reaction will become a way of thinking.

#### **LITERATURE:**

1. Castells, M. (2004). The rise of the network society. Sofia: LIK, pp.77-81.
2. Drucker, P. (2000). The post-capitalist society. Sofia: LIK, p.198.
3. Drucker, P. (2000). Management challenges of the 21st century. Sofia: Classic and Style, pp.78-79.
4. Drucker, P. (2000). Management challenges of the 21st century. Sofia: Classic and Style. pp. 80-88.
5. Naydenova, P. (2020). The motivating role of culture in the organization, Journal of the Bulgarian Academy of Sciences (p. 64). Sofia: Academic Publishing House "Prof. Marin Drinov".
6. Naydenova, P. (2020). The motivating role of culture in the organization, Journal of the Bulgarian Academy of Sciences (p. 65). Sofia: Academic Publishing House "Prof. Marin Drinov".
7. Tchobanova, R., Tasev, Al., Milanova, A., Naydenova, P. (2013). Knowledge as an economic resource. Sofia: Academic Publishing House "Prof. Dr. Sc. (Econ.) Marin Drinov", pp. 18-19.
8. Tchobanova, R., Tasev, Al., Milanova, A., Naydenova, P. (2013). Knowledge as an economic resource. Sofia: Academic Publishing House "Prof. Dr. Sc.(Econ.) Marin Drinov," pp. 52-53.

## REAL IMPACT OF EU FUNDING – QUALITY VERSUS QUANTITY

**Marko Sostar**

*Polytechnic in Pozega  
Vukovarska 17, 34000 Pozega, Croatia  
msostar@vup.hr*

### **ABSTRACT**

*EU funds as grants encourage the reduction of regional inequalities through the development of less developed areas. Most of the stakeholders are gravitating to the ideal situation, in which whole available funds will be attracted and implemented, therefore efficacy of territorial unit is most often and simplest measured by the number of projects, and by the amount of money implemented through this projects. More development projects do not necessarily mean more benefits for a particular area. It is necessary to direct resources well in order to achieve maximum effects. This paper shows the importance of smart planning and strategic thinking through the analysis of the impact of funded projects on development. The survey was conducted through a survey questionnaire on a sample of 78 consultants for EU funds where their experiences and impacts of the projects in which they participated were analyzed.*

**Keywords:** *EU funds, impact, development*

### **1. INTRODUCTION**

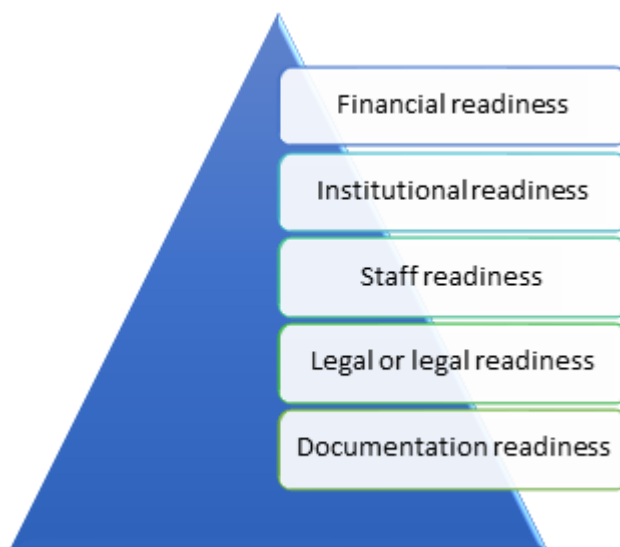
European Union funds as an available source of funding for various project ideas, as a factor that definitely has the potential to contribute to local, regional and national socio-economic development, are an increasingly hot topic of discussion in professional and scientific circles. Stakeholders who deal daily with the preparation and implementation of projects, monitoring implementation, programming, evaluation, reporting and all other activities, or those for whom funding through EU funds is the job, are mainly focused on a single goal that is very clearly and unambiguously defined, and that is to realize as many funds as possible through as many projects as possible. The goal thus defined is difficult to finally and definitely fulfill, that is, to achieve a kind of absolute utilization of European Union funds. Not because some of the stakeholders are not capable of it, so the funds will remain unused, but because the implementation of projects is actually the implementation of planned activities and they do not have to be realized every time and in the way planned. In addition, on the other hand, it is impossible to reach the level that all prepared projects achieve funding. When we talk about the ways in which the success in the achieved finance from the European Union funds is measured, there are different measurement models. Stakeholders employed at the operational levels of project implementation measure the quality of their work by quantitative indicators of implemented projects. However, conditionally speaking, higher level stakeholders, who care for and are responsible for the socio-economic development of their institution, company, association, city, municipality, county, up to the national level, must certainly take into account the qualitative indicators of projects that have achieved funding through European Union funds. It is illusory and unrealistic to assume that all these stakeholders will deal with this, or that they will approach the evaluation of projects in this way, but they certainly need to expand their narrow perception of the definition of success in financing projects from EU funds. The problem is that we measure what we aspire to, or we measure what is relatively easy to measure. Thus development is measured mainly through gross domestic product which is easy to measure and has therefore become a fixation of economists around the world (Stigitz, 2009). Similarly, the value and number of projects is really just one of many variables that measure the success in achieving funding for project ideas from European Union funds.



## 2. IMPACT OF EU FUNDING

The socio-economic impact of the Structural Funds can be viewed from different perspectives or points of view, but there are two particularly represented. First, there is the economic point of view, since the purpose of the European Structural Funds is to encourage economic and social convergence, and that convergence is expressed and measured through macroeconomic variables such as output, per capita income and employment. Second, but no less important and indeed closely related to the previous one, is the contribution of these funds to increase the main factors influencing the medium and long-term competitiveness of the economy (Ruiz, 2008).

Achieving project financing is one side of the perception and measurement of performance in the use of European Union funds, and as such, it is determined by the capacities available, and which are necessary for the preparation and implementation of projects. The fact that a region with significant absorption capacities is at the same time more likely to withdraw more funds and implement more projects in its area is clearly and unequivocally valid here. But what is independent of the size and absorption capacity of the region, is that another step can always be taken in the direction of increasing the absorption capacity. True, these capacities are partly pre-defined and more difficult to influence, but there are also some capacities that can and must be influenced, of course assuming that we want to contribute significantly to socio-economic development by using EU funds. Thus, the absorption capacities for the effective use of European Union funds are observed by some authors through the aspect of readiness for the necessary capacities (Figure 1).



*Figure 1: Absorption efficiency factors  
(Source: Daszuta, 2010)*

The degree of readiness can show us how efficient we will be in attracting the funds available to us. Absorption capacities can also be defined according to three main factors as (Duduiala-Popescu, 2009): macroeconomic absorption capacity, financial capacity and management-administrative capacity. The macroeconomic absorption capacity can be defined and measured in terms of GDP, where the ceiling for the Structural Funds and the Cohesion Fund together is usually defined as 4% of a country's GDP. Financial absorption capacity can be defined as the ability to co-finance EU-funded programs and projects, the ability to plan and guarantee national contributions in EU multiannual budgets, and the ability to collect these contributions from several partners (national, regional and local authorities, private bodies), interested in implementing a program or project. Administrative capacity can be defined as the ability and skill of central, regional and local government to prepare appropriate plans, programs and

projects on time, as the ability to decide on programs and projects, then the ability to organize coordination among major partners, ability to cope with administrative and reporting requirements, and the ability to carry out funding and supervision adequately, avoiding irregularities as much as possible. Most measurements of the impact of funds, especially macroeconomic impact, are expressed through a shift in GDP. However, many authors argue that GDP as a measure shows a number of shortcomings. GDP cannot be used per se as a measure of social welfare, or a measure to compare outputs and living standards in different economies or in a given economy over time. u (non-market products and services, informal economy, late GDP reports and others). It can be seen from the above that there are many things that take place in a country's economy that cannot be estimated exactly and are not included in the calculation of income, so gross domestic income per capita cannot always be taken as a real measure of social welfare. (Cini et al., 2011).

### **3. STRATEGIC PLANNING AND MANAGEMENT**

the goal of every region, institution, association and even every stakeholder-beneficiary of funds, should be the preparation and implementation of quality projects. The quality of the project can be measured by several criteria, so a quality project will have a larger number of end users, and each of the users will benefit more. A quality project will have greater added value, it will significantly contribute to the environment in which then such a project will contribute more to the quality or improvement of the quality of the socio-economic condition of the environment in which it is implemented. The presence of quality projects does not mean that there are no bad projects that are financed and implemented in an area. On the contrary, sometimes, due to the realized financing for a specific project, funds are released for another, less specific or less justified project. Strategic planning and management is the key to realizing quality projects at the right time with minimum costs and maximum effects. When we make decision about the necessary activities of an individual project, it is necessary to take into account all available information. Using existing decision-making models, we will minimize possible errors or eliminate them completely. Decision models are defined as mathematical models and techniques in decision analysis that deal with prescriptive choice theories. They answer the question of how exactly a decision maker should behave when faced with a choice between those activities in which results are obtained based on their chances or the activities of competitors. Decision analysis is a process that allows the decision maker to select at least one option from a set of possible decision alternatives. In terms of results, there is uncertainty about its realization in the future (Barković, 2009). Public institutions, counties, cities and municipalities have the task of planning wisely through their strategic documents which should give a clear direction for investment and project development. The impression left by the people who make the strategies, the people who coordinate the making of such strategies, is that in most cases such strategies are just the necessary documents that need to be made, purely to fill out the form. The only thing that matters to them is that there are enough priorities and goals in the strategies, so that the most diverse projects can fit into them. Thus, the documents lose their quality and cannot be considered as a planning basis, let alone a basis for directed development. Unfortunately, most of the above stakeholders thus participate in the drafting of such documents, both for themselves and for stakeholders from higher positions, and consequently most documents are such that vaguely and insufficiently precisely define where a county or region wants to be. When we talk about development projects, and their place in development strategies, it is clear that they should directly contribute to the fulfillment of priorities, also more or less directly to the realization of a strategically defined vision. Quality development projects are those that contribute the most to the socio-economic development of the areas for which they are being prepared. Once quality development projects of a region are defined, then it is necessary to focus all its capacities on their preparation and realization of financing from one

of the available European Union funds. Decisions are often made as to which project is developmental and which is not, without being based on the measurement of exact indicators. It is a chronic non-use of well-known tools, such as cost-benefit analysis or cost-benefit analysis, then non-use of cost-effectiveness studies, etc. In case of need for public intervention, the costs and benefits of such intervention should be clearly identified and compared (Florio, 2007). Decisions on quality development projects are often made politically, without measuring the specific impact on development, so unfortunately these projects can sometimes be called low-quality. So we are talking about politically based decision-making, and the absence of economic decision-making. We could relate this to the notion of fungicity which says that money entering a country specifically for one purpose releases money for another purpose, and the net effect need not have anything to do with the original purpose (Stiglitz, 2004).

#### 4. RESEARCH AND RESULTS

The research was conducted by the examination method. A survey questionnaire was applied to a sample of 78 consultants in the field of EU funds. Selected respondents are people who know the situation and projects at the local and regional level as well as the challenges faced by stakeholders involved in the development process of a particular area. The survey questionnaire is a closed type where certain statements are offered and the respondents express their agreement or disagreement with them. The aim of the research was to examine the attitudes of consultants regarding the efficiency in the absorption of EU funds as well as whether necessarily more projects mean greater efficiency and level of development of a particular area.

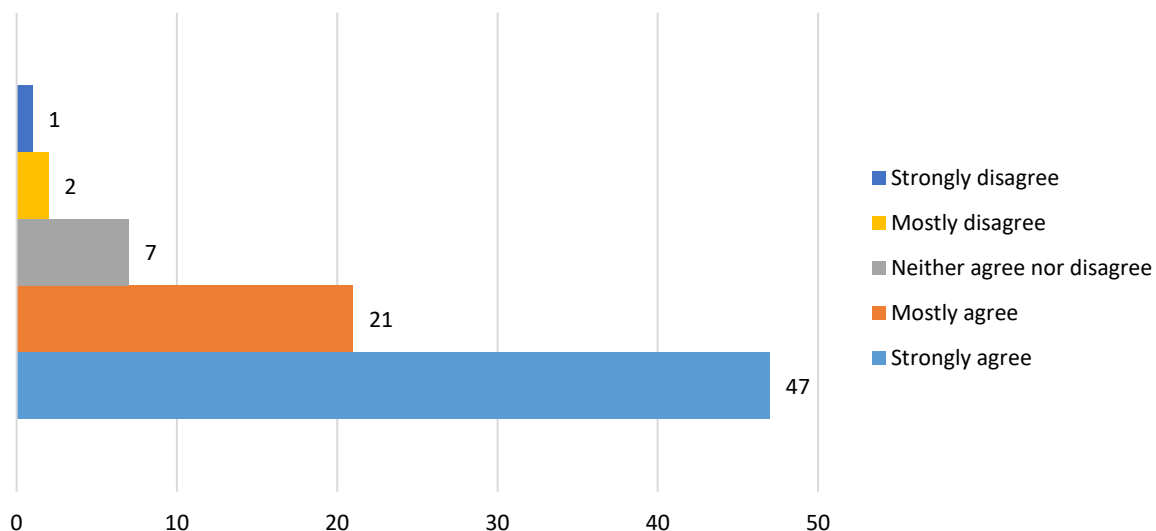
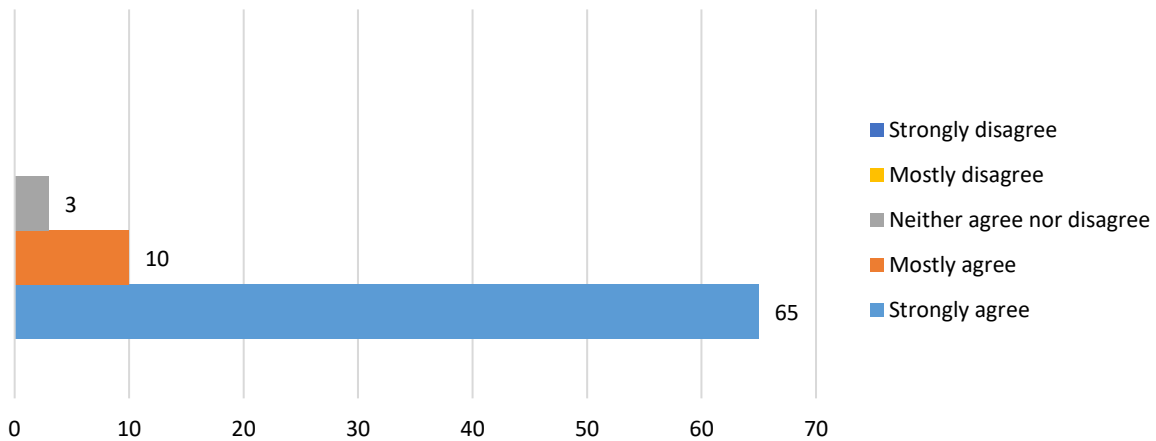


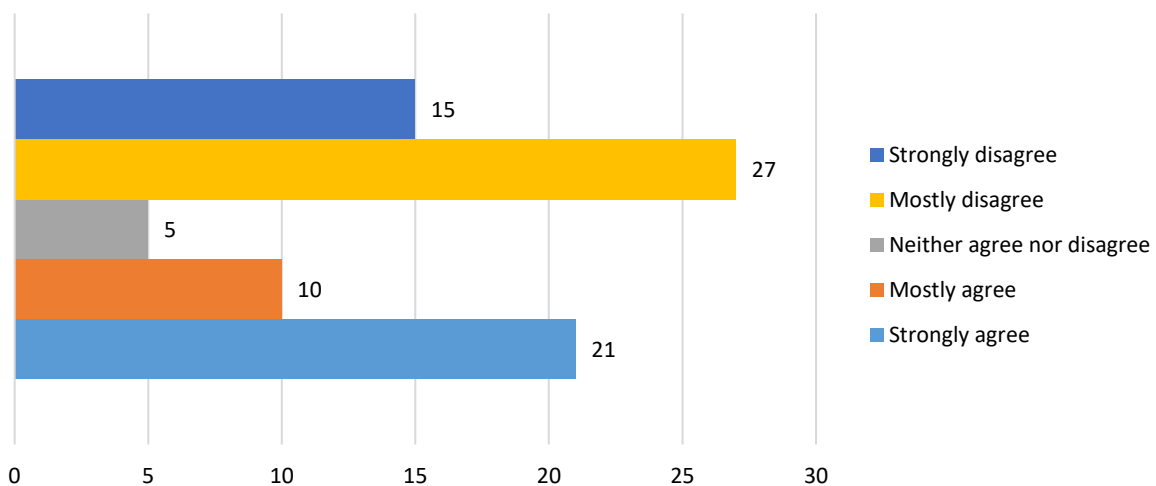
Figure 2: *Quality strategic planning is a condition for the development of an individual area*  
(Source: Author, 2021)

Figure 2 shows how most respondents believe that quality strategic planning is a condition for success and how properly targeted planning affects the development of a particular area. A small number of respondents do not agree with this statement and believe that it is not important for development or the impact is negligible. “Planning helps assure that an organization remains relevant and responsive to the needs of its community, and contributes to organizational stability and growth. It provides a basis for monitoring progress, and for assessing results and impact. It facilitates new program development. It enables an organization to look into the future in an orderly and systematic way.”



*Figure 3: Projects financed from EU funds significantly affect the level of development of a particular area*  
(Source: Author, 2021)

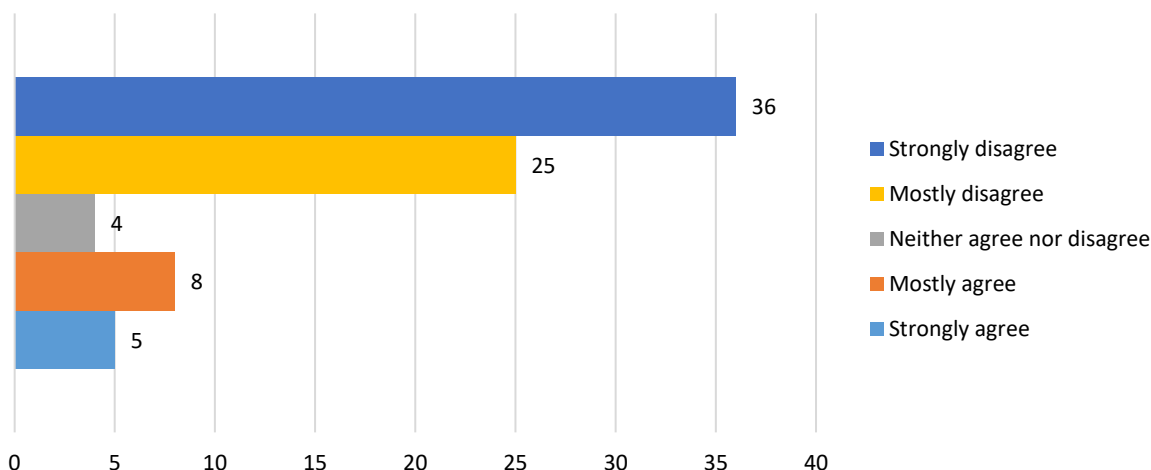
Figure 3 shows that almost all respondents agree that funding from EU funds encourages the development of a particular area. It is indicative that none of the respondents contradicted the stated statement.



*Figure 4: It is important to apply for projects to all available sources of funding*  
(Source: Author, 2021)

Figure 4 shows how the opinion of the respondents is divided. Some believe that projects should be applied to all available sources of funding, while some believe that this should be targeted in accordance with strategic plans and directions of development.

*Figure following on the next page*



*Figure 5: A larger number of realized projects leads to a higher level of development of a certain area*  
(Source: Author, 2021)

Figure 5 shows that almost all respondents do not agree with the statement that a larger number of implemented projects leads to a higher degree of development. Certainly, the respondents took into account the opportunity cost or the lost opportunity to invest in another project that is more important for a certain region if the capacities are focused on a project that brings less benefits.

## 5. CONCLUSION

Since the system of financing projects from EU funds determines the amount of the percentage of gross domestic product up to which it is possible to use the funds, it is impossible to directly influence that part of the capacity from the stakeholder level. Everyone needs to give more importance to the quality direction of development through concrete, measurable, targeted projects that will ultimately bring the most effects for a particular region. This is certainly the key to success because no one has unlimited capacity. Management and strategic planning are the key to success, and projects and development have no place for politicization and promotion. The part that stakeholders can directly influence is to a lesser extent financial capacities, which are also limited, but by defining quality strategies, priorities, above all quality development projects, it is possible to optimally use such limited capacities and thus use EU funds respecting the maximum criteria. effectiveness and efficiency in the use of funds. However, this requires economically based decision-making, and less politically based, it is necessary to achieve a higher level of cooperation of institutions, especially knowledge multipliers, but it is necessary to use information and knowledge about funds in a new way. We can conclude that strategic planning is the key to efficient financing of development projects. The main goal of strategic planning is to clearly determine the nature and character of the organization and the sector it represents and manage its development in the future. The strategic plan is usually accompanied by the development of annual work plans, which define in more detail the responsibility for the execution of the plan, deadlines, necessary resources and possibly organizational and operational steps that need to be done to achieve the goals defined in the plan. By investing in those projects that bring us the greatest benefits, we will avoid investing in projects on which we will spend available resources. The number of projects does not necessarily mean a higher level of development, the emphasis should be on quality in smart planning.

## LITERATURE:

1. Daszuta, A. (2000): The problem of the so-called readiness as the determinant of the effective absorption of Structural funds, based on example of the Podlaskie region in Poland, [http://www.nispa.org/conf\\_papers\\_list.php?cid=2](http://www.nispa.org/conf_papers_list.php?cid=2), (17.01.2021.)
2. Duduiala-Popescu, L. (2009): The structural funds management in third-Central and Eastern Europe, <http://mpira.ub.uni-muenchen.de/12882/>, (01.02.2021.)
3. Barković, D.: Menadžersko odlučivanje, Ekonomski fakultet Osijek, Osijek, 2009.
4. Cini, V., Nater, N., Marić, J.: Problem raspodjele dohotka i analiza siromaštva Republike Hrvatske, Ekonomski vjesnik, God. (24.), No.1, 121-125, 2011.
5. Florio, M. (2007): Cost–Benefit Analysis and incentives in evaluation the Structural funds of the European union, Cheltenham; Edward Elgar Publishing Limited
6. Ruiz, C.: New methods and results in measuring the efficiency of EU funds: the Spanish case, Society and Economy, Vol. 30, 245-257, 2008.
7. Stiglitz, E.J. (2004): Globalizacija i dvojbe koje izaziva, Zagreb, Algoritam
8. Stiglitz, E.J. (2009): Uspjeh globalizacije-Novi koraci do pravednoga svijeta, Zagreb, Algoritam

# CRITICAL ANALYSIS OF THE GREEN ECONOMY IN AFRICA: CASE OF BIOFUEL

**Abdelhamid Nechad**

*Professor at ESCA School of Management, Casablanca, Morocco  
nechad22@yahoo.fr*

**Rihab Belyazid**

*Phd Student at Abdelmalek Essaadi University, Morocco  
belyazidrihab@gmail.com*

## ABSTRACT

*The African economy is dominated by countries with low inputs and incomes. Despite the veracity of its resources, favorable climate, and abundant labor, most African countries depend on exports of primary products. Indeed, the continent's agricultural system is a rain-fed system in the majority of its countries that generates a small-scale production that remains insufficient to meet the needs of the population and contributes to the multiplication of energy and food insecurity. In the light of these challenges, policy makers in Africa have questioned the effectiveness and usefulness of the economic strategies adopted for more rational use of resources. The biofuel is both a source of hope in the face of the challenges of energy insecurity, food and poverty in Africa, and potential for economic development. Biofuels can be defined as fuels that can be produced from agricultural and forestry products or the biodegradable part of industrial and municipal waste<sup>1</sup>. The main sources of energy in rural Africa are biofuels that are used for lighting and powering engines such as wood and excreta. Africa needs to take advantage of the raw material needed to be part of this emerging industry. It needs to take advantage of its access to clean and renewable sources of energy. The survival of its population depends on the use of fossil fuels, firewood and charcoal, which greatly limits its potential for economic and social development. Thus, the continent's energy needs are growing very rapidly under the pressure of demographic factors and urbanization; this means that Africa needs to move from traditional sources of energy to new ones in order to improve the economies of the energy and reduce its dependence on fossil fuels and build the basics of development. In this article, we aim to identify what Africa hides in its nature and serves as a true pillar of a new industry. Next, it is necessary to review how African countries have responded to this potential in terms of policy and strategy. In addition, we will end this article with a set of economic, social and environmental impacts to elucidate what biofuels have brought to Africa. This article will aim to answer three major questions:*

- Biofuels: What potential for Africa?*
- What are the policies for biofuels in Africa?*
- What are the positive and negative impacts of biofuels in Africa?*

**Keywords:** *Biofuel, Africa, sustainable development, energy agriculture and renewable resources*

## 1. INTRODUCTION

The history of biofuel goes back to 2003 when the European Union unveiled its biofuel promotion program. Incidentally, biofuels, fuels from renewable sources, can be liquid or gaseous, and are created from processing of non-fossil organic materials from biomass, for example vegetable matter produced by agriculture (beet, wheat, maize, rapeseed, sunflower,

---

<sup>1</sup> <https://www.britannica.com/technology/biofuel>

potato, etc.)<sup>2</sup>. Two types of biofuels are in demand on the world market: ethanol and biodiesel. Ethanol, which comes from starch or other forms of sugars, is produced from maize, sugar cane, sweet potato or sorghum, and more recently cassava. While biodiesel is a fuel consisting of oils vegetable recycled usually oilseeds, it's added or substituted for diesel and can be used for diesel engines. Indeed, energy directs our life; it is a necessary element in human activity. It has been present in our daily lives for a long time, but everyone has their own way of using it. For more than a century, the global economy has used fossil fuels such as oil, natural gas and coal as a source of energy. Today these sources are also more exploited for the production of electric energy and many consumer products. Although petroleum hydrocarbons have undeniable advantages especially for industries and the transport sector, their perverse climate effects have led some countries to think of alternative sources of cleaner energy. Alternative solutions include renewable energies such as wind, solar, geothermal and biomass. In this context, and as a substitute of fuel using biomass resources, many developed and developing countries thought to biofuels, which represent a promoter sector. Africa, as other continents have biomass resources, began in recent years to involve various political and biofuel promotion strategies to strengthen its energy efficiency and enable its people to have the basics and the necessities of development. African countries also have vast land, veracity of natural resources and existing labor; all of these characteristics fulfill the conditions necessary to establish a clean and promising industry. However, the triple challenge facing Africa is ensuring food security, energy security and sustainable development. It is true that biofuels offer the opportunity to exploit Africa's vast biomass resources, but it is essential to intensify research to improve crop yields, production methods and uses. The journey is just beginning and a set of policies and strategies must be putted in order to ensure a good exploitation of biomass and a clean biofuels production.

## 2. BIOFUEL: WHAT A POTENTIAL FOR AFRICA?

The human race has been using biofuels for millions of years in the form of wood, coal, peat or animal manure. However, recent advances in chemistry have made it possible to produce liquid fuels that can replace petrol and diesel from renewable sources. In another sense, biofuel is a fuel produced from renewable resources such as a tree, a plant or an animal. There are now three main sources: trees, plants rich in vegetable oils, and sugar and wheat. Other new plants such as jatropha, algae rich in hydrocarbons may also be used to produce biofuel. Inputs used for the biofuels production have been known for a long time. Nevertheless, the processes and the development of production techniques are recent; it traces a new edge of using and transforming these inputs into biofuels. There are three generations of biofuels, only processes and technical development that make the difference between each generation and another. The first generation consists mainly of two biofuels types that are produced from raw materials, which can be used in an animal or human food chain. Bioethanol can be produced from sugar cane, cereals and sugar beet and is used in gasoline engines. In addition, biodiesel that occurs from different sources of fatty acids, including soybean, rapeseed, palm and other vegetable oils, is used in diesel engines. In addition, cellulosic materials such as wood, leaves and stems of plants or those from waste can also be used to produce biofuel. The second-generation refers to wood components or carbon-based that are not directly used in food production. This technology makes it possible to produce so-called second-generation bioethanol, biodiesel, bio-hydrogen or biogas. It is not yet deployed at the industrial stage but prospects for implementation in the medium term are emerging. Their large-scale production is planned for 2020-2030. As for third-generation biofuels, these processes rely mainly on the use of microorganisms.

<sup>2</sup> <https://www.linternaute.fr/dictionnaire/fr/definition/biodiesel/>



In the same vein, Africa has had several attempts to develop biofuels. Initiatives in Mali date back to the 1940s, especially in the valuation of *Jatropha*. Nevertheless, applications have remained limited to very small-scale uses in a context of improving rural access to a few energy services. Currently, there is a proliferation of interests within the continent. Given that Africa has a vast and middle nature the rich resources able to be used as biofuel, several African countries have developed a new energy vision. The economic and social reality of most African countries has called for the energy exploitation of renewable resources. The biofuels sector is directly involved in the development and improvement of economic growth, social development and the creation of sustainable jobs. Energy agriculture is an approach, which consists in turning agriculture to establishment of plants, may be transformed into biofuel. In the long term, local production of biofuels can be exported to both the European and American markets. The development of a biofuel industry will lead to an improvement in the lives of African rural people in view of the new jobs it has created, which would considerably reduce the high unemployment rate, which is a major economic hurdle for developing countries. South. On the other hand, and because biofuels are shown to release half as much CO<sub>2</sub> and sulfur in the atmosphere as fossil fuels, the development of biofuels would allow African countries to comply with international environmental regulations and would be very beneficial for the African population and ecosystem. Thanks to the veracity of Africa's natural resources, several plants and plants rich in concentrated oil could be used as biofuels. Indeed, biofuel can be produced from several sources such as corn, peanut, seaweed, palm, coconut, soy, sunflower and castor oil. *Jatropha* is also a promising source in West Africa since its discovery in the 1990s. The latter is a shrub that grows in the poor and dry soils of the Sahel, gives seeds rich in oil, easy to transform into diesel. Its poisonous fruits have targeted its use by limiting its spatial competition with traditional food crops. This plant that grows in arid areas to triple use: a renewable energy source for the local population using its vegetable oil as fuel, a commercial energy source by exporting biodiesel from its oil and can also be used to local cuisine, offering an alternative to wood. Given its value, it is not surprising that *Jatropha* crops have emerged in recent years in countries as diverse as Egypt, Madagascar, Zimbabwe, Kenya and Zambia. The end of the 1930s is the beginning of new edge for Malians, they recognized the possibility of using *Jatropha* oil as fuel. At present, it is used to replace the diesel mix used in the diesel engines that run the grain mills and water pumps in rural Mali. Today, we can see that several African countries have made progress in the production of *Jatropha* oil biofuel by encouraging biofuel development initiatives. Another type of biofuel existing in Africa can be obtained from biomass. This is bioethanol for gasoline engines. Vegetables containing sucrose (such as sugar cane) or starch (such as maize, sorghum or cassava) can be processed to give bioethanol, obtained by fermentation of the sugar extracted from the sugar plant or by distillation. starch from corn. This ethanol of biological origin is nothing other than ethyl alcohol, the same as that found in all alcoholic beverages. It can be mixed with gasoline in proportions ranging from 5 to 85%.<sup>3</sup> In this sense, Africa could become in the near future a major producer of ethanol produced from the sugar plant or maize. There are a lot of projects going on right now for the development of the biofuel industry. A set of associations for extracting oils from energy plants that can serve as biofuels have been created in Africa. This kind of project seems to be a major opportunity for the country to stimulate economic growth, combat unemployment and poverty while enjoying the country's natural resources and labor of existing work. Still talking about ethanol, Africa has also turned to intensify cassava cultivation. Nigeria is already on this path, in early 2006, a law authorized The Nigerian National Petroleum Corporation began importing small amounts of ethanol to test its own blends and distribution infrastructure that will be then used for the Nigerian local production of ethanol Young African women gathered around a pile of cassava.

---

<sup>3</sup> <https://ethanolfireplace.blogspot.com/2008/12/quest-ce-que-le-bioethanol-do-vient-il.html>

Such international cooperation could support African countries in this perspective of development of the biofuel industry. Africa has also invested in the production of cellulosic ethanol from maize or switch grass not only to produce energy but also food substances. The switch grass has a variety of industrial uses, the most promising of which are paper making and ethanol production, but it can also be used to feed cattle and is ultimately a good fuel. This perennial plant has many advantages from an agronomic and environmental point of view. First, its requirements for fertilization are minimal. Then, its culture can last between 5 and 10 years. In the same context, and in the context of the development of the biofuel sector that Africa has experienced, it is necessary to refer to Mauritius, which is an example of leadership in the valuation of bioenergy. Indeed, 40% of its energy needs are provided through cogeneration from bagasse after sugar production plants based in the sugarcane. Mali has also developed national strategies with clear objectives, Senegal with a national program and several countries of the southern subregion of Africa such as South Africa, Zimbabwe, and Zambia.

### **3. BIOFUEL POLICIES IN AFRICA**

The African continent is not left in the race for the development of biofuels. It is true that his experience is still very recent compared to other countries such as America and Canada, but the development of this sector in the country is too encouraging. Africa offers an ideal environment for biofuel production, with a vast expanse of unused land, a tropical climate suitable for energy farming, and a large unemployed rural workforce. Namely also that the majority of the African population suffers from poverty and devoid of the necessities such as electricity, biogas and running water. The majority cultivates seeds exclusively for food, without taking into consideration the many challenges related to the sale of seeds. In this context, the implementation of a biofuels strategy is an opportunity to put agricultural enterprises, especially those in rural areas, in a path of development and emergence. This will increase income levels, which will make it easier for people to meet basic needs, including health, medical and educational needs. There are many benefits from such a biofuel projects, which concerns not only biodiesel but also electricity. The latter can be produced from the hulls of *Jatropha* fruits while biogas can be produced from oil cakes, and leftovers are a good organic fertilizer. Several reasons explain this radical change of strategy. As it is known, a majority of African countries have always opted for a food agriculture, but the alternative energy of biofuels, has led the interest of several poor countries that suffer from an energy deficit in the hope of build a new economic model. In other words, biofuel is the hope that can lead to development while being based on the agricultural sector. This is achievable while turning the agriculture sector from food agriculture to energy farming. On the strategy side, the development of biofuels in Africa takes two forms. The first, under government impetus with the introduction of incentives for production, foreign investment and consumption of biofuels. The second is the presence of foreign private investment, which is a real driver of the development of biofuels in Africa. In the same way, the commitment of African countries in the production of biofuels is a chosen strategy. Substituting biofuels for fossil fuels would help reduce the hydrocarbon imports that most countries suffer from. Still in this logic, the pure vegetable oil sector provides a concrete and economic energy solution to remote rural areas that are poorly served by energy distribution networks. Secondly, a production of biofuels would be to valorize the agricultural potential of the African continent. Several studies indicate a significant potential of uncultivated farmland in Africa. It is also a good opportunity for job creation, development of the agricultural sector and economic growth. Regarding to biofuel strategies adopted in Africa, several African countries have already put in place national strategies for the promotion of biofuels. In this respect, Senegal, Ghana and Nigeria have national strategies for the promotion of biofuels. They are based on the setting up of a technical committee to define the policies to be implemented in this sector, to create an incentive legislative and regulatory framework for the production and

use of biofuels and to develop in the short and medium term. Medium term bioalcohol and biodiesel. Similarly, raw materials differ from one country to another, for Nigeria, where it specializes in the production of bioethanol from cassava and sugar cane, while Ghana's strong point is *Jatropha*, which serves as a staple food for biodiesel production. In addition to sugar cane and cassava, Nigeria is also exploring the potential use of peanuts, pumpkin seeds, *Jatropha* and oil palm for biodiesel production. In Benin, as part of the Energy Services Supply Project of the Directorate General, a program of biofuel development is being put in place and aims to produce biodiesel from castor and *Jatropha* for the agricultural sector, transport and electricity generation and bioethanol as energy cooking and as a fuel alternative to gasoline. In Mali, the adopted strategy is based on *Jatropha*; this plant is very widely used as hedge in the country on about 10000 kilometers with a growth rate of 2000 kilometers a year. He appeared in Mali, from the 1930s under the French presence, but its development has been mainly driven by the initiative of the German Technical Cooperation (GTZ), which has conducted a series of projects in the country since 1987. The potential that contained this plant has been favored by many private projects and initiatives, as in the case of Mali Folkecenter located in the Sikasso area and other projects. To these many private initiatives has been added the action of the Malian public authorities. In 2004, this resulted in the establishment, at the level of the Ministry of Energy, of a national program for energy recovery of *Jatropha* oil. In response to a constant demand, the National Agency for the Development of Biofuels produced in 2008 a National Strategy for the Development of Biofuels, which set targets for 2023. In 2010, it also carried out a complementary study on the definition of Steps towards the Creation of a Favorable and Adapted Legislative and Regulatory Framework<sup>4</sup>, which detailed the three possible development models -Peasant Production for Local Use, Small-scale Industrial Production or medium-scale with farmer supply and Large-scale industrial production targeting primarily the export market. In Burkina Faso, the Directorate General for Energy of the Ministry of Mines, Quarries and Energy is in charge of these issues, through the Renewable Energies Department. The DGE commissioned a first study in 2008 on the development opportunities of biofuels in Burkina Faso. <sup>5</sup>On this basis, it has prepared a draft Framework Document for biofuel development policy, which should be approved by CICAFIG, but it is not validated today. Today, there is no clear political framework in both countries for launching biofuel projects under secure conditions. The situation is, however, more advanced in Mali, where several studies have been undertaken recently with the support of UNDP. The legal void presents a risk for the operators, the farmers and therefore indirectly for the States. In the case of *Jatropha*, strategies have been validated in Mali or studied in Burkina Faso, but these do not seem realistic in view of the development difficulties of this sector. In general, biofuel policies may appear to be highly complex as they affect multiple topics and ministries.

## **4. BIOFUELS IN AFRICA: BETWEEN POSITIVE AND NEGATIVE SPILLOVERS**

### **4.1. Biofuel production and food security**

Food security is a global affair, defined by the World Bank in the mid-1980s as access for everyone and at all times to sufficient food to lead an active and healthy life. The individual is the central element of this definition. Therefore, we can say that if human beings can not get their food needs, it is not because the amount of food available on the planet is insufficient, but because of the weakness of their purchasing power that does not allow the satisfaction of their needs. To study the impact of biofuels on food security, we must therefore consider the consequences that may have on the purchasing power of low-income people. In other words,

<sup>4</sup>Stratégie nationale de développement des biocarburants au Mali : Les étapes vers la création d'un cadre législatif et réglementaire favorable et adapté, rapport préliminaire, 28 septembre 2010.

<sup>5</sup> [https://mafiadoc.com/102198online2017-2517srcenfrfinal-jrc-publications-\\_598441dd1723ddce69c58c92.html](https://mafiadoc.com/102198online2017-2517srcenfrfinal-jrc-publications-_598441dd1723ddce69c58c92.html)

the exploitation of biomass in the production of biofuels by developed countries has an impact on the food security of developing countries insofar as it affects the ability of the poor in developing countries to earn a living, on the level of food prices they pay. It is an addiction with two kinds of cause and effect relationship. The first relationship is rather beneficial for developing countries in the event that increasing biofuel consumption in developed countries can be a source of income for developing countries, thereby improving their food security. While the second relationship causes effect rather touches the inflationary side. In another way, the increase in demand for agricultural products linked to the use of biofuels in developed countries has an inflationary effect on world food prices. Let's just say that the increase in world food prices will be positive or negative for developing countries depending on whether the poor are net producers or consumers. Overall, it is the poorest farmers who are often net consumers of food in developing countries because their resources, including land, are so scarce that they do not allow them to produce in sufficient quantities. what they would need to feed their families. If all these elements are taken into account in the case of Africa, it should be noted that several African countries are moving towards biofuels to allow the population's access to modern energy services. For example, in 2010 the area under cultivation of sugar cane and sorghum is estimated at 2 million hectares, of which 10% is devoted to production (2 million m<sup>3</sup>) of ethanol for the fleet of the Southern African region, while 4 million m<sup>3</sup> are exported , mainly to Europe <sup>6</sup> . By 2050, the area of production is expected to expand to 6.8 million hectares in Central African regions at the expense of subsistence food production. Another example, one hectare of land that can produce 10 tons of wheat, allows to feed biofuels only one sober vehicle. This example demonstrates that vehicles that run on biofuel are big consumers of agricultural land. Indeed, millions of hectares are devoted to the production of biofuels resulting in soaring prices for raw materials and foodstuffs. According to the Food and Agriculture Organization of the United Nations (FAO), biofuels account for a third of the increase in agricultural prices. The poorest populations are therefore finding it increasingly difficult to feed themselves. Biofuels are therefore unconsciously leading to the worsening of famine in the world. In addition, to irrigate the hectares of biofuel plantations, agriculture monopolizes water in a considerable way. Indeed, it consumes 70% of the fresh water available on Earth while more than one billion men do not access to drinking water. It therefore seems inhuman to deprive the poorest of water to produce the biofuels intended for our cars. The performance of biofuels is also debatable. Indeed, these provide less energy than petroleum fuels. Thus, it takes 13 liters of super ethanol to 100Km instead of 10 liters by rolling unleaded. It is even necessary to note that at the level of the African market, the production and use of modern bioenergy are currently limited. This is due to the low level of technological development of African countries, which presents more disadvantages than benefits for the overall well-being of the people. The abandonment of subsistence food crops, shrinking the traditional farmland resulting production insufficient food, a leak of resources destined mainly export. As for the benefits or spin-offs, they could be evaluated in the context of a clean development based on the use of biofuels.

#### **4.2. Impacts of biofuels on the environment and ecosystems**

Africa, with its vast land and cheap labor, is a prime target for biofuel promoters. To this end, several foreign companies are rushing on African farmland to produce biofuels. The list is long, if there is no official census of projects, an estimate that no less than 100 production projects in twenty countries of the continent, from 50 foreign companies. In this list of investor countries, the United Kingdom holds the upper hand especially in Mali, Guinea, Senegal and Madagascar. Italy ranks second, followed by Germany, France and the United States.

<sup>6</sup> Abdoul-Kader Bafoutché ,DÉVELOPPEMENT DURABLE , « Impacts des biocarburants sur l'environnement et la sécurité alimentaire », 09 JULY 2015 .

While some of these companies generate profits for the countries in which they operate, thanks to investment, employment and local use of biofuels, the local do not generate any benefits. This is due to the nature of the articles in these contracts, which are in most cases vague and unenforceable promises and conditions. In the same vein, the increasing use of agricultural land to produce biofuel is increasingly challenged around the world as it is accused of threatening ecosystems and the environment. Several studies blame biofuels for having a negative impact on the climate in terms of emissions of greenhouse gases and cultivated area. In other words, the liter of biodiesel from rapeseed would represent 1.2 times more emissions of effect greenhouse that liter of diesel, for soybeans, 2 times more emissions, and for palm oil, 3 times more. Thus, the production of first-generation biofuels over large areas leads to the massive use of pesticides and fertilizers. They can lead to negative impacts on soils, water resources and biodiversity. However, the biofuel production system can have foreseeable impacts on water resources like pollution. The severity of these spillovers is reflected in the production of biofuels resulting in land-use changes<sup>7</sup>. Moreover, the method of cultivation of second and third generation agro-fuels increases the global pressure of the soil. This overpressure can lead to degradation of soil fertility and their environmental functions. Land use changes, in particular the cultivation of grasslands or forest areas, may result in the destocking of carbon previously stored in the soil, and thus the deterioration of the regulation function of soil greenhouse gases. This loss of carbon can induce changes in soil properties and lead to degradation such as biodiversity loss. Even more diverse and sustainable bioenergy crops could have negative environmental impacts if they are intended to replace forests and natural grasslands.

## 5. CONCLUSION

In this article, we have highlighted African biomass in order to elucidate the link between it and biofuels, as well as the policies that African countries have put in place to make this industry a promoter to establish the necessary bases of development. All of these policies and strategies validated or in the study phase reflect the African desire to join a new market in the hope of ensuring its energy security from biofuels. The problem of food security is also of equal value, because of its dependence on African agricultural culture. In another way, and according to several studies and reports, the biofuel industry is undermining food security in Africa. This is by exploiting foreign companies from African farmland to produce biofuels. Such a strategy is causing many families to abandon subsistence food crops and their traditional farmland, which is leading to insufficient food production and a flight of resources for export. It is true that a large part of the jobs likely to accompany increased production of biofuels in African countries will be due to the potential increase in the use of labor at the level of farms producing raw materials. Unfortunately, since most foreign investors typically target biofuel production for export because of increased demand from developed countries, while the domestic market is a secondary target. In the same vein, the negative effects on ecosystems and the environment are also important. To a lesser extent, governments in order to display the eco-label of projects and thus benefit from the financial support of international institutions mainly advance the environmental aspect of biofuels. In reality, the production of biofuels leads to the massive use of pesticides and fertilizers. The negative impacts on soils, resources and biodiversity are among the side effects of agricultural production in general. Ultimately, the severity of the impacts of biofuels on the environment and food security depends on how the raw materials used to produce these biofuels are produced and processed. The fundamental question that needs to be asked is whether we are able to limit or even control the impacts mentioned and to safeguard the environment and food security in African countries. This requires vigilance and awareness among producers and consumers to meet the challenges of energy and the

<sup>7</sup> Laurent Gazull, conférence internationale : « *Enjeux et perspectives des biocarburants pour l'Afrique* » ; Ouagadougou, Burkina Faso, 27-29 novembre 2007.

environment by limiting the adverse effects of initiatives whose consequences would be unavoidable. Particular attention should also be given to biofuels, the large scale development of which involves several actors. National consultation and harmonization of energy, agricultural, environmental and social policies should be ensured in order to maintain a balance between food security, energy and the right to sustainable social development. Priority should also be given to encouraging local production to meet needs at the national level and promote local value addition.

## LITERATURE:

1. Abdoul-Kader Bafoutche ,(2015)Développement Durable , « Impacts Des Biocarburants Sur L'environnement Et La Securite Alimentaire ».
2. Adams Tidjani,(2018) « Les Biocarburants En Afrique : Etat Des Lieux », A Partir Du Rapport De Wetlands International.
3. Alain Damien « La Biomasse Energie » 2e Edition Dunod.
4. Audrey Garric , Le Monde,« Ces Pays Qui Se Bousculent En Afrique Pour Produire Des Agrocarburants.
5. Bamikole Amigun ,Josephine Kaviti Musango, William Stafford (2011) ,in Renewable and Sustainable Energy Reviews Volume 15, Issue 2, Pages 1360-1372 «Development of biofuels in South Africa: Challenges and opportunities».
6. Charles B.L.Jumbe, Frederick B.M.Msiska, Michae lMadjera (2009) in Energy Policy Volume 37, Issue 11, Pages 4980-4986, «Biofuels development in Sub-Saharan Africa: Are the policies conducive? »
7. Cotula, L., L. Finnegan et D. Macqueen (2011), "Biomass Energy: Another Driver of Land Acquisitions?" (IIED Briefing Papers No. 17098IIED) (p. 4), IIED Publications Database.
8. Donald Mitchell (2011) «Biofuels In Africa: Opportunities Prospects And Challenges », Edition World Bank.
9. Gazull L. and D. Gautier (2014), "Woodfuel in a Global Change Context", Wiley Interdisciplinary Reviews: Energy and Environment, 4 (2), pp. 156-170.
10. Hlpe Rapport 5, (2011) « Agrocarburants Et Securite Alimentaire Juin 2013 ».,
11. IEA Bioenergy (2007), Potential Contribution of Bioenergy to the World's Future Energy Demand. Rotorua, New Zealand, IEA Bioenergy.
12. Laurent Gazull, « Les enjeux d'une transition bioénergétique dans les pays en développement » CIRAD Edition MAISON D'ÉDITION DE LA CONNAISSANCE.
13. Laurent Gazull, (2007) Conference Internationale : « Enjeux Et Perspectives Des Biocarburants Pour L'afrique » ; Ouagadougou, Burkina Faso.
14. OCDE, FAO (2014), « Biocarburants », In : Perspectives agricoles de l'OCDE et de la FAO 2014-2023. Paris, Éditions OCDE, pp. 121-140.
15. OCDE/IEA (2012), Key World Energy Statistics 2012, International Energy Agency, Paris, 87 p.
16. Patience Mutopo Atakilte Beyene Hanne Haaland Festus Boamah Marie Widengård Rune Skarstein (2011), « Biofuels, Land Grabbing and Food Security in Africa», Edition Zed Books.
17. REN21 (2015), Renewables 2015 Global Status Report, United Nations Environment Programme (UNEP), Paris, 32p.
18. Sven Sielhorst Jan Willem Molenaar Don Offermans, "Biofuels in Africa an Assessment of Risks and Benefits For African Wetlands".
19. <https://www.linternaute.fr/dictionnaire/fr/definition/biodiesel/>.
20. <https://www.britannica.com/technology/biofuel>.

# STRUCTURAL CONVERGENCE WITH THE EUROZONE: A COMPARATIVE ANALYSIS OF BULGARIA AND ROMANIA

**Stela Raleva**

*University of National and World Economy, Bulgaria  
Sofia, Studentski grad 1700, Bulgaria  
st.raleva@unwe.bg*

## ABSTRACT

*The paper provides an analysis of the structural convergence of the Bulgarian and Romanian economies with the Eurozone, measured in terms of the convergence in the production, expenditure and income structures of the GDP. The interest in this subject matter is triggered by the future membership of the two countries in the Eurozone and its connection with the effectiveness of the conducted monetary policy, as well as the prospects for their economic growth and real convergence. The evaluation of the structural convergence is based on the use of the sigma convergence approach and the construction of the Krugman Specialization Index and the Index of Structural Inequality. The study examines the 2000 – 2019 period which allows for the characterization of the specifics prior to and in the wake of the 2008 global economic and financial crisis. Based on the results of the empirical analysis it is concluded that there was a considerable narrowing of the structural differences in the GVA in Bulgaria for the entire period which ran relatively smoothly whereas in Romania it started in 2012 and featured certain irregularities. It has been established that the divergence process in the GDP expenditure structure before the crisis was more obvious in Bulgaria and that the Bulgarian economy featured a higher level of structural convergence in comparison to Romania after 2009. The trend in the GDP income structure of Bulgaria after 2012 was towards a considerable narrowing of the differences with the Eurozone whereas in Romania it was towards a moderate increase in the deviations. The lower level of structural convergence or structural divergence of the Romanian economy is based on the higher, compared to Bulgaria, relative shares of the industry sector in GVA and the investments and the companies' incomes in GDP which have a positive impact on economic growth.*

**Keywords:** *GDP structures, Krugman specialization index, Index of structural inequality, Sigma convergence, Structural convergence*

## 1. INTRODUCTION

The subject matter of structural convergence is relatively new in economic theory and particularly topical for the new EU member states, which are not members of the Eurozone yet but both will join it in the future. Its relevance is based on the fact that it is related to the effectiveness of the future common monetary policy and the resistance of economies to the emergence of exogenous shocks. It should also be borne in mind that the convergence in the economic structures can have different impact on the opportunities for economic growth and respectively, on the rate of the real convergence of these economies with the EU average levels. The aim of the current paper is to present a comparative analysis of the structural convergence of the economies of Bulgaria and Romania with the Eurozone, to disclose its specific characteristics in the periods before and after the 2008 global financial and economic crisis and to discuss its relation to the rate of economic growth in both countries. Measuring the structural convergence is based on the relative shares of the gross domestic product (GDP) components in its production, expenditure and income structures and through the implementation of sigma ( $\sigma$ ) convergence. The paper has five main parts. The first part focuses briefly on the most important conclusions drawn in the existing theoretical and empirical publications dedicated to the convergence in the three main structures of GDP.

The second part describes the most commonly used specific methods of  $\sigma$ -convergence and the levels of the empirical analysis. The third, fourth and fifth parts include the empirical analysis of the convergence in the production, expenditure and income structures of the GDP of the two countries with the Eurozone and disclose their specifics in comparative terms and over time. The conclusion includes the most important results of the empirical analysis.

## 2. LITERATURE REVIEW

Structural convergence has a special role in the system of the existing general understanding about structural changes and economic convergence. It is a heterogeneous economic concept which is generally interpreted in the context of the development of the EU integration process. According to the first more encompassing understanding of Wacziarg (2004) two economies are the subject of structural convergence when their real convergence is combined with convergence in their sectoral structures. In a number of research papers published later the focus is predominantly on the structural convergence rather than on its correlation with the convergence in the real levels of GDP per capita. The significance of structural convergence results from the understanding that it leads to a better coherence of the business cycles which can have a positive impact on the results from the implemented monetary policy and to reduce their vulnerability to the occurrence of exogenous shocks (Imbs and Wacziarg, 2003; MPC task force of the ECB, 2004). We should also consider the fact that narrowing the structural differences can be related to suppressing some sources of economic growth and thus come into conflict with the long-term economic goals. The measurement of the structural convergence is generally done through the decreasing deviations of the relative shares of the key economic sectors and the economic activities in the gross value added (GVA) between the compared economies (Wacziarg, 2004; Imbs, 2000; Angeloni et al, 2005; MPC Task Force of the ECB, 2004; Darvas and Szapary, 2004). It is believed that this convergence in the GDP production structure corresponds to the synchronization of the business cycles as its impact on the efficiency of the monetary policy is achieved through its impact on the transmission mechanisms, as well as through its direct and indirect inflationary effects. This convergence in the GDP production structure can be evaluated at different levels of aggregation of the economic activity with the formation of inter-sectoral and intra-sectoral convergences. The idea about inter-sectoral convergence was created by Fourastié (1949), who identified three sectors – primary, secondary and tertiary which is currently transformed into agriculture, forestry and fisheries; industry and services. It is believed that the economies with unequal degrees of development are based on different economic sectors and with the increase in the GDP per capita the structural characteristics of the less developed countries are getting closer to those of the more developed ones. The process of intra-sectoral convergence is more ambiguous due to the specific dependence of individual countries on various factors in terms of strength and origin, which can be evidenced in preserving the gap or in strengthening the divergence (Palan and Schmiedeberg, 2010). The study of the convergence in the GDP expenditure structure is relatively limited which can be due to its secondary role in the characterization of the general structural convergence (Buiter and Grafe, 2002; Darvas and Szapary, 2004). The research is mainly based on empirical studies and does not provide detailed theoretical interpretation of the relation between the convergence in the expenditure structure of the GDP of the different economies, on the one hand, and the synchronization of the business cycle, the effectiveness of the common monetary policy and the resistance to external shocks, on the other. What is more, the majority of these publications suggest a broader approach to the structural convergence and include an analysis of the dynamics in the production structure of the gross product. Another specific characteristics of theirs is that they are made on a disaggregate level and the focus is on the deviations in the relative shares of the individual or all components of the aggregate expenditure.



The convergence in the GDP income structure was analysed in just a few individual publications (Raleva, 2019) where by analogy with the studies on the convergence in the expenditure structure, they do not make a content analysis of its role and the empirical evaluations include only the convergence in the relative shares of the compensation of employees and the sum of net operating surplus and net mixed income. Bulgaria and/or Romania are included in some comparative studies of structural convergence which are based on the use of special methods and refer to different periods (Miron et al, 2013; Chilian, et al; 2016; Dan, H., 2019; Raleva and Damyanov, 2019; Damyanov, 2019). There are also individual country studies for each of them, in which the comparison with other EU countries and/or Central European ones is of complementary nature and refer only to certain aspects of structural convergence. (Marius-Corneliu, 2006; Stattev and Raleva, 2006; Postoiu and Busega, 2015; Velichkov, 2019; Raleva and Marikina, 2020). None of the existing publications, however, does not set the goal of conducting a detailed comparative analysis of the structural convergence of the Bulgarian and Romanian economies with the EU or the Eurozone which are based on the three approaches to measuring GDP and which encompass a sufficiently long period.

### 3. METHODOLOGY

The evaluation of structural convergence in the current paper is based on  $\sigma$ -convergence by constructing two heterogeneous indices – the Krugman Specialization Index (KSI) and the Index of Structural Inequality (ISI). The KSI (Krugman, 1991; Longhi et al., 2004; Palan, 2013) is calculated using the following formula:

$$KSI = \sum_{i=1}^n |S_{BGi/ROi} - S_{EZi}|$$

where  $S_{BGi/ROi}$  is the relative share of component  $i$  in the GDP under the respective approach of Bulgaria and Romania,  $S_{EZi}$  is the share of the same component in the GDP of the Eurozone, and  $n$  is the number of components.

The ISI is known in literature as an index of inequality in the productive structure (Cuadrado-Roura et al, 1999; Palan, 2013). Its broader denomination in this paper is determined by the fact that it is used not only to refer to the structure of GVA, but also to the expenditure and income structures of GDP. The formula used to calculate the index is:

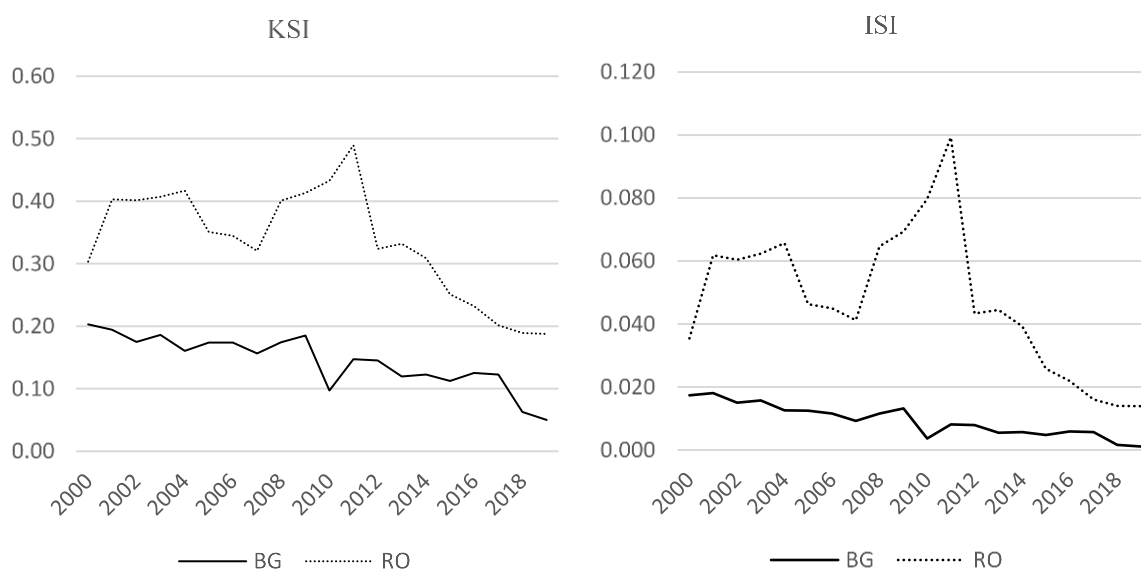
$$ISI = \sum_{i=1}^n (S_{BGi} - S_{EZi})^2$$

What is special about ISI is that the deviations of the respective components from the mean values for the Eurozone are to the second power which leads to its stronger dependence on the component with the highest change. The higher values of the two indices show the higher degree of structural differences whereas their decline over time is indicative of the existence of structural convergence. The measurement of the convergence in the expenditure structure of GDP is carried out after identifying the following components: a) personal consumption expenditure, including final consumption expenditure of households and nonprofit institutions servicing households (NPISHs); b) gross capital formation; c) government consumption, calculated as a sum of individual consumption expenditure and collective consumption expenditure of general government; and d) external balance of goods and services.

The convergence in the income structure is measured through its decomposition into: a) compensation of employees; b) gross operating surplus and mixed income (GOS&MI); and c) other incomes. The convergence in the GDP production structure is calculated on the basis of the relative shares of GVA in the three main economic sectors – a) agriculture, forestry and fisheries; b) industry, including manufacturing and construction; and c) services. All empirical data about the structural components of GDP are provided by Eurostat and are relevant for the period between 2000 and 2019.

#### 4. CONVERGENCE IN THE STRUCTURE OF GVA

The structure of GVA in Bulgaria features a distinct convergence in the respective structure of the Eurozone which is valid for the larger part of the period under consideration and runs relatively smoothly (Fig. 1). More dramatic fluctuations were reported only in 2010 and 2011 which showed narrowing and increasing the differences and in 2018-2019 too, determining the highest levels of structural similarity reached. This can be evidenced by the trends in the two indices used with KSI amounting at the end of the period to just ¼ of its initial value while ISI approached zero.



*Figure 1: Convergence in the structure of GVA*  
(Source: Own calculations based on <https://ec.europa.eu/eurostat>)

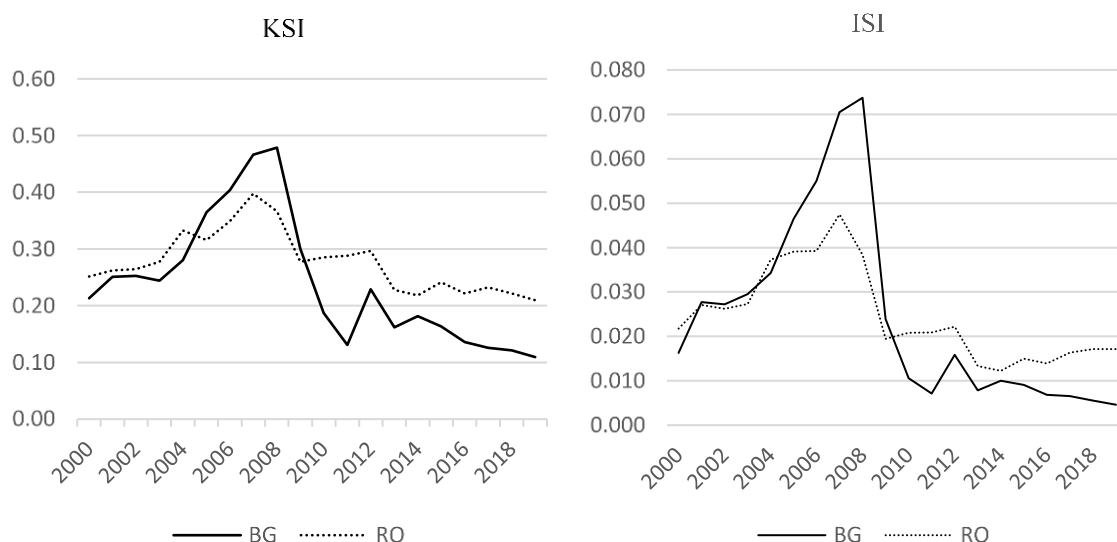
During the same period Romania diverged more considerably from the structure of GVA in the Eurozone in comparison to Bulgaria registering some very specific changes over time. The deeper discrepancies, reported in 2001, were followed by an interval of relative stability which lasted until 2004. The contradictory changes observed in 2005 and 2008 brought about a recovery in the level of KSI in 2010 to its level from 2004 while such recovery in ISI was reported in 2009. In 2011 the two indices reached their highest levels of 0.49 and 0.099 respectively which correspond to the highest structural discrepancies. Since 2012 they marked a lasting decrease which occurred with irregular intensity. The narrowing of the gaps with the structure of GVA in the Eurozone was most significant in the same year when KSI fell from 0.49 to 0.32, while ISI – from 0.099 to 0.043. Subsequent more considerable drops in the first index were registered in 2015 and 2007 and in the second – throughout the entire period starting 2014 until 2017. During the remaining years the changes were relatively moderate and in 2019 the divergence from the Eurozone based on KSI amounted to 62% and on ISI – to 39% of the initial one.

For the period, KSI of Romania was on average around 2.5 times higher than that of Bulgaria with the largest gap between the two reported for 2010 and they were closest in 2000. Despite the common convergence tendencies during the past years, the differences between them were preserved while during the last two years they became more substantial. Considering the higher sensitivity ISI demonstrates, the discrepancies it registered were larger and the excess for Romania was 6.5 times on average. The analysed differences in the convergence in the structure of GVA of Bulgaria and Romania were greatly due to the higher relative share of the industry sector typical of the latter. On average for the period it amounted to 36.5% whereas in Bulgaria it was 27.9% and for the Eurozone - 25.7%. During the 2008 – 2011 period, which featured the biggest structural disproportions, the share of the industry in the GVA of Romania exceeded 40% and in 2011 it reached the maximum of 44%. During the same period the relative share of services in Bulgaria amounting to 65.3%, on average, was much closer to the mean value in the Eurozone of 72.4% and considerably exceeded the mean relative share in Romania of 55.6%. The structural differences between the two countries between 2001 and 2004 were partially due to the faster decline of the relative share of agriculture, forestry and fisheries typical for Bulgaria. The reported differences in the sectoral structure of GVA of the two new EU member countries determine the closer structural convergence of Bulgaria with the Eurozone. During the greater part of the period, however, Romania reported higher rates of economic growth which exceeded by 0.3 percentage points, on average, those of Bulgaria. Furthermore, Romania reported higher growth in GDP per capita in PPS – from 52% of the average for the EU-27 in 2008 to 70% in 2019, whereas for Bulgaria the respective values were 43% and 53%. To some extent this was due to the higher relative share of industry in GVA which is usually characterized by higher labour productivity and higher contribution to the export of the country relative to the other two sectors.

## 5. CONVERGENCE IN GDP EXPENDITURE STRUCTURE

The dynamics in KSI and ISI for the GDP expenditure structure do not illustrate a distinct trend towards narrowing or broadening the differences (Fig. 2). Both countries experienced two periods marked by the crisis in 2009. The first period featured a process of divergence which was more prominent in Bulgaria. During that time, following a period of minor short-term fluctuations, KSI increased 2.5 times and in 2007 and 2008 it reached the maximum value of 0.48. During the following period of three years there was an accelerated structural convergence which led to a drop to 0.13 in the deviation from the mean level for the Eurozone. After a single increase to 0.23 in 2012 a new narrowing in the differences followed and in 2019 it reached its maximum of 0.1. These changes indicate that after 2009 the GDP expenditure structure of Bulgaria began to converge with that of the Eurozone and initially this process ran at high rates and gradually started to subside during recent years. ISI followed a similar trajectory illustrating more distinct fluctuation margins than KSI.

*Figure following on the next page*



*Figure 2: Convergence in GDP expenditure structure*  
 (Source: Own calculations based on <https://ec.europa.eu/eurostat>)

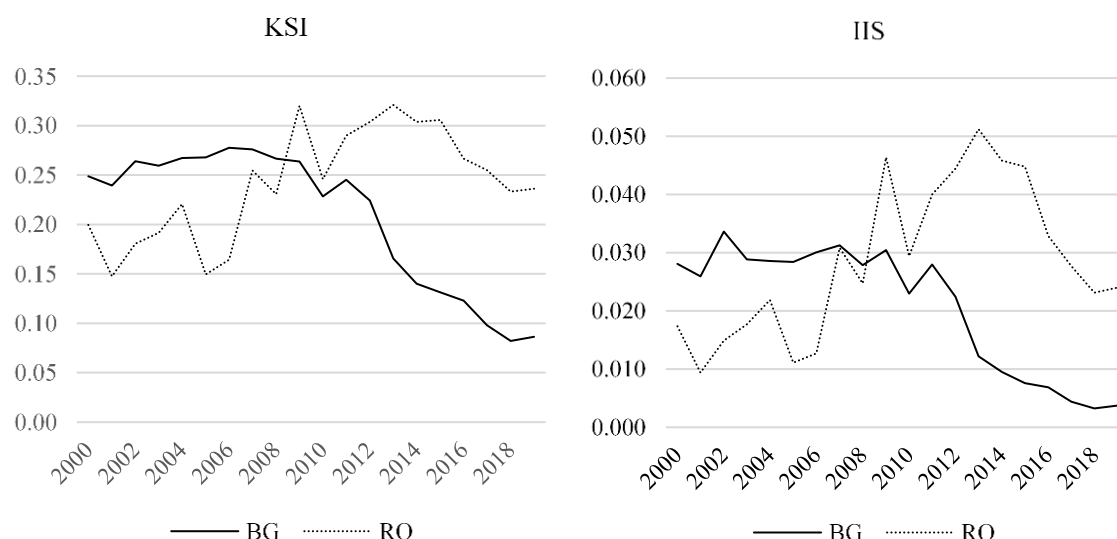
In the case of Romania the initial divergence was relatively more moderate with the highest value of KSI of 0.40 which was recorded in 2007. Furthermore, this index started to decline in the next year whereas in Bulgaria it was still growing. From 2009 until 2012 its values became more stable and a new drop was registered in 2013. Starting 2014 KSI for Romania fluctuated within very narrow boundaries and the structural divergence relative to the Eurozone was preserved. In 2019 it decreased by 17% compared to 2000 while in Bulgaria it decreased by 49%. According to the ISI the discrepancy between the GDP expenditure structure in the Eurozone and that in Romania at the end of the period amounted to 79% of the initial one whereas for Bulgaria it was just 28%. The differences in the mean values of the two indices for Bulgaria and Romania were minor which was due to the specific interdependencies between them during the different stages of the period. Until 2004 inclusive and from 2010 Bulgaria showed greater similarity with the Eurozone in terms of the GDP expenditure structure in comparison to Romania where the difference between the two countries was smaller during the first interval and greater during the second. The relative position of Bulgaria worsened from 2005 until 2009 when its KSI was on average by 17.5% higher than that of Romania while for the ISI the average excess was by 45%. This was even more relevant for the period until 2008 when the two indices for Bulgaria were by 30.6% and 92% respectively higher than those in Romania. The bigger divergence in the expenditure structure of the GDP of Bulgaria from the Eurozone in the period between 2005 and 2008 was due to the considerable increase in investments, whose relative share in the gross product of the country grew from 23.4% to 37%. This higher investment activity was the main factor for the comparatively high rates of economic growth of 6.6% on average, realized in that period. What is more, the growth in investments was related to the increase in the deficit in foreign trade from 11.2% of GDP in 2004 to 19.7% in 2008. Although Romania also marked an increase in investments for the same period of 24.2% to 33.1% of GDP, this led to a more moderate increase in the deficit in foreign trade whose value in 2008 amounted to 12.1% of GDP. Another specific characteristic feature for Romania is the distinct narrowing of the differences with the Eurozone in terms of the relative share of the final consumption expenditure of households and NPISHs, while in Bulgaria this component of the aggregate expenditure performed in a more conservative manner.

The period after 2009 saw the relative share of investment in the GDP of Bulgaria decline and started to fluctuate around the mean for the Eurozone which, however, limited the possibilities for achieving higher rates of economic growth. This is also related to overcoming the deviation in the share of net export where the discrepancies with the expenditure structure of GDP was mostly explained with the higher, though declining relative share of the final consumption expenditure of households and NPISHs and the lower relative share of government consumption. In Romania the share of investments in GDP remained higher despite its decline over time which contributed to the higher rates of economic growth reported after 2012. Another specific feature of the country was the continuing excess of the relative share of final consumption expenditure of households and NPISHs over the reported ones in the Eurozone and Bulgaria which at the end of the period amounted to 10.2 percentage points and 4.7 percentage points respectively. As far as the share of government consumption is concerned, it marked a sustainable increase during the past four years and in 2019 the gap between the country and the Eurozone was -3.2 percentage points whereas the gap between the Eurozone and Bulgaria was -3.8 percentage points.

## 6. CONVERGENCE IN THE GDP INCOME STRUCTURE

The study into the convergence in the GDP income structure is considered to be of complementary importance to evaluating structural convergence. It can contribute to clarifying the reasons for the existence of convergence or divergence trends in the GDP expenditure structure. At the base of its perception in the meaning specified, lies the understanding that the distribution of the income between labour and capital can influence the dynamics of the investment activity. If this dynamics differs for the compared countries and groups of countries, the way income is distributed will have impact on the decline or increase in the structural disproportions between the countries. As the data in Figure 3 show Bulgaria and Romania feature diametric changes in the income structure of GDP relative to the Eurozone. For Bulgaria the general tendency for the period was towards narrowing the distance with KSI of 34.7% in 2019 when ISI was just 13.2% of its initial value. Within the period, however, two intervals can be identified which feature different specifics. The first interval continued until 2011 and was characterized with alternating increases and decreases in the two indices and as a result their values during that year were almost equal to those in 2000. During the second interval the indices marked a considerable decline at rates which fluctuated within wide boundaries. The most significant drops were in 2013 and 2017 when the decline in KSI was by 26.1% and 20.3% respectively and of ISI – by 45.7% and 35.7% respectively. During the remaining years the decrease was relatively more moderate and in the last year there was even an increase in the differences by 5.3% according to the first index and by 15.3% according to the second. For Romania the respective changes throughout the entire period moved in different directions with an overall trend towards a moderate deepening of the discrepancies. This is evidenced by the fact that in 2019 the values of the two indices were by 18.4% and 38.1% respectively higher than the ones recorded in 2000. The discrepancies were smaller before 2008 inclusive and after 2015 when the mean value of the first index remained below 0.26, while the value of the second – below 0.03. The period between 2009 and 2015 stood out with higher structural desynchronization with the Eurozone when KSI reached a maximum of 0.32 in 2009 and 2013 when ISI amounted to 0.046 and 0.051 respectively.

*Figure following on the next page*



*Figure 3: Convergence in GDP income structure*  
*(Source: Own calculations based on <https://ec.europa.eu/eurostat>)*

The higher level of convergence in the GDP income structure of Bulgaria ensues from the significant increase in the relative share of the employee compensations made at the expense of the decreased share of GOS&MI. In 2019 the incomes of employees accounted for 43.2% of GDP which was by 8.3 percentage points more than in 2000. The dynamics outlined is completely logical considering the low absolute level of employee income in the country which presupposes a process of catching up of the average levels in the EU and the Eurozone. The problem is that the related decline in the relative share of GOS&MI has a negative impact on their investments which turns it into an impediment to economic growth not only in the short-run, but in the long-run too. The income distribution in Romania at the end of the period – 38.2% for the compensation of employees and 52.3% for GOS&MI, was quite close to that at the beginning and the changes over the years were diverse. The lack of a sustainable increase in the share of incomes of the employed and the decline in the incomes of the companies' predetermines the existence of the same or wider gap between the GDP income structure in Romania and the Eurozone. This, however, can be seen as a possible reason for the higher investment activity, relative to that in Bulgaria, which is reflected in the higher rates of economic growth during most of the years.

## 7. CONCLUSION

The results from the empirical analysis presented in the current paper give ground for concluding that Bulgaria shows better convergence in the GDP structures with the Eurozone relative to Romania. The convergence in the structure of GVA of the Bulgarian economy is consistent nearly throughout the entire period under consideration and happened relatively smoothly whereas the convergence for the Romanian economy started in 2012 and ran unevenly. Keeping the higher values of divergence for Romania is connected with the higher relative share in the value added of industry which has impact on the achieved higher rates of economic growth due to the higher labour productivity in this sector and its considerable contribution to export. The expenditure structure for both countries featured divergence before the crisis in 2009 which was more distinct in Bulgaria as a result of the rapid increase in investments and the foreign trade deficit. In the post-crisis period the Bulgarian economy showed a higher level of structural convergence with the Eurozone than the Romanian due to the lower relative share of investments in the GDP which in turn limited the possibilities for

generating higher economic growth. The trend in Bulgaria for 2012 in terms of the GDP income structure was towards a significant reduction in the differences due to the increased relative share of the incomes of the employed and the reduced relative share of the incomes of companies which had a depressing impact on the investment activity. Similar suppressive effect was not observed in Romania where the change in the structure of incomes for the entire period was towards a moderate increase in the deviations from the Eurozone.

## LITERATURE:

1. Angeloni, I., Flad, M., Mongelly, F. (2005). Economic and Monetary Integration of the New Member States – Helping to Chart the Route. *Occasional Paper Series*, European Central Bank, 36.
2. Buiter, W., Grafe, C. (2002). Anchor, Float or Abandon Ship: Exchange Rate Regimes for Accession Countries. *CEPR Discussion Papers*, Centre for Economic Policy Research, 3184.
3. Chilian, M-N., Iordan, M., Pauna, C. (2016). Real and Structural Convergence in the Romanian Counties in the Pre-accession and Post-accession Periods. 56th Congress of the European Regional Science Association: "Cities & Regions: Smart, Sustainable, Inclusive?", Vienna, Austria, Available at: <https://www.econstor.eu/handle/10419/174648> (Accessed 24.01.2021).
4. Cuadrado-Roura, J., Garcia-Greciano, B., Raymond, J. (1999). Regional Convergence in Productivity and Productive Structure: the Spanish Case, *International Regional Science Review*, 22(1), pp. 35–53.
5. Dan, H. (2019). Joining The Euro Zone – An Exploration of Real and Structural Convergence in Romania, Bulgaria and Croatia. *Economic Archive*, D. A. Tsenov Academy of Economics, 1, pp. 19-32.
6. Damyanov, D. (2019). Structural Convergence of European Economies – Literature Review. *Research Papers*, University of National and World Economy, 5, pp. 217–230.
7. Darvas, Z., Szapary, G. (2004). Business Cycle Synchronization in the Enlarged EU: Comovements in the New and Old Members. *MNB Working Paper*, Magyar Nemzeti Bank, 1.
8. Fourastié, J. (1949). *Le Grand Espoir du XXe Siècle*. Paris: Presses Universitaires de France, Reprinted as „Moderne Techniek en Economische Ontwikkeling“ (1965). Amsterdam: Het Spectrum.
9. Imbs, J. (2000) Sectors and the OECD Business Cycle. *CEPR Discussion Paper*, Centre for Economic Policy Research, 2473.
10. Imbs, J., Wacziarg, R. (2003). Stages of Diversification. *American Economic Review*, American Economic Association, 93(1), pp. 63-86.
11. Krugman, P. (1991). *Geography and Trade*. Cambridge, MA: MIT Press.
12. Longhi, S., Nijkamp, P., Traistru, I. (2004). Economic Integration and Regional Structural Change in a Wider Europe: Evidence from New EU and Accession Countries. *Journal for Institutional Innovation, Development and Transition*, 9, pp. 48-55.
13. Marius-Corneliu, M. (2006). The Structural Convergence of the Romanian Economy. Comparative Analysis. *Theoretical and Applied Economics*, Asociația Generală a Economistilor din România, 1(496), pp. 26-33.
14. Miron, D., Tatomir, F., Alexe, I. (2013). Do Central and Eastern European Countries Become More Similar in Terms of Sectoral Structures as Their Real Convergence with the Euro Area Increases? Analysis on the Last Decade. *Economic Computation and Economic Cybernetics Studies and Research*, 47(1), pp. 5-26.
15. MPC task force of the ECB. (2004) Sectoral Specialization in the EU: A Macroeconomic Perspective, *Occasional Paper Series*, European Central Bank, 19.

16. Palan, N. (2013). *Structural Change and Convergence: An Empirical Analysis of Production Structures in Europe*. Frankfurt am Main: Peter Lang GmbH.
17. Palan, N., Schmiedeberg, C. (2010). Structural Convergence of European Countries. *Structural Change and Economic Dynamics*, 21(2), pp. 85-100.
18. Postoiu, C., Busega, I. (2015). Romania's Agriculture and its Role in the Convergence Process. *Global Economic Observer*, 1 (3), pp. 34-43.
19. Raleva, S. (2019). Structural Characteristics of Economic Growth in Bulgaria. *Research Papers*, University of National and World Economy, 5, pp. 65-81.
20. Raleva, S., Damyanov, D. (2019). GDP production structure convergence of selected CEE countries with the Eurozone. *Sustainable Development Goals 2030: Challenges for South and Eastern European Countries and the Black Sea Region*, UNWE Publishing Complex, pp. 29-41, Available at: <http://www.asecu.gr/files/15th-international-asecu-conference-2019-unwe-sofia-proceedings.pdf> (Accessed 26.09.2020).
21. Raleva, S., Marikina, M. (2020). Structural Convergence with Eurozone and Institutional Quality in Bulgaria, *33rd EBES Conference Proceedings*, EBES Istanbul – Turkey: EBES Publications, pp. 586-600.
22. Stattev, S., Raleva, S. (2006). Bulgarian GDP Structures - Convergence with the EU. *South-Eastern Europe Journal of Economics*, 4(2), pp.193–207.
23. Velichkov, N. (2020). Convergence of GDP Expenditure Components in Bulgaria to the Eurozone. *Business Research*, Burgas Free University, 1, pp. 54-65.
24. Wacziarg, R. (2004). Structural Convergence. *CDDRL Working Papers*, Center of Democracy, Development and the Rule of Law, 8.



# THE POLITICAL ECONOMY OF CHINA IN THE IMPACT OF COVID-19

**Aysel Musayeva-Gurbanova**

*Azerbaijan State University of Economics (UNEC)*

*Istiqlaliyyat str.6, AZ1001, Baku, Azerbaijan*

*ayselmusayeva@unec.edu.az*

## **ABSTRACT**

*In its global scope and effect, the Covid-19 pandemic is unparalleled, presenting daunting challenges to policymakers and the empirical study of its direct and indirect impacts within the integrated global economy. The results of the analysis show that the global recession will be long-lasting, with no country, regardless of its mitigation strategy, avoiding its effects. As most of the world is trying to keep the fragile rebound from recession from being stalled by new coronavirus waves, China's economy appears to be on its way. The coronavirus started in the Wuhan province of China in December 2019 and spread rapidly. Although the cases seen in China reach their peak today, over time have entered a downward trend. The opposite trends are seen in Europe and America. . In strongly interconnected and integrated earth the effects of the disease have gone beyond death. In this context, governments prepare contingency plans and help prevent economic collapse receives packages. Serious deadlocks have occurred in the Chinese economy after the coronavirus, and this situation has led to a decrease in production and consumption. In general, global supply chains its operation was impaired, and all companies in the world were negatively affected by this situation. This research will have been analyzing the political impact of China's economy during outbreak issues. In accordance, here, we will discuss China's economy current economic course and challenges.*

**Keywords:** Covid-19, China, economy, impact, growth

## **1. INTRODUCTION**

While the Covid-19 crisis first came to be a worldwide threat to public health, in developed and developing countries it has significantly effectuated lifestyles, political and economic circumstances. The first phase of a long-term revival of the global economy was planned for 2020, which began and expanded along the US-China axis in recent years and was vulnerable to break-up developments between the real economy and the financial market. But circumstances weren't as expected. This outbreak of new kinds of coronavirus (Covid-19) led to a global economic and social lockout and a lack of hope. In recent months of 2019, a virus first appearing in Wuhan, China's Hubei province has spread at an unexpected pace, infecting up to eleven million people and causing more than 500 thousand lives to 213 countries and regions worldwide within a couple of months. Thus, the political and economic globalization, as a result of the convergence of the economy and human mobility that they have enhanced from the 1980s, has made positive contributions and paves the way for fast diffusion of public health risks. The standardization process should enter a certain point and detailed risk evaluation studies should be carried out on epidemic reflection, in areas such as development, unemployment, and investment, to determine accurately the long-term influence of the Covid-19 epidemic on the global system and the global economy. At the same time, it should be emphasized that lockdown practices that limit the physical movement and selection and stagnate economic and social order in human societies may have psychological consequences permanently. On the other hand, the global economic conditions were deeply influenced by systemic contractions in the systems of supply as well as demand. Indeed, economic recovery may not be an apt word to characterize China's economic boom, as the pandemic triggered something more like depression than a recession in the case of China.

With society returning to normal, China's economic growth is being boosted by innovation and pre-existing digitalization. The shock of the pandemic has strengthened China's trend towards digitization and investment in innovation, and its accelerated effect has steadily been unleashed as the economy returns to normal. Here, we will first discuss why, even after being surprised by COVID-19, China's economy continues to boom, and then elaborate on China's current economic course and challenges soon. Although the US, European economies, and many developing countries head into a process of recession, the fast-widening growth rates of China and Asian economies have declined. Moreover, there has been an enormous public health expense that would significantly impact global trends in the coming century, from development to designing of the consumption and utility industries. The cost of public health has not been accounted for. It may lead to processes that lead China to a loss of its "global factory" position in the coming years because many developed countries, particularly the US and Japan, are making incentive packages to move their manufacturing facilities outside China's borders. While very concrete and scientific data in this regard has not been revealed, former US President Donald Trump and French President Emmanuel Macron accused the Beijing administration of imprudence support the scenarios for long-lasting cuts to China in the global disease bill. Noticeably, both the Chinese economy and the global economy would be a turning point for the Covid-19 epidemic. The Chinese economy has been in a downward spiral for a while and has been witnessing high growth rates for quite a long time. Economic competition between the US and China, in particular with trade wars, was also on the agenda. While cessation of fire was made through the January 2020 resolution, during trade wars China has also been adversely affected. The amount of international trade was contracted and the rate of economic growth was slowed down. After China has announced its success over the virus, the second economic war starts. Understandably, China is not alone responsible for this situation. The progression of the virus will lead to step by a step recovery process. Thus, even though China can launch its full-capacity production, the nation will be unable, due to inadequate demand worldwide or fragmented supply chain, to meet its target growth rates for the remaining year. China is already faced 40 years with the danger of an economic slowdown. It is estimated that in Chinese fighting the epidemic, 8 million people lost their jobs. The question of whether China will satisfy the requirements of its population also comes to the fore because of the reduction in scale.

## **2. CHINESE POLITICAL ECONOMY SITUATION DURING THE OUTBREAK**

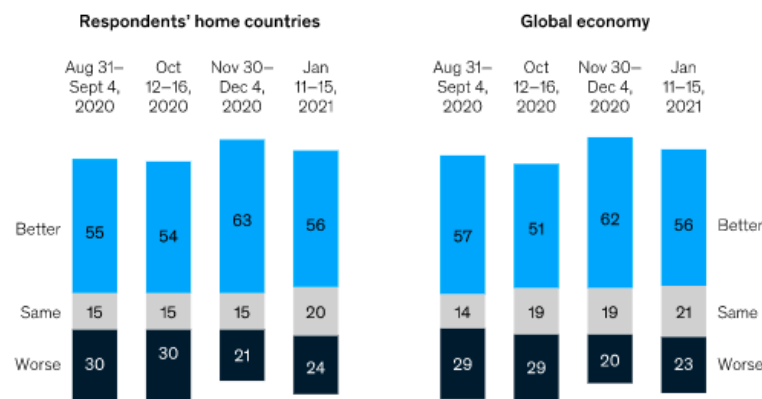
Looking ahead to next year, the aspirations of respondents for Chinese home economies are increasingly positive: 63% believe their countries' economic conditions will be better six months from now, up from 54% who said the same thing in mid-October, according to McKinsey Global Economic Survey predictions for the future. Meanwhile, the global outlook has bounced back. 61 percent of respondents now expect that global conditions will change in the months ahead, after several peaks and valleys in recent surveys. Moreover, respondents are the most likely in the last three years to expect the growth rate of the global economy to rise. Sixty-eight percent are now predicting increased expansion, with just 24 percent predicting a contraction, the smallest proportion to say so during the year. Overall, perceptions of the national economies of executives remain consistent with the September figures, with 55% expecting progress over the next six months. Outlooks in all but two areas appear to brighten. Greater China is one of these. The results indicate even changing perceptions regarding the effect on domestic and foreign GDP of the COVID-19 crisis. When asked, which one of the nine crisis-related situations in their countries considers it most likely, they are always looking at a scenario which is defined by partially successful public-health policy responses, instead of the most commonly cited which includes virus control, sector harm, and a lower long-term growth rate.

However, the second-most frequently cited scenario for the global economy has been marked by recurrent viruses and sluggish long-term growth. The shares of optimistic views of income and demand are the highest since the pandemic was announced for respondents to have anticipated their businesses. In the coming months, 55 percent of respondents expect the earnings of their businesses to raise more than twice the share that they posted six months earlier.

*Figure 1: Expected changes in economic conditions, next 6 months*

**Executives maintain a positive outlook on the economy, though their views have tempered.**

Expected changes in economic conditions, next 6 months,<sup>1</sup> % of respondents



<sup>1</sup>Figures may not sum to 100%, because of rounding. Sept 2020, n = 1,138; Oct 2020, n = 2,264; Dec 2020, n = 1,382; and Jan 2021, n = 1,025.

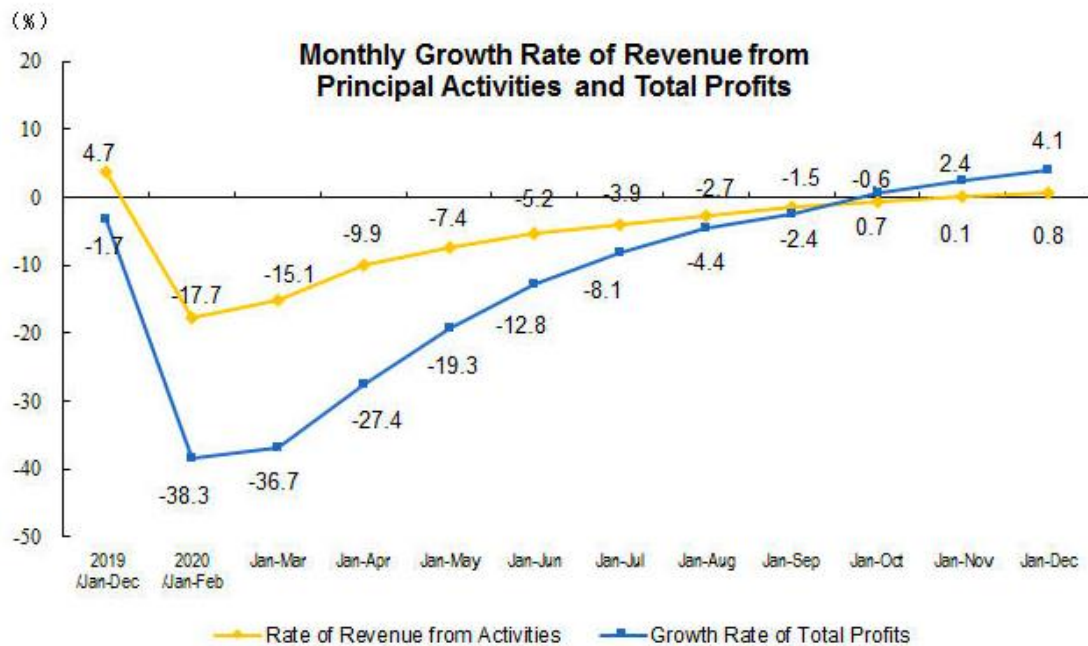
McKinsey  
& Company

Source: McKinsey & Company (2021)

Innovation and digitalization also have caused economic development in China as pandemic controlled society return to life. China recorded GDP growth in the third quarter, up by 4.9 percent over the previous year and growth of 0.7 percent over the first three quarters of the year, according to data from the National Bureau of Statistics released on October 20. In September, the exports and imports in China rose steadily, imports increased by 13.2%, and exports expanded by 9.9% from the previous year. As international trade has demonstrated, the pandemic has significantly affected developing countries, causing a dramatic decline in their prominence in trade network areas but does not have an impact on China's central position. Moreover, on September 2 according to the United Nations World Intellectual Properties, China holds its 14th position in the highly competitive economies in the Global Innovation Index (GII) 2020 (WIPO). The COVID-19 pandemic in its entirety seemed to stimulate the "acceleration of trends that were previously present," according to WIPO Director General Francis Gurry, one of the trends which can be intensified by the pandemic is the shift towards Asia. In line with these facts that the central government is endorsing Shenzhen's reform. President Xi Jinping declared support for the pilot city reform with complete approval on the 40th anniversary of the establishment of the Special Economic Zone in Shenzhen, involving a systematic development process, extending the transparency and the modernization of the governance structures, and effectively encouraging the evolvement of the Greater Bay region of Guangdong-Hong Kong-Macau. Secondly, Shenzhen has become a focus of trade and development for a new wave of Chinese innovators with a diverse young workforce. The Shenzhen population of any urban center in the world is the largest in terms of "engine room."

Third, Shenzhen has developed regional ties as the center of Chinese change. Shenzhen is now a center for research and technology, as a showcase for China's economic growth.

Figure 2: Monthly growth rate of revenue from principal activities and total profits



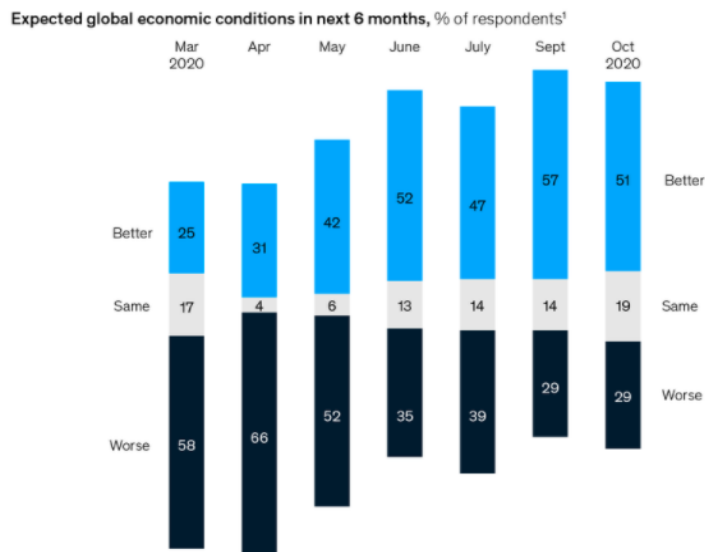
Source: National Bureau of Statistics of China, 2020

The First Smart City Initiative (SCI) Implementation Committee Meeting took place on 17 June 2020, focused on digital communication, creativity, and entrepreneurship, and technology talent sharing and growth. In Singapore and Shenzhen, COVID-19 has increased the digital speed and made 'ever more pertinent' the digital networking of two parties; both cities have settled on eight memoranda of understandings on greater consumer access in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) and in South East Asia. To increase investment in Research and Development (R&D) and to control the innovation industry, the Chinese administration played an important role. In 2019, China continued to expand on R&D for its long-term double-digit growth. Total public and private spending on research and technology grew by 12.5% compared to 2.21 trillion (\$322 billion) Chinese Renminbi in 2019 to 2,23% of GDP. In contrast, 2.83% of GDP was invested by the United States, 2.38% of GDP by the OECD countries, 4.9% by Israel, and 4.5% by South Korea respectively in 2018. China's most recent five-year plan and the medium and long-term 15-year research and technology growth policy set the target of spending 2.5% of GDP on R&D by 2020.

Figure following on the next page

*Figure 3: Expected global economic conditions in next 6 months*

**Most respondents remain positive about expected global conditions, but the share predicting improvement has declined since September.**



<sup>1</sup>Figures may not sum to 100%, because of rounding. In Mar 2020, n = 1,152; in Apr 2020, n = 2,121; in May 2020, n = 2,514; in June 2020, n = 2,222; in July 2020, n = 2,112; in Sept 2020, n = 1,138; and in Oct 2020, n = 2,264.

McKinsey  
& Company

Source: McKinsey & Company (2021)

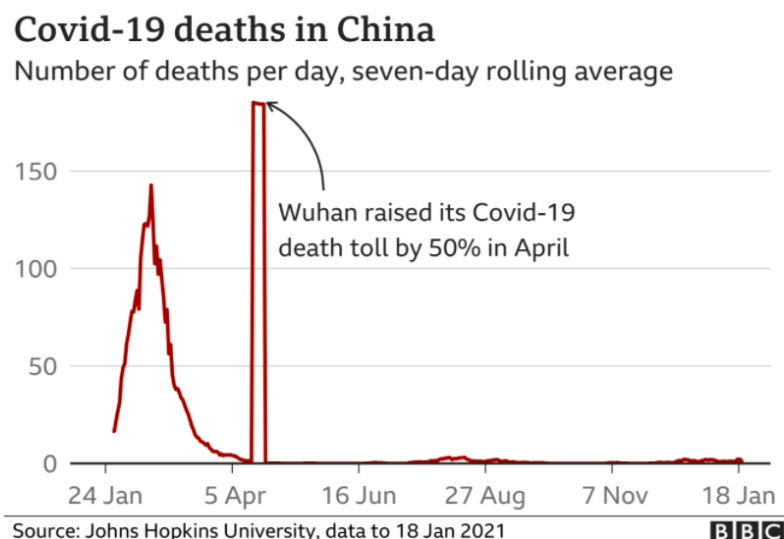
Like other economies in East Asia, government involvement was a significant element in China's growth during Covid-19. Robert Wade points out that the government will direct the economy in a certain direction to achieve better economic efficiency than free markets, according to the facts from East Asia countries. Taking these into account, Assistant Professor in Chinese and East Asian Business at King's College London Dr. Sun has described the "China Model" three primary features: authoritarianism, democratic centralization, and powerful government capacity. Sun said authoritarianism and political centralization were the main components that affected a Chinese government response to the latest coronavirus pandemic (COVID-19), although it is the latter "an essential condition for all effective governance, both within democratic and authorities." Specifically, Dr. Sun claimed that the Chinese authorities enabled the Chinese government to implement "draconian measures for imposing isolation, monitoring, and quarantine," including an "intrusive government and limited respect for civil liberties and individual rights." Dr. Sun also noted that whilst these measures "proven extremely effective in limiting pandemic propagation," while draconian and intrusive to personal privacy. These measures.

## 2.1. Hubei Province's political and economic repercussions during Covid-19

Hubei has strong geographical advantages as the largest full traffic center in Central China. Wuhan, which emerged from the merger of three cities named Wuchang, Hankou, and Hanyang is known as "Jiusheng Tongqu (the leading business center of nine provinces)". Wuhan is an important transportation hub, with dozens of railways, roads, and highways passing through the city and connecting other major cities, and is recognized as the political, economic, financial, cultural, educational, and transportation hub of Central China. It includes strong science and educational institutions, prosperity in natural capital, decent facilities for transport and connectivity as well as strong industrial bases.

In the economic development of China Hubei has a 4% stake. The Hubei Free Trade Zone was approved on 1 April 2017 by the administration. The capital, Wuhan, has 11 million residents and strong economic and geographical advantages in the most population of central China. The biggest inland harbor in the world is here. It's almost a hub for commerce, storage, and shipping. It is also China's center in the manufacturing, financial, business, scientific, scientific, and technological fields, and in education, which is also a significant part of the "One Belt, One Road" project. In the 1990s, 35.2, 38, and 26.9 percent were allocated by the GDP components of the province of Hubei, and 10.3, 44.5, and 45.2 percent were distributed by the farming, industry, and service industries in 2017 respectively. In other terms, the province of Hubei has over the years been China's significant manufacturing center. Metalworks, motorcycles, chemical and building materials, foodstuffs, machinery construction, textiles, electronics, and shipbuilding are the main industries in the province. Hubei has a large supply of hydroelectric power and the hydroelectric capacity reaches here 66% of industrial output. The Chinese government has placed the city under quarantine on 23 January 2020 to stop a further outbreak of the 2019 coronavirus that has been an epidemic (Wuhan coronavirus, the pneumonia of Wuhan, and the new coronavirus (2019-nCoV)). Foreign flights to the city have been canceled as well; in Germany, Turkey, all travelers from several countries, including France and China, have started to track the thermal detector. In the first quarter of 2020, Hubei was the Chinese economic sector that the first epicenter for the coronavirus outbreak, which was the most serious economic downturn of the Chinese government's 31 provincial jurisdictions at the beginning of this year. The National Statistical Bureau of China had mentioned that the unexpected emergence of the latest coronavirus, with most economic indicators dramatically declining in the first quarter, has had an unparalleled effect on the economic and social growth in the province.

*Figure 4: Covid-19 deaths in China*



*Source: BBC News reports (2021)*

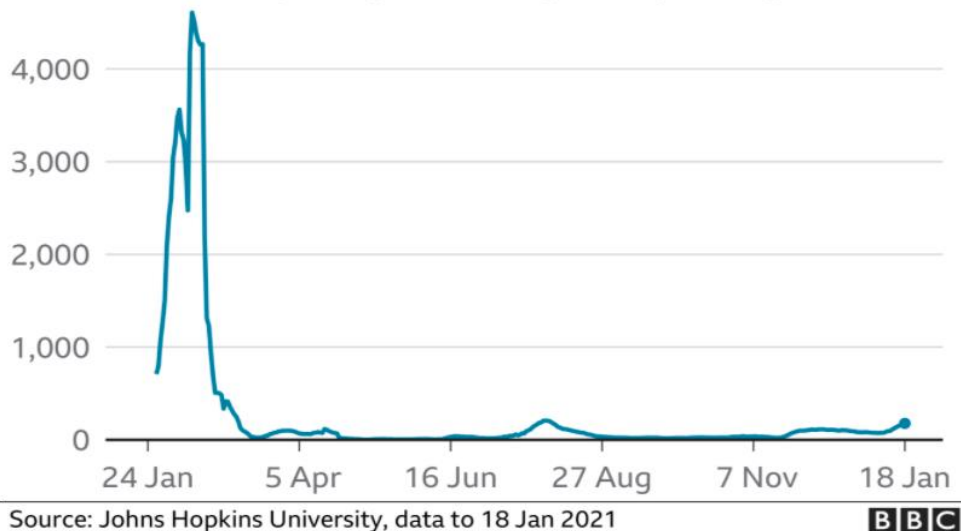
The traffic between China and Europe was also responsible for severe restrictions. Connections from Hubei Province but also other areas such as Jiwu (Zhejiang) and Hefei have been suspended until the second half of February (Anhui). The instability of shipping prohibits the supply of goods to the cargo terminals. The disease itself has prompted foreign businesses to recognize the value of China's position of too many supply chains. The propensity to diversify supply chains would seem to escalate when one segment of output, particularly the one aimed at the local market, stays where they are.

In the first quarter of 2020, the GDP in Hubei Province, which is decreased 39.2%, but restored gradually to just five percent in the global catastrophe year. Official estimates in China indicate that GDP increased by 2.3% last year, even though the economy was very unbalanced. Wang Zhonglin, the city's top official, called on citizens not to "reduce efforts to develop into an international city" in a December forum to promote economic growth along the Yangtze River, flowing through Wuhan.

*Figure 5: Covid-19 cases in China*

## Covid-19 cases in China

Number of cases per day, seven-day rolling average



*Source: BBC News reports (2021)*

One year later, in the city, life seems almost normal. The news from BBC drove to the area and spoke to the people about their lives. But, the level of the crisis achieved is responsible for politizing the decision-making mechanism, which also impacts underlying issues such as disease counteracting. The Hubei Province, which is on the brink of crisis, has failed in other regions of China, even suspect the Chinese Communist Party (CPC) of malfunctioning the health system within a financial crisis. All this is combined with an overall sense of hypocrisy and pathological constraints that preclude undue bureaucracy from working and operating efficiently within state institutions.

*Figure following on the netx page*



Figure 6: Euromonitor International Macro Model, National Statistics. Global real GDP growth using PPP weights; figures for 2020 onwards are forecasts (2020)



In comparison with Europe and the U.S., there is an image of regulation in China, unlike fuss and disorder in the west. At the height of the outbreak, Jinping declared total war, and victory over the virus is secured for now with the intense steps taken. First, it should be taken into account the fact that China has not behaved transparently enough and has long concealed the virus and the data.

Figure 7: Euromonitor International Macro Model, National Statistics.

Country/Region	2019	2020	2021	2022	2023-2027	2020 revision	2021 revision
<b>Developing Economies</b>	4.1	-1.1	6.3	5.4	4.4	-5.3	1.8
China	6.3	0.5	8.3	6.4	4.9	-5.3	2.7
India	5.1	2.1	7.0	6.8	6.1	-3.7	0.6
Indonesia	5.0	0.8	6.5	6.3	5.0	-4.1	1.4
Brazil	1.1	-5.0	3.0	3.7	2.4	-7.1	0.7
Mexico	-0.1	-7.0	3.0	3.0	2.4	-7.9	1.5
Russia	1.3	-6.2	3.7	2.8	1.6	-7.9	2.1
Turkey	0.9	-5.0	4.5	4.0	3.3	-7.5	1.4

Note: Global real GDP growth using PPP weights; revisions are relative to pre-pandemic (2020)

### 3. CONCLUSION

The economic crisis triggered by the steps taken to slow down and end the COVID 19 outbreak is substantially different from the ones faced by past economic crises to date. This is multidimensional since the economic crises triggered by the epidemic are unknown, epidemic period uncertain, epidemic number recurrence (which they call the 2nd and 3rd waves), and the elimination of the epidemic are most significant. As the conclusion of this kind of financial crisis is closely correlated with the end of the outbreak. This means that the spread of COVID-19 is a health concern, but the economic situation will not stop until the disease has stopped. As summarizing in this research, though China's economy has been seriously affected by the coronavirus outbreak, Beijing still can regenerate as soon as possible and recover from the meltdown. China's history is vibrant in fighting disasters.



A multidimensional systematic crisis emerging as demand as well as demand reduction is triggered by the economic crisis which has been caused by steps taken to slow down the COVID-19 outbreak. Around the same time, the combined reduction in demand and supply in the COVID 19 pandemic adversely impacts economic earnings, decreasing them and lowering the growth rate. This adds to customer panic, disrupts buying habits, and generates industry anomalies. The issues faced during the COVID19 outbreak include production, use, and workforce. The following findings have appeared on the basis of political and economic evidence for analysis for the political economy of China in the impact of COVID-19:

- Failure to produce because employees do not go to work due to quarantine measures;
- Low-level production due to the flexible work system applied to protect social distance;
- Breakdowns in the supply chains due to the quarantine measures taken by the government and bankruptcies in this process;
- The production of companies that cannot find intermediate goods
- Production losses in the agricultural sector due to their inability to harvest and harvest their products on time, and the inability of agricultural workers to work due to quarantine measures;
- All businesses, especially aviation, logistics, tourism and accommodation, and the food and beverage sector such as restaurants, cafeterias, are faced with serious difficulties Bankruptcies and job losses in certain sectors;
- Business activities becoming difficult for Small and Medium-Sized Enterprises (SMEs);
- Many world leaders take national and local political decision-making, using incremental measures to mitigate the economic decline;
- Effect and disruption of exports and imports;
- Reduction in consumer spending as a result of quarantine policies;
- As the COVID-19 pandemic has become an extremely unpredictable climate, consumption spending decreases as some customers regulate their spending.

China would decide strategies to create a balance between health and the economy with sensitivity in the COVID-19 process. Besides, the economic, social, and cultural systems of each nation are distinct, even though every country applies similar policies, and also the mechanism of growth in the epidemic COVID-19 and the economic and social implications thereof would vary in China within governmental issues. Social policies are one of the key components of the extensive economic package offered by COVID-19 countries. Here, it is important to ask how countries can take policy steps and to prioritize them. This process should be viewed as a measure of its potential influence on Chinese politics and Xi Jinping's future. From now on, the future of the Chinese system and the process of comparing this with the West is on the agenda of Chinese politics' organizational strength and health infrastructure expertise. In some ways, this crisis is regarded by Xi Jinping, who is recognized as a "legendary heads of state" with Mao Zedong and Deng Xiaoping, as the biggest political obstacle and as some form of a quest to prove the success of the Chinese regime in the world. If the outbreak comes to a close over the coming years, the CPC will most likely effectively use its surveillance of the coercion structure and instruments to mold public opinion to translate the tragedy into a victory for the political world and maybe even to improve the government. A longer-term disease, however, would trigger more internal conflict not only between the government and the people but within the governmental system as well. This drives the ruling party to reduce the scale of the epidemic to allow migrant workers to return to manufacturing centers and to bring economic growth back on the usual course. The activities of the government are determined by fear of the detrimental impact of the current recession and this presents an even greater danger for the CPC rule from the policymakers.

The information strategy can be expected to be monitored progressively tightly. The ruling class will make attempts to remove any indicators of disobedience, using not only surveillance but also conventional modes of repression: every day are exposed cases of journalists being arrested and persecuted, civil society leaders and intellectuals who have opposed government behavior within deepening economic problems. The precautions taken to stop the outbreak of the disease are still commonly used for government influence. Any citizens have been placed under house quarantine to limit their public activities. There are signs. If COVID-19 is prevented, the Chinese economy will be able to fully recover in six to 12 months, in 2021. If the epidemic's destructive impacts remain that the country's economic condition will be severely impacted, and also the world economy will be affected. If so it would allow further demands on the government to introduce a program of incentives for party structure and government-owned businesses.

## LITERATURE:

1. Bogusz, Michał. (2020) .The Wuhan coronavirus: the outbreak's political and economic repercussions (2020). Retrieved 17.01.2020 from <https://www.osw.waw.pl/en/publikacje/analyses/2020-02-17/wuhan-coronavirus-outbreaks-political-and-economic-repercussions>
2. Warwick M. and Roshen F., (2020). The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. CAMA Centre for Applied Macroeconomic Analysis, Working Paper 19/2020 February 2020, CEPR Press, Retrieved 25.01.2020 from file:///Users/user/Downloads/2020\_McKibbinFernando\_COVID-19SevenScenarios.pdf
3. China's Hubei, the epicenter of coronavirus outbreak, posts first-quarter GDP slump (2020). Retrieved 19/01/2020 from <https://www.reuters.com/article/us-china-economy-gdp-hubei-idUSKCN2231QJ>
4. Tang, Frank. (2020). China's economic recovery from coronavirus in doubt as Beijing outbreak forces businesses to 'wait and see'. Retrieved 20.01.2020 from <https://www.scmp.com/economy/china-economy/article/3089274/chinas-economic-recovery-coronavirus-doubt-beijing-outbreak>
5. Chudik, Alexander; Mohaddes, Kamiar; Pesaran, M. Hashem; Raissi Mehdi; Rebucci Alessandro. (2020). Retrieved 20.01.2020 from <https://voxeu.org/article/economic-consequences-covid-19-multi-country-analysis>
6. What is the impact of COVID-19 on the global economy? (2020) . Retrieved 19/01/2020 from <https://www.glion.edu/magazine/impact-covid-19-global-economy/>
7. The coronavirus effect on global economic sentiment. (2020) . Retrieved 21/01/2020 from <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-coronavirus-effect-on-global-economic-sentiment#>
8. The "China Model" Revisited: Political Economy of China in the Post-COVID-19 Era. (2020) . Retrieved 21/01/2020 from <https://www.northwestern.edu/abroad/about/news/the-china-model-revisited-political-economy-of-china-in-the-post-covid-19-era.html>
9. Charlie Campbell. (2020). Retrieved 22.01.2020 from <https://time.com/5932412/wuhan-lockdown-anniversary-china-covid19-coronavirus/>
10. Wuhan lockdown: A year of China's fight against the Covid pandemic. (2020). Retrieved 25/01/2020 from <https://www.bbc.com/news/world-asia-china-55628488>

## **DEVELOPING AN ECOSYSTEM FOR SOCIAL ENTERPRISE IN AZERBAIJAN BASED ON THE EUROPEAN UNION EXPERIENCE**

**Turan Suleymanov**

*Azerbaijan State University of Economics (UNEC), Azerbaijan  
turan.suleymanov@unec.edu.az*

**Fabio Casula**

*ATHMES, Belgium  
fabio.casula@athmes.eu*

**Mahammad Kekalov**

*Azerbaijan State University of Economics (UNEC), Azerbaijan  
mahammad\_kekalov@unec.edu.az*

### **ABSTRACT**

*The concept of social enterprise has recently been drawing the attention of both academics and policymakers across the world. Despite the increasing knowledge on social enterprise, there is still limited information regarding the difficulties that such organizations face. The development level of business models and the ecosystem of social enterprises also vary from country to country. The European Union is one of the best examples for the promotion and recognition of social enterprise with well-designed government support mechanisms. However, Azerbaijan has recently become familiar with this concept and didn't have adequate policies, programs, and strategies with supporting mechanisms. This paper aims to have a case study of Azerbaijan and provide recommendations for the development of the social enterprise ecosystem based on the experience of the European Union. The authors' findings and recommendations cover four main pillars of the social enterprise ecosystem - capacity to self-organize, visibility and recognition, resources, and education and skills development.*

**Keywords:** *Social Enterprise, Social Enterprise Ecosystem, Azerbaijan*

### **1. INTRODUCTION**

The concept of social enterprise has recently become one of the emerging fields of academic inquiry. The primary goal of social enterprises-businesses is to generate a positive social impact. This type of business model is an important component of the social economy, which employs about 13.6 million people in Europe (Gladwell, 2019). Despite the increasing knowledge on social enterprise, there are still limited information regarding this concept. The development level of business models and the ecosystem of social enterprises vary from country to country across the world. In this regard, Azerbaijan is one of the countries that have recently become familiar with this concept. Currently, there are no more than a few dozen active social enterprises in the country (Rosandic & Guluzade, 2018, p. 8). However, this type of business models is considered to have a great potential in Azerbaijan since the public policy in the country is socially oriented and there is a generally favorable business environment (Gladwell, 2019). In addition, in countries like Azerbaijan, the development of social entrepreneurship is more a necessity rather than a choice. Because there are multiple issues and diverse range of vulnerable and underrepresented social groups. The most socially and economically vulnerable groups in the country are refugees and internally displaced people, especially following the Nagorno Karabakh conflict in the 1990s. Therefore, social welfare statistics and unemployment in Azerbaijan have negatively been affected by this conflict. There is about 1 million internally displaced people and refugees in the country (Gladwell, 2019).

On top of it, the country has also been facing several social and economic challenges that may be addressed by social enterprises. Some of these challenges are related to gender issues, as well as rural-urban wage gaps. As of 2019, the average monthly wages of women were around 41% less than men. There is also a sharp difference between average monthly nominal wages and salaries of employees by economic regions and national level. Monthly nominal wages and salaries of employees in the poorest economic region of Azerbaijan is 45% lower than the national average and 60 % lower than average in richest urban city (*Azerbaijan State Statistics Committee*, 2020). Therefore, creating a suitable condition and ecosystem for the development of social enterprises could contribute as a solution of the above-mentioned issues as well as inclusiveness, sustainability and other policy objectives. Considering those problematics, studying best practices from around the world is imperative from an academic point of view. It helps to define policy lessons for the development of social enterprise ecosystem and to investigate the possibility to implement similar methods in Azerbaijan. Since the European Union (EU) is considered as one of the best examples among the existing ecosystems, the authors of this article aim to use Azerbaijan as a case study and provide recommendations for the development of a social enterprise ecosystem in the country based on the experiences of the EU. The findings and recommendations will cover four main pillars of the social enterprise ecosystem - capacity to self-organize, visibility and recognition, resources, and education & skills development.

## 2. LITERATURE REVIEW

### 2.1. The Concepts of Social Enterprise and Social Entrepreneurship

There are various understandings of social enterprises by academics, practitioners and policymakers. The concept of social entrepreneurship is often used as interchangeably with social enterprise. The concept of social entrepreneur was introduced by Banks in 1972 and it was seen as a solution to solve social problems through management practices (Nicholls, 2006). Social entrepreneurship gained a broader popularity with the establishment of the Ashoka foundation by Drayton in the US. Later on, it also drew the attention of European countries in the 1990s. This foundation was aimed at supporting social entrepreneurs (Kabbaj et al., 2016). The European Commission has also been using the term “social entrepreneurship” as an interchange with social enterprises. For instance, the Social Business Initiative (SBI) of 2011, was called as an initiative of “creating a favorable climate for social enterprises...”. However, the action plan in this initiative was presented to support social entrepreneurship. Well, what is social entrepreneurship? There are many definitions of social entrepreneurship, and no consensus on an exact definition (Dees, 1998). The OECD defines social entrepreneurship as “any private activity of general interest organized from an entrepreneurial approach and not having as its main reason the maximization of profits but the satisfaction of certain economic and social objectives, the ability to establish, through the production of goods and services, innovative solutions to the problems of exclusion and unemployment”. Some scholars believe social entrepreneurship occurs through social enterprises operations. “Social enterprises mix different logics: they trade in the market, but not with the aim of maximizing the financial return on investment for their shareholders; they receive public support through public policies which they contribute to shaping; they are embedded in civil society through the development of voluntary collective action around common goals characterized by a public benefit dimension” (Defourny and Nyssens, 2006, p. 13). Despite the differences presented in these two definitions, both concepts are used interchangeably, especially in policy documents and among practitioners. And the issue remains within the EU Bubble. Therefore, in this paper both concepts are considered to be interchangeable.

## 2.2. Social Entrepreneurship Ecosystem

Isenberg (2010) described the entrepreneurship ecosystem as a set of individual elements that combined in complex ways. These elements include leadership, culture, capital market and open-minded customers. For Isenberg (2010), “in isolation, each is conducive to entrepreneurship but insufficient to sustain it. Engaging private sector, modifying cultural norms, removing regulatory barriers, encouraging and celebrating successes, passing conducive legislation, being judicious in emphasizing clusters and incubators, subjecting financing programs to market rigors, and, above all, approaching the entrepreneurship ecosystem as a whole will allow governments to create economic growth by stimulating self-sustaining venture creation.” According to the studies, the development of entrepreneurship and creation of favorable economic growth can only be reached when there is coordination among each elements of the ecosystem. This can also be applied to social entrepreneurship. There is a need for favorable environment to have better impact. One of the studies on the ecosystem of social enterprises came from the comparative synthesis report on “Social Enterprises and Their Ecosystems in Europe”, published in 2020. In this report, the social enterprise Ecosystem of the European Union is presented as a system based upon four distinct pillars - capacity to self-organize, visibility and recognition, access to resources, and research, education and skills development (Borzaga et al., 2020). Governments play an important role in the development of social enterprise ecosystems. Kim et al. (2014) says government policy should be oriented to social entrepreneurship ecosystem to be more effective. According to Bozhikin et al. (2019), there are eighteen actors in the ecosystem of social entrepreneurs. Governments policy and regulatory mechanisms should be directed to the ecosystem and non-state actors. Further development of social entrepreneurship requires not only support for social entrepreneurs and their social enterprises, but also the key players. In this regard, financial organizations (Lehner, 2014), media, NGOs (Sen, 2007), customers (Srivastava and Shainesh, 2015), suppliers, retailers, educational organizations, social innovators and others should also be taken into account. Some of the mechanism in this direction could be different administrative relief, subsidies and tax reduction. This could help to enhance government policies towards social entrepreneurship ecosystem.

## 3. THE CASE STUDY OF THE EUROPEAN UNION

Eleven countries within the European Union created explicit policies and 16 of them adapted new legislation to boost the social enterprise in the union (Borzaga et al., 2020).

### 3.1. Capacity to self-organize

One of the main pillars of the ecosystem is related to the capacity to self-organize. Social enterprises emerge as result of social and civic commitment of group of citizens. In EU countries, very often, organizations are established by groups of citizens with few resources available to address societal changes and challenges. There are many examples of such citizen-driven initiatives in the European Union. However, in countries such as Bulgaria, Czech Republic, Estonia, Hungary and some southern Italian region where solidarity relations are mainly built on family networks and characterized with lower level of trust and activism of the general public, are characterized with less developed social enterprises. In addition, existence of networks and mutual support mechanism also contribute to the development of social enterprises. In countries like France, Italy, Spain and others, such networks pushed for the introduction of new legislations and government policies on social enterprises. The existence of networks also provides mutual support mechanisms such as co-working spaces, funding opportunities and prizes to social enterprises. In the EU, there are tens of such networks available, at both national and regional levels. DIESIS, EUCLID Network, Intercontinental Network for the Promotion of Social Solidarity Economy (RIPESS) are some of such networks

that provide opportunities for social enterprises. There are also European Network of Social Integration Enterprises, European Federation of Renewable Energy Cooperatives, and RREUSE that concentrate their activities more on the field. In addition, social enterprises enjoy tens of such networks available to them in both national and regional levels (Borzaga et al., 2020).

### **3.2. Visibility and Recognition**

The second pillar of enterprise ecosystem is visibility and recognition. In the EU, political recognition of social enterprises has been increasing in the last decades. It has been happening in different periods and through various tools depending on member states. In some countries such as France and Spain, it was realized in broader institutional levels as part of social economy. Some other countries such as Denmark and the Netherlands responded to it via promoting social enterprises at the municipal level. In some other countries such as Slovakia and Luxemburg, political recognition was conducted via the creation of ministerial structures. Political recognition also led to reforms in the domain of welfare, public procurement and employment. Even some countries went further to come up with national strategies and programs in regard to the development and promotion of social enterprise (Borzaga et al., 2020). Recognition also took place in the sphere of laws. Some countries such as France, Germany and others made adjustment to their regulation to specially cover social enterprises. Some other countries introduced new legislations for status of social enterprises (Italy, Denmark, and Slovenia), accreditation (Austria, Bulgaria, Croatia, Germany, Poland, Romania, Slovenia, and Spain) and “legal status qualification” (Bulgaria, France, Greece, Italy, Luxembourg, Romania and Slovakia) Outside public sector, some countries have also introduced a new system of private marks label and certification aimed at social enterprises. Finland, Germany, and the United Kingdom are some of those countries that have successfully employed such systems (Borzaga et al., 2020).

### **3.3. Access to Resources**

The EU member states have different kinds of financial resources available to the social enterprises, depending on their function. One of the categories of financial resources is considered as non-repayable resources to start up and scale. It should be mentioned that different types of support measures are available in the different EU member states. These resources can be classified in three different types. The first one is grants and subsidies from public authorities and European funds. The second one is grants and other support from private stakeholders, foundations and second level organizations. The third one is private and public support for incubators and business innovation centers (Borzaga et al., 2020). The second category of resources come from income-generating activities. These kind of mix of resources also differ from country to country. In most member states, social enterprises income may come from public subsidies and lately from contacts particularly in the delivery of social, health and education services. Both private and public sector also remain a source of income. One of the unique rules to access these resources is related to active involvement of social enterprises in the public sphere. This method became widely practiced by the EU public procurement rules that came into force in 2014 which allow authorities to be able to pay more importance to social value and output of service providers. Effective relations with private actors such as individuals, collectivities and business-to business can also be considered as one of the significant access to the resources for social enterprises in the EU (Borzaga et al., 2020). Last but not least, one should not underestimate the repayable resources for social enterprises in the EU. One of such resources is tax breaks and fiscal benefits. In the EU, social enterprises enjoy several fiscal benefits. However, these benefits vary from country to country. There are certain fiscal benefits for non-profit organizations, that even social enterprises can enjoy.

The aim of fiscal benefits and advantages for social enterprises also include a reduction of the production costs and favoring their capitalization. In the EU, depending on the countries, the main fiscal benefits granted to social enterprises are identified as corporate tax exemption on retained profits, VAT exemption or reduced rate, social insurance costs reduced or covered by subsidies, and tax reductions granted to private and/or institutional donors (Borzaga et al., 2020).

### **3.4. Research, Education and Skills Development**

The fourth pillar of social enterprise ecosystem is considered as research, education and skills development. Social enterprise was first studied in the 1990s in the EU when there were only 15 member states. Since then, social enterprise has become a scientific field of research in the EU. The emergence of social enterprise as a distinct field of research led to numerous projects aimed at the development of social enterprises. Even though researchers in this field had limitations, they contributed to an increased awareness among the citizens and policy makers. There are multiple research centers throughout the EU that concentrate on social enterprise, social economy and even on social innovation. Some of the EU financed and/or led centers include Creating Economic Space for Social Innovation (CrESSI), Enabling the Flourishing and Evolution of Social Entrepreneurship for Innovative and Inclusive Societies (EFESEIIS), For a better tomorrow: social enterprises on the move! (FAB-MOVE) and others (Borzaga et al., 2020). There is a consolidation of social enterprise education and training in the EU. Most EU member states already have existing curricula on social enterprise that are available at the highest-level of educational institutions. In regards to skill development, it should be noted that social enterprise education and trainings also exist outside formal education. There is very good example of support system from both private funders and public administrations.

## **4. SOCIAL ENTERPRISE AND ENTREPRENEURSHIP IN AZERBAIJAN AND ITS ECOSYSTEM**

### **4.1. Capacity to self-organize**

The situation in Azerbaijan in regard to group initiatives is more or less similar to the one in Czech Republic, Hungary and some southern regions of Italy. There are very few citizen-driven initiatives in Azerbaijan. For a long time, there has been a lack of mutual support mechanism and networks in Azerbaijan. However, in order to address the above challenges, the Azerbaijani government as well as NGOs have been taking some steps and implementing new projects. The establishment of the ABAD (Simplified Support to Family Businesses) under the State Agency for Public Service and Social Innovation in 2016 could be considered as the first-ever and biggest government initiative that solely focuses on social entrepreneurship and social enterprises in the country. After a year of establishment of ABAD, the creation of the KOBIA (The Small and Medium Business Development Agency) under the Ministry of Economy was another boost to provide necessary support to all kind of SMEs, including social enterprises. Despite a lack of official policy, KOBIA considers the development and promotion of social entrepreneurship as one of its priorities. In this regard, KOBIA has been taking action towards an increase of self-employment, involvement of vulnerable groups, including low-income families, population living in the regions, especially women in social business (Social Enterprise World Forum Held in Partnership with SMBDA, 2020). In regards to the role of non-government stakeholders, one should underline the increase in number of NGOs in the country. However, there is still a lack of such networks at the regional levels and, the access to the services offered by KOBIA and ABAD in some regions is still limited.

#### 4.2. Visibility and recognition

In regard to visibility and recognition, it should be mentioned that the establishment of ABAD is the first-ever political recognition of social enterprises and social entrepreneurship in Azerbaijan. Both KOBIA and Innovation Agency publicly claim promotion of social entrepreneurship and social enterprises. However, neither have a dedicated structure within their organization that specially deal with social enterprise and social businesses. Besides, the lack of power and funding at the municipal level to support social entrepreneurship makes support very limited. Moreover, there is neither a national strategy nor a program in regards to the development and promotion of social enterprise in the country. There is also no recognition of social enterprise and social entrepreneurship in the sphere of laws. A lack of legal framework related to this concept also creates challenges for formation of properly guided policies addressing the development of special enterprises in the country. Social enterprises and entrepreneurship activities are legally treated as the same as other kind of entrepreneurial activities. There is neither a special treatment nor privileges provided by the government. According to the 1st article of the “Entrepreneurship” Law of the Republic of Azerbaijan, an entrepreneurial activity is defined as “an independent activity implemented by individuals which results in making profits (income for individual entrepreneurs) through the usage of property utilization, sales of goods, doing work or offering services.” (Law of the Republic of Azerbaijan on Entrepreneurship, 1992) Social entrepreneurs are registered as either sole proprietors or limited companies. A lot of social enterprises operate as NGOs. They receive no recognition for their particular social goals and operate under the Law on Entrepreneurship much like any other forms of entrepreneurial activities. The stagnant development of social entrepreneurship suffers from this issue, as there is no attention paid to social enterprises and businesses. This situation does not allow any incentives to be available for entrepreneurs who have or plan to develop social businesses.

#### 4.3. Access to Resources

One of the main issues in Azerbaijan is the lack of adequate financing to support social entrepreneurship. This problem affects almost all enterprises in Azerbaijan. However, there are certain government mechanisms, in general, to support certain group of entrepreneurs and SMEs. Apart from that, Azerbaijan is characterized by a lack of angel investment and alternative funds from the private sector. Acquiring funding for starting businesses remain an issue in Azerbaijan. Many entrepreneurs tend to bootstrap their start-up costs from their savings. However, government organizations do also provide certain subsidies, grant funding, in-kind support and other services for small and medium businesses. The Strategic Road Map on Producing Consumer Goods on Small and Medium Business Levels in the Republic of Azerbaijan lists some of the way that these businesses can seek and get funding for their operations. For instance, the Entrepreneurship Development Fund of Azerbaijan provides low interest loans to businesses. (*Strategic Roadmap of Production of Consumer Goods on Small and Medium Business Levels in Azerbaijan*, 2016). They have loaned an average of 47,000 USD to 12.5 thousand businesses in Azerbaijan. Azerbaijan Investment Company is a venture capital firm that invests in non-oil sector. Azerbaijan Export and Investment Promotion Foundation (AZPROMO) funds businesses to participate in international product fairs with their locally-manufactured produce. The Agency for Agro Credit and Development makes loans with interest rates as low as 2% for farmers and provides other low-interest opportunities through their partner banks. The now-defunct State fund for Development of Information Technologies offered up to 300,000 AZN for high tech startups. Private banks also offer special loans for small and medium businesses. For instance, privately-owned Unibank offers different loans in partnership with Entrepreneurship Development Fund and Mortgage and Credit Insurance Fund as well as special loans for agro-farmers.



However, there neither state nor private financing mechanism and options available particularly for social businesses in Azerbaijan. The lack of legal definition of social entrepreneurship also keeps this type of business activities outside of government's support, when it comes the repayable resources for social enterprises including tax breaks and fiscal benefits. There are currently certain tax exemptions for certain type of entrepreneurs, though none of them are directed towards those having a social goal. It should be mentioned that certain tax exemptions have recently been implemented by the government due to the Covid-19 pandemic. Businesses that have lost some or all of their revenues due to the coronavirus-related government lockdowns and shutdowns are waived, partially or in full, to pay taxes ranging from property tax, value added tax and even profit tax. (*Tax cuts and privileges for entrepreneurs*, 2020). Enterprises and entrepreneurs enjoy non-repayable resources provided by government to start-up and scale. However, there is not specific resources particularly available for social enterprises. Government has special support mechanism for innovative startups and microbusiness. For instance, Small and Medium Business Development Agency (KOBIA) offers tax exemptions for businesses that get their certification as an "innovative startup". (*Innovative startups will receive tax exemptions* 2019). For example, businesses that register as resident of Technologies Park are exempt from the following taxes for 7 to 10 years since the day of registration: income tax for both individuals (1) and registered entities (2), value-added tax on import of equipment and machinery (requires a pre-approval for each business) (3), property tax (4), land tax (4) and customs duty (5). (*Decree of the President of the Republic of Azerbaijan*, 2019). On another Presidential decree in 2018, microbusinesses were waived taxes for 75% of their profits and small businesses were waived the 10% equity fees between co-founders. (*Law of the Republic of Azerbaijan on Amendments to the Tax Code of the Republic of Azerbaijan*, 2018).

#### **4.4. Research, education and skills development**

In Azerbaijan education for stakeholders of social enterprises are mainly available outside formal education. There is neither study programs nor curricula for social enterprise and social entrepreneurship at schools and universities. In the education system of Azerbaijan, social entrepreneurship is not fully recognized and most of the education on social entrepreneurship take place via non-formal education. Social entrepreneurship is mainly taught in a few classes within mainstream curricula (Rosandic & Guluzade, 2018). The business education in Azerbaijan, for a long time, was strictly limited to the study of traditional businesses and did not get past social impact within the frameworks of business ethics and Corporate Social Responsibility. Innovative business incubators at universities and outside the university may be considered as the main source of non-formal education in social entrepreneurship. Azerbaijan State University of Economics has established Yunus Social Business Center to support students with their social business ideas (*Yunus Social Business Center established at UNEC*, 2016), but these practices are rare in the general setting of business education in Azerbaijan despite being a first-ever initiative by Azerbaijani university to boost social business education in the country. Youth training in the field of social entrepreneurship is slightly better than other domains of this field. Private and individual initiatives, such as Social Business Youth Center or Toxum.org, provides learning and mentorship opportunities primarily for young people interested in building social businesses. More recently, Social Business Bootcamp Azerbaijan took place, organized by Social Business Youth Center. Social Innovation Lab is also another youth initiative to address social problems through entrepreneurship. These are, however, not government initiatives and they do not receive institutional support from the state. There is limited access to incubators and accelerators in Azerbaijan. The first of these organizations, Barama Innovation and Entrepreneurship Center was founded in 2009 and continues to run 6-month Barama Incubation Program to this day.

Even though a private initiative at first, the government has recently taken control of this incubator and merged it with Innovations Center Azerbaijan. (*'Barama' will continue its work at the Innovations Agency*, 2019). The Social Innovation Lab mentioned above also provides incubation services for businesses with social impact. "Yunus and Youth" is the most outstanding online incubator for social businesses. Each year, they award up to 30 fellowship. For 6 months, fellows develop their social businesses together with mentors on this program. These 6 months are inclusive of all parts of building a business and seeks to fill all the gaps in the business plan. Then the fellows pitch their ideas to a group of investors on the pitch day. A similar center in Azerbaijan can be established under Azerbaijan State University of Economics or the Center for Communication of Economic Reforms.

## 5. POLICY LESSONS FOR AZERBAIJAN AND RECOMMENDATIONS

As mentioned earlier, the European Union has one of the best ecosystems for social enterprise. Despite several differences in regard to the level of development of the ecosystem among EU member states, some of the best practices can be applied to Azerbaijan. Since most of the initiatives are citizen-driven, the government should implement special state programs and projects to increase awareness on social enterprise among the citizens and also promote and support the establishment of mutual support mechanism and networks. Department particularly for dealing with social enterprises and social entrepreneurship may also be established at government agencies closely related with these types of businesses, such as Small and Medium Business Development Agency (KOBIA) under the Ministry of Economy and the Innovation Agency under the Ministry of Transportation, Communication and High Technologies. These departments can probably work to promote social entrepreneurship and subsequently increase the role of government in building a social business ecosystem. It will enable social businesses to build and maintain strategic partnerships with other government organizations as well. The development of the social enterprise ecosystem also requires political, legal, private and self-recognition. A lack of legal framework has a negative impact on the development of government policies to support social enterprises and its ecosystem. The creation of a state-adopted definition for social enterprise and/or criteria for qualification of social enterprise could help a lot. The government's recognition of social enterprise certificates may also enable support schemes for social businesses in all fields of the economy and lay grounds for building an ecosystem. Another important step to develop an ecosystem of social enterprise is to make resources accessible to them. Government policies and programs can be modified in this regard. Tax breaks and fiscal benefits, repayable resources and non-repayable resources for start-up and consolidation can also contribute to the development of an ecosystem of social enterprises. Certain tax exemptions can be applied for social enterprises. Businesses that get certified through government procedures could be waived the value added tax (VAT) and/or taxation on property and profits. Other relevant tax incentives or schemes can also be put in place to attract more attention to getting their businesses certified. This will stimulate the overall interest in acquiring these certificates and improve the role of government in helping social entrepreneurs and enterprises. Businesses that are officially recognized as social enterprise or acquire the social businesses certificates should be eligible for business loans with special conditions and lower interest rates. Banks operations in this regard can also be subsidized by the government fully or in part. One of the main directions of government policies, programs and activities should concern research, education and skills development. There is rather a need for a more systemic and state-sponsored approach towards enabling social entrepreneurship to be taught at schools and universities. "Social business" can be included in curricula at universities. It can help students learn the academic foundations of social entrepreneurship and their overall understanding of the field. Such education can also provide new skills and competences to be successful in these businesses.

## 6. CONCLUSION

This paper reviewed and deducted policy lessons and recommendations for Azerbaijan by studying the policies and programs in the EU and its member states. One of the key findings of this paper is the vital role of government in the development of social enterprises and its ecosystem. Because a favorable environment and ecosystem has a positive impact on an entire society. Despite the challenges and barriers for development of social enterprises in Azerbaijan, the country has a great potential. Based on the EU experiences described in this paper, several lessons and recommendations can be drawn for Azerbaijan. In this regard, the Government of Azerbaijan should concentrate on the development of an ecosystem that aims at creating government policies and a dedicated legal framework for increasing awareness, providing funding opportunities, achieving political and public recognition, as well as including social enterprises in research, education and skill development. In addition, these policies should also aim at supporting all the actors of the ecosystem.

## LITERATURE:

1. *Azerbaijan State Statistics Committee, Review of 2019*. Last updated: 27 Nov 2020 <https://www.stat.gov.az/source/regions/?lang=en>
2. 'Barama' will continue its work at the Innovations Agency (2019, July 04). APA. <https://apa.az/az/infrastruktur/azercell-in-barama-innovasiya-merkezi-fealiyyetini-innovasiyalar-agentliyiinde-davam-etdirecek-541260>
3. Borzaga, C., Galera, G., Franchini, B., Chiomento, S., Nogales, R., & Carini, C. (2020). *Social Enterprises and Their Ecosystems in Europe. Comparative Synthesis Report*. European Union. <https://ec.europa.eu/social/main.jsp?langId=en&catId=89&furtherNews=yes&newsId=9534>
4. Bozhikin, I., Macke, J., & da Costa, L. F. (2019). *The role of government and key non-state actors in social entrepreneurship: A systematic literature review*. Journal of Cleaner Production, 226, 730–747. <https://doi.org/10.1016/j.jclepro.2019.04.076>
5. *Decree of the President of the Republic of Azerbaijan on approval of the "Rules for the use of funds of the Innovation Agency under the Ministry of Transport, Communications and High Technologies of the Republic of Azerbaijan"* (14 June 2019)
6. Dees, G (1998). *The Meaning of Social Entrepreneurship*. Stanford University: Center for Social Innovation, Graduate School of Business, Kauffman Center for Entrepreneurial Leadership, An Exploratory Study of the Social Entrepreneurship Ecosystem 1650021-19 J. [www.faculty.fuqua.duke.edu/centers/case/files/dees-SE.pdf](http://www.faculty.fuqua.duke.edu/centers/case/files/dees-SE.pdf)
7. Defourny, J., Nyssens, M., 2006. *Defining social enterprise*. In: Nyssens, M. (Ed.), *Social Enterprise at the Crossroads of Market, Public Policies and Civil Society*. Routledge, London, pp. 1e28.
8. *Innovative startups will receive tax exemptions* (2019, June 03). Marja. <https://marja.az/public/index.php/43226/azerbaycanda-innovativ-startaplara-vergi-guzestleri-verilecek>
9. Isenberg, D (2010). *How to start an entrepreneurial revolution*. Harvard Business Review, 88(6) 40–51.
10. Kabbaj, M., El Ouazzani Ech Hadi, K., Elamrani, J., & Lemtaoui, M. (2016). *A Study of the social entrepreneurship ecosystem: the case of Morocco*, Journal of Developmental Entrepreneurship, 21(04), 1650021. <https://doi.org/10.1142/s1084946716500217>
11. Kim, Y.D., Yoon, S., Kim, H.G., 2014. *An economic perspective and policy implication for social enterprise*. Am. J. Appl. Sci. 11 (3), 406e413. <https://doi.org/10.3844/ajassp.2014.406.413>

12. *Law of the Republic of Azerbaijan on Amendments to the Tax Code of the Republic of Azerbaijan* <http://e-qanun.az/framework/41016#>
13. *Law of the Republic of Azerbaijan on Entrepreneurship*. 1992. <http://www.e-qanun.az/framework/7920>
14. Lehner, O.M., 2014. *The formation and interplay of social capital in crowdfunded social ventures*. *Entrep. Reg. Dev.* 26 (5e6), 478e499. <https://doi.org/10.1080/08985626.2014.922623>
15. Rosandic, A., & Guluzade, M. (2018, January). *Social Economy in Eastern Neighbourhood and in the Western Balkans Country report – Azerbaijan*. Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR) [https://ec.europa.eu/growth/content/social-economy-eastern-neighbourhood-and-western-balkans\\_en](https://ec.europa.eu/growth/content/social-economy-eastern-neighbourhood-and-western-balkans_en)
16. Sen, P., 2007. *Ashoka's big idea: transforming the world through social entrepreneurship*. *Futures* 39, 534e553. <https://doi.org/10.1016/j.futures.2006.10.013>.
17. *Social Enterprise World Forum (SEWF) held in partnership with SMBDA*. (2020, October 28). Small and Medium Business Development Agency of the Republic of Azerbaijan. <https://smb.gov.az/news/kobia-nin-trfdasligi-il-sosial-sahibkarlarin-beynlxalq-forumu-kecirilib>
18. Srivastava, S.C., Shainesh, G., 2015. *Bridging the service divide through digitally enabled service innovations: evidence from Indian healthcare service providers*. *MIS Q.* 39 (1), 245e267. <https://doi.org/10.25300/MISQ/2015/39.1.11>.
19. *Strategic Roadmap of Production of Consumer Goods on Small and Medium Business Levels in Azerbaijan*. 2016. [https://mida.gov.az/documents/Ki%C3%A7ik\\_v%C9%99\\_orta\\_sahibkarl%C4%B1q\\_s%C9%99viyy%C9%99sind%C9%99\\_istehlak\\_mallar%C4%B1n%C4%B1n\\_istehsal%C4%B1na\\_dair.pdf](https://mida.gov.az/documents/Ki%C3%A7ik_v%C9%99_orta_sahibkarl%C4%B1q_s%C9%99viyy%C9%99sind%C9%99_istehlak_mallar%C4%B1n%C4%B1n_istehsal%C4%B1na_dair.pdf)
20. *Tax cuts and privileges for entrepreneurs* (2020, June 04). State Tax Service under the Ministry of Economy of the Republic of Azerbaijan. <https://www.taxes.gov.az/az/post/1076>
21. Terziev, V., Bencheva, N., Arabska, E., Tepavicharova, M., Nichev, N., & Stoeva, T. (2016). *Social Entrepreneurship in Bulgaria: Barriers to Growth*. *SSRN Electronic Journal*, 197–202. <https://doi.org/10.2139/ssrn.3157985>
22. *Yunus Social Business Center established at UNEC*. (2016, June 21). UNEC. <https://unec.edu.az/en/unec-de-yunus-sosial-biznes-merkezi-yaradilib/>

## CONTEMPORARY CHALLENGES OF CULTURAL HERITAGE MANAGEMENT BY PUBLIC AND PRIVATE ENTITIES

**Adam Kozien**

*Jagiellonian University in Kraków, Faculty of Law and Administration,  
Doctoral School in the Social Sciences of the Jagiellonian University in Kraków in the  
discipline of Legal Sciences  
ul. Gołębia 24, 31-007 Cracow, Poland  
a.kozien@doctoral.uj.edu.pl*

### ABSTRACT

*Cultural heritage is a concept that covers numerous designations, both tangible and intangible, such as cultural goods, monuments, which are important for the culture and identity of a given community. From the legal perspective, especially from the administrative law perspective, it is crucial to protect and care for the designates of cultural heritage, so that, in accordance with the principle of intergenerational justice, the achievements of the previous and the present generation are passed on to future generations. At the same time, it is more and more often noticed that appropriate management is necessary to ensure the effectiveness of protection of cultural heritage. In this context, the achievements of praxeology may be helpful, especially in the field of the efficiency of cultural heritage management, taking into account such measures as: effectiveness, profitability and economy. The protection of cultural heritage should be dynamic, not static, and in addition to the protection of authenticity and integrity, it should enable the development of cultural heritage designations, the widest possible access to them, and their use for appropriate purposes. Cultural heritage is managed by bodies governed by public and private law and there are some differences in this respect. Moreover, in today's globalized and digitized world, new problems and challenges can be seen in the efficient management of cultural heritage, including its protection, development, and the need to adapt to changing social, economic, cultural, legal and political conditions. It should be emphasized that ensuring the efficient management of cultural heritage and its effective protection should be in the public and individual interest. The aim of the article is to analyze the situation of cultural heritage from the perspective of its efficient management in the contemporary globalized and digitized world. The analysis will be carried out taking into account the legal aspects. In addition, the challenges in the field of cultural heritage management from the perspective of legal sciences and management science will be indicated, taking into account the differences in cultural heritage management by public and private law entities.*

**Keywords:** *cultural heritage, management, private entities, public entities*

### 1. INTRODUCTION

Cultural heritage is nowadays a broad concept with numerous designations and influencing social, cultural and economic life. The heritage of past generations determines the cultural identity of individual societies and countries. The obligation to preserve the heritage of past generations and the current generation, and to pass it on to the next generations in the best and most faithful condition possible, is the task of each generation, which expresses the intergenerational relationship and implements the principle of intergenerational justice (Dobosz, 2015b). The concepts of protection and care of cultural heritage do not reflect the full extent of activities that are necessary to preserve and pass the heritage on to future generations. Cultural heritage is dynamic, and therefore the approach to it cannot be static and ossified, but dynamic and flexible. It is now necessary to refer to such concepts as administration, or more broadly, management. At the same time, it should be noted that the key issue may be to refer to the achievements of praxeology, which indicates the efficiency of action.

Therefore, when transferring this terminology, it is necessary to efficiently manage cultural heritage. Cultural heritage is owned by bodies governed by public or private law, and is also managed by bodies governed by public or private law. Certain differences can be seen in the management of cultural heritage by the state, local government units (Kozień, 2020; Kozień, 2018c) and public governance entities, and private law entities, i.e. natural or legal persons or organizational units without legal personality. Cultural heritage designations are embedded in a specific environment and, to some extent, they must be adapted to the needs of the contemporary world, while maintaining their authenticity and integrity. At the same time, responsibility for cultural heritage must be assumed by the whole society, not just individuals - patrons or enthusiasts of cultural heritage and art. Contemporary civilization progress, the creation of a global digital society, as well as digitization and digitization issues, on the one hand, offer great opportunities from the perspective of cultural heritage management and its dissemination, but on the other hand, they can cause certain dangers and threats. Cultural heritage faces numerous challenges related to a changing society as well as culture. It is also worth emphasizing that effective protection of cultural heritage also requires a holistic approach to cultural heritage management, and therefore from the legal, social, economic, cultural and environmental perspective, and it must be implemented on a multi-level, and therefore at the international, EU, national and local. The aim of the article is to analyze the situation of cultural heritage from the perspective of its efficient management in the contemporary globalized and digitized world. The analysis will be carried out taking into account the legal aspects. In addition, the challenges in the field of cultural heritage management from the perspective of legal sciences and management science will be indicated, taking into account the differences in cultural heritage management by public and private law entities.

## **2. CULTURAL HERITAGE AS THE SUBJECT OF MANAGEMENT AND LAW**

The concept of cultural heritage is defined differently in different scientific disciplines. For example, it is worth mentioning several definitions of cultural heritage in the literature on the subject. J. Pruszyński treats heritage as: “the stock of movable and immovable things along with the related spiritual values, historical and moral phenomena, considered worthy of protection of the law for the good of society and its development and passing on to the next generations, due to understandable and accepted historical values, patriotic, religious, scientific and artistic, important for the identity and continuity of political, social and cultural development, proving the truths and commemorating historical events, cultivating a sense of beauty and civilization community” (Pruszyński, 2001), and in the context of heritage, points to things inherited after past generations (Pruszyński, 2001). A. Gieysztor noted that “architecture, urban planning, rural layout, landscape, works of art, archives, libraries and museums are the material heritage of material culture with immaterial content” (Gieysztor, 1995). K. Zeidler considers cultural heritage to be: “the entire material and spiritual heritage of a given social group” (Zeidler, 2007). The issues of cultural heritage in the contemporary world are also aptly addressed by J. Purchla in the words: “The relationship between the past and the future is not limited today to the issue of monuments and their protection. A concept that has seen a spectacular career recently is cultural heritage (cultural heritage). More and more often it replaces the classic concept of a monument. It must be emphasized that while a monument belongs to the past, heritage serves modern purposes, and heritage is not only tangible cultural goods, but also our memory and identity. Cultural heritage is a dynamic process of its own. It reflects both the attitude of society to the world of values and the very process of reinterpreting values. This is also where the growing importance of cultural heritage lies. Because heritage belongs to all of us, and access to it is one of the basic human rights. Therefore, heritage always has a human dimension. This fact also shows the key importance of social capital - not only for the dynamic process of continuous creation and reinterpretation of heritage, but also for its

effective protection” (Purchla, 2013). Cultural heritage includes such concepts as a cultural asset and a monument. The literature on the subject and legal acts, including those at the international level, distinguish between material and non-material heritage. The legal definition of cultural heritage can be found in Art. 1 Convention Concerning the Protection of the World's Cultural and Natural Heritage (Dz.U. – Journal of Laws - of 1976, No. 32, item 190), according to which the notional scope of cultural heritage includes:

- “monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
- groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
- sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view” (Dz.U. – Journal of Laws - of 1976, No. 32, item 190). The analysis of this provision shows that it refers strictly to material cultural heritage. For this reason, in 2003, the international legislator adopted the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, executed in Paris on 17 October 2003 (Journal of Laws - of 2011, No. 172, item 1018), in which in Art. 2 clause 1 sentence 1, the concept of intangible cultural heritage is defined as follows: “The »intangible cultural heritage« means the practices, representations, expressions, knowledge, skills - as well as the instruments, objects, artefacts and cultural spaces associated therewith - that communities, groups and, in some cases, individuals recognize as part of their cultural heritage” (Dz.U. – Journal of Laws - of 2011, No. 172, item 1018), while in Art. 2 clause 2 of this Convention lists the designations of the concept of “intangible cultural heritage”, however, the catalog of these designations is open (Kozień, 2018b). Nowadays, dynamic changes can be noticed in the area of cultural heritage (Dobosz, 2019), and, as P. Dobosz notes, “over the last few decades there has been a clear segmentation of tangible and intangible heritage and at the same time the universalisation of mechanisms for their protection” (Dobosz, 2019). It is also worth noting that the protection of cultural heritage, as well as its authenticity and integrity (Kozień, 2018a; Kozień, 2021) is carried out in various legal systems (Dobosz, 2015a), as well as at the level of international, EU, national and local law, such as also in the perspective of European integration (Dobosz, 2002) and international integration.

### 3. MANAGEMENT OF CULTURAL HERITAGE

The concept of management is very broad and vague, and it is also defined in various ways both in the field of management sciences, but also in other scientific disciplines. Therefore, definitions will be presented that try to holistically capture the definition issues and seem to be the most appropriate from the perspective of the subject of the article. H. Fayol used the term “to administer” as: “to anticipate, organize, command, coordinate and control” (Otręba, 2012; Fayol, 2013). In the context of the concept of administration in administrative and legal terms, it is worth noting that the Latin term *ministrare* should be translated as serve, direct or perform, and the prefix *ad-* (*administrare*) emphasizes the purposefulness of a given activity (Zimmermann, 2016). H. Mintzberg treats management as practice, not science, and in this context believes that the scope of management as practice includes arts, science and crafts, although he emphasizes that in management the use of science is necessary (Mintzberg, 2012). R.W. Griffin defines management as: “a set of activities (including planning and making decisions, organizing, leading, i.e. managing people and controlling) directed at the resources

of the organization (human, financial, material and information) and carried out with the intention of achieving the organization's goals in an efficient and effective" (Griffin, 1996). Then R.W. Griffin defines the terms efficient, that is, "using rules wisely and without unnecessary waste", and also efficient, that is, "operating successfully" (Griffin, 1996). R.W. Griffin also treats management as a process in which he treats planning as "setting the goals of the organization and determining how to best achieve them", decision making as "part of the planning process involving selecting a mode of action from among a set of available options", organizing as "a logical grouping of activities and resources", managing people (leadership) as "a set of processes used to make members of an organization cooperate with each other in the interests of the organization", and controlling as "observing the progress of the organization in achieving its goals" (Griffin, 1996). Nowadays, in the context of cultural heritage management, it seems reasonable to use the achievements of praxeology. Praxeology is treated as the science of efficient action (Kotarbiński, 1973). In the literature on the subject of various fields and scientific disciplines, e.g. philosophy - incl. Aristotle, St. Thomas Aquinas, praxeology (Kotarbiński, 1973), anthropology, logic, economics - incl. Ludwig von Mises (Mises, 2012), axiology, management (Kozień, 2019), you can find various definitions of the concept of efficiency. T. Kotarbiński treats efficiency as a general assessment of activities, which takes the values of efficient operation, such as: profitability, effectiveness, economy, simplicity, efficiency, accuracy and cleanliness, however, among them the basic measures of efficiency are: effectiveness, profitability, as well as economy (Kotarbiński, 1973). The concept of "effectiveness" is related to the pursuit of a specific goal (Kotarbiński, 1973), and therefore "effective action is aimed at achieving the goal, i.e. the result is in line with the goal" (Kozień, 2019). Another form of efficiency - profitability is defined in units of value (Zieleniewski, 1964). J. Zieleniewski believes that value is "a subjective quantity (...) and opens the way to a mathematically formalized approach to the problem of human action without introducing a homo oeconomicus model inconsistent with reality, taking into account only those values that can be expressed in monetary units". (Zieleniewski, 1981). In consequence, an action is beneficial when "the useful result achieved is higher than the cost of the action (effort)" (Kozień, 2019). The last measure of efficiency - economy is a "dimensionless parameter related to the same quantities that appear in the definition of profitability" and is expressed as "the ratio of the useful result (...) to the cost of the action" (Kozień, 2019). In the context of operational efficiency, there is also the concept of effectiveness, which is "a component of the evaluation of operational efficiency in a universal sense" (Kozień, 2019). The concept of effectiveness is defined in various ways (Kozień, 2019), and sometimes it is considered tantamount to the concept of efficiency or effectiveness, however, it should be emphasized that the concept of efficiency is a concept broader than the concept of effectiveness. Efficiency from the perspective of management theory is of great importance when assessing project implementation, in which the key elements of project implementation efficiency assessment are: purpose, time, cost and quality (Kozień, 2019; Kozień, 2017a; Kozień, 2017b). It is also worth emphasizing that projects are also implemented in the field of culture and protection of cultural heritage, and can bring numerous results of a social, strategic, cultural, as well as aesthetic nature, especially in terms of appropriate conservation / restoration / restoration, etc. (Dobosz, 1997) material cultural heritage. Administration, or more broadly, the management of cultural heritage should be directed towards the goals of: protection and development of cultural heritage and preserving the values associated with it, as well as passing it on to future generations with preserved authenticity and integrity. Actions aimed at these goals, having the character of main goals, should be implemented efficiently, and therefore effectively, favorably and economically, taking into account the universalism of effectiveness of actions. It should be emphasized that the designations of cultural heritage, apart from the fact that they are divided into tangible and intangible, have a significantly different nature, which means that from the



management perspective, an adaptive approach should be taken. Flexibility and dynamics of activities in the field of cultural heritage management seem to be of key importance and it is difficult to define a management model uniform for all designators of cultural heritage. A completely different approach will be noticeable in the case of cultural heritage management by subjects of public law, and different by subjects of private law. On the one hand, management by bodies governed by public law seems to be safer from the point of view of preserving the authenticity and integrity of a given cultural heritage designation, but on the other hand, at the same time, it is usually more static, formalized and not very creative. The management of cultural heritage by private law entities may pose dangers related to complete commercialization and lack of responsibility for the authenticity and integrity of a given heritage designation, but at the same time it is usually more creative, dynamic and flexible. As a consequence, it can be noticed that from the perspective of the efficiency of activities, entities of public law will implement more the value of effectiveness, while entities of private law - values of benefit and economy. It should also be emphasized that cultural heritage must, in a sense, “live” and keep up with changes in society. For this reason, the achievements of management science, which have been presented above, may contribute to the effective protection of cultural heritage. Taking into account the value of economy and to a certain extent of benefits, budgetary issues should be indicated, especially from the perspective of public funds (Magliacani, 2015). In general, the issue of public budget funds allocated to cultural heritage is problematic, especially in crisis situations (Magliacani, 2015). From the perspective of cultural heritage management, the best solution would seem to be a form of public-private partnership. In the literature on the subject, the concept of “New Public Management” is indicated (Magliacani, 2015; Hood, 1995). The concept of “New Public Management” consists of the key elements: “lessening or removing differences between the public and the private sector and shifting the emphasis from process accountability towards a greater element of accountability in terms of results” (Hood, 1995; Magliacani, 2015). The two main components of “New Public Management” are (Magliacani, 2015; Hood, 1995):

- 1) “Public Sector Distinctiveness” in which the following important elements can be listed, such as:
  - “Unbundling of the public sector into corporatized units organized by product”,
  - “More contract-based competitive provision, with international markets and term contracts”,
  - “Stress in private sector style of management practice”,
  - “More stress on discipline and frugality in resource use” (Magliacani, 2015; Hood, 1995).
- 2) “Rules vs Discretion”, which consists of the following elements:
  - “More emphasis on visible hands-on top management”,
  - “Explicit formal measurable standards and measures of performance and success”,
  - “Greater emphasis on output controls” (Magliacani, 2015; Hood, 1995).

Nowadays, we can see the development of “managerialism” also in the field of cultural heritage management. Thus, there is a tendency to shift from public management of cultural heritage towards private management. As a consequence, it seems that in the contemporary globalized world, in order for the management of cultural heritage to have the value of efficiency, it should be transferred to private law entities with simultaneous support from the public law, i.e. the state or local government. It should also be emphasized that cultural heritage has a public-legal dimension, and its protection and passing it on to future generations falls within the scope of public goals and tasks, as well as is in the public interest (Kozień, 2021).

#### 4. CONTEMPORARY CHALLENGES IN THE AREA OF MANAGEMENT OF CULTURAL HERITAGE

First of all, the common globalization and the blurring of national and cultural boundaries of contemporary societies can be identified as a contemporary challenge for the management of cultural heritage. On the one hand, multicultural policy enables more universal access to the world cultural heritage through intercultural exchange, but on the other hand, it may cause the danger of losing the cultural identity of some societies, and thus losing part of the cultural heritage. The universal opening up of the world also necessitates the transfer of certain legal instruments protecting cultural heritage in genere and its particular designates in concreto to the level of international and EU law. It should be emphasized that currently, at the level of international law, there are numerous conventions protecting cultural heritage or its designates, however, it is necessary, on the one hand, to introduce specific instruments and forms of protection, and on the other hand, to provide a real possibility of enforcing compliance with public and private law international law on the protection of cultural heritage. It is difficult because it creates a danger of violating the sovereignty of states. It seems, however, that from the perspective of the value of the cultural heritage of the whole world, which consists of state and local heritage, as well as even unlimited trade in works of art, it is necessary nowadays to transfer some instruments and forms of heritage protection to the international level. Perhaps international legislation should move towards not so much management mechanisms for cultural heritage, but those coordinating its protection. Secondly, cultural heritage is owned by bodies governed by public or private law. In the case of the latter, a problematic issue may arise to what extent the norms of public law may affect the management of cultural heritage designations by private law entities. In this context, it should be emphasized that there must be certain administrative and legal mechanisms securing the authenticity and integrity of cultural heritage designates (Kozień, 2021), and thus leading to limitations of private law entities in the management of their cultural heritage designates. It should also be noted that from a legal perspective, the individual interest is weighed against the public interest. In this respect, the principle of sustainable development, derived from the concept of sustainable development, can be helpful (Kozień, 2021; Kozien, Kozien, 2018a; Kozień, Kozień, 2019; Boyle, Freestone, 2012; Cordonier-Segger, Khalfan, 2012; Pearce, Turner, 1990; Skrzydło-Niżnik, Dobosz, 2004). One should also refer to the concept of G.W.F. Hegel, who treats property as a kind of burden, as well as a limitation of the individual and his actions (Roellecke, 2005). In the context of cultural heritage management, it should be emphasized that even if a given designate belongs to a given private law entity, even the ownership right is not absolute and the need to protect the authenticity and integrity of monuments may cause certain limitations in the management of the cultural heritage designation. Thirdly, the challenge is the universal shift of the cultural heritage management paradigm from static (protection) to dynamic (protection combined with the development of heritage while preserving its authenticity and integrity). organization (Kozień, 1998; Kozień, 2002), as well as, to a certain extent, exhibit entrepreneurial attitudes that are of key importance for the development of the organization (Kozień, 1999). Fourth, in the area of cultural heritage, management must be efficient, and therefore have the values of efficiency, profitability and economy. Fifthly, the challenge for cultural heritage management is the necessity to transfer this management to private law entities, while binding them to specific administrative and legal provisions in the field of cultural heritage protection. Moreover, the concept of “New Public Management” also allows for a specific privatization of the management of cultural heritage even when it is managed by entities governed by public law. Related to this is also the challenge of striving for managerialism in the management of cultural heritage. Sixth, to some extent it is necessary to modify the management structure in the area of cultural heritage. The management model of, for example, cultural institutions should be based to a greater extent on the corporate governance model, with the specification

of management, supervisory and opinion-making bodies. Seventh, when managing cultural heritage, one should cooperate with other entities, especially public and private institutions, associations, foundations that deal with the issue of cultural heritage, as well as universities (Kozien, Kozien, 2017a) and their socio-economic environment (Kozien, Kozien, 2017b), which may also include cultural heritage managers. Eighth, the challenge is also the implementation of various projects, especially cultural ones, by entities managing cultural heritage, also using various forms of support for the implementation of such projects in this regard (Kozien, Kozien, 2018b). Ninthly, a major challenge in the field of cultural heritage management is digitization and digitization. Currently, many areas of social life are moving to the Internet. It is a great challenge nowadays, but also a benefit for entities managing cultural heritage, in order to enable even more people to reach the largest possible number of cultural heritage designators. Tenthly, a very big challenge is, on the one hand, to bring the designations of cultural heritage closer to society, but at the same time not to fully commercialize them. It is therefore necessary to find the right balance between the promotion of cultural heritage and total commercialization resulting in the loss of value and identity of cultural heritage. Eleventh, a certain challenge that the management of cultural heritage has always faced is the issue of its security, both from the perspective of war and terrorist situations, but also theft, destruction of cultural heritage designations, as well as hooligan antics. For this purpose, apart from cooperation with appropriate services, which are tasked with guarding public safety and internal security systems, modern technology can be helpful. The last identified challenge is the challenge of a social nature, faced by each entity managing cultural heritage, which is the transfer of cultural heritage to the present and future generations. In this regard, it is necessary to ensure the widest possible access to heritage, as well as appropriate education and upbringing in this area.

## 5. CONCLUSIONS

Moving on to the conclusions, it should be stated that cultural heritage is very important from the perspective of the functioning of states and societies, as well as the preservation of their cultural identity, and it is necessary to protect cultural heritage designates, especially their authenticity and integrity. Nowadays, static protection of cultural heritage is not sufficient, but it should be dynamic. Ensuring effective protection of cultural heritage is possible not only by establishing appropriate legal norms (mainly in the area of administrative law), but also through efficient management of cultural heritage or its designates, taking into account the values of effectiveness, profitability and economy. In general, the privatization of cultural heritage management should be pursued, even when it is managed by bodies governed by public law. At the same time, certain legal norms at the international, EU, national and local levels should safeguard the authenticity and integrity of cultural heritage designations. Today, the management of cultural heritage is faced with numerous managerial, legal, political, economic and social challenges. The identified, most important, in the author's opinion, contemporary challenges in the field of cultural heritage management show that a holistic and interdisciplinary approach is necessary to the issues of heritage, and entities managing cultural heritage must have broad and interdisciplinary knowledge, which translates into the need to educate and sensitize the entire society, and especially heritage managers of the importance and value of cultural heritage for countries and societies, as well as for present and future generations.

**ACKNOWLEDGEMENT:** *Research work financed from the budget for science in 2019-2022, as a research project under the "Diamond Grant" program, project No. DI2018 018348.*

**LITERATURE:**

1. Adamczyk, J., Nitkiewicz, T. (2007). *Programowanie zrównoważonego rozwoju przedsiębiorstw*. Warsaw: PWE, p. 14.
2. Boyle, A., Freestone, D. (2012). *International Law and Sustainable Development: Past Achievements and Future Challenges*. Oxford: Oxford Scholarship Online.
3. Convention concerning the Protection of the World's Cultural and Natural Heritage, Dz.U. – Journal of Laws – of 1976, No. 32, item 190.
4. Cordonier-Segger, M.C., Khalfan, A. (2012). *Sustainable Development Law: Principles, Practices, and Prospects*. Oxford: Oxford Scholarship Online.
5. Dobosz, P. (1997). *Administracyjnoprawne instrumenty kształtowania ochrony zabytków*. Kraków: Oficyna Wydawnicza „Dajwór”, p. 95-101.
6. Dobosz, P. (2002). *Pojęcia dziedzictwa kulturowego i jego znaczenie dla działań polskiej administracji publicznej wobec integracji europejskiej*. „Ochrona Zabytków”, nr 55/2 (217).
7. Dobosz, P. (2015a). *Systemy prawne ochrony zabytków z perspektywy teorii prawa administracyjnego*. Kraków: Studio Cubus.
8. Dobosz, P. (2015b). *Sprawiedliwość międzypokoleniowa w prawie administracyjnym*. [in:] Stahl, M., Kasiński, M., Właźlak, K. (Eds.). *Sprawiedliwość i zaufanie do władz publicznych w prawie administracyjnym*. Warsaw: Lex a Wolters Kluwer business.
9. Dobosz, P., (2019). *Historiografia rodzinna - relevantny segment dziedzictwa kulturowego (studium przypadku: wymordowanie rodziny Pieczarów i Doboszków przez Niemców i umożliwienie ucieczki Józefowi Doboszowi przez Austriaka, jednego z żołnierzy hitlerowskich, uczestniczących w eksterminacji – Jachówka, 17 stycznia 1945 r.)*. [in:] Dobosz, P., Górny, W., Mazur, A., Kozień, A. (Eds.). *Klasyczne i nowe formy ochrony zabytków w europejskiej przestrzeni dziedzictwa kulturowego*. Kraków: Studio Cubus, p. 32.
10. Fayol, H. (2013). *General and Industrial Management*. Martino Publishing.
11. Gieysztor, A. (1995). *Dziedzictwo i suwerenność*. [in:] *Obowiązki wobec dziedzictwa a prawa rynku*. Kraków, p. 36.
12. Griffin, R.W. (1996). *Podstawy zarządzania organizacjami*. Warszawa: PWN, pp. 38; 39-44.
13. Hood, C. (1995). *The 'new public management' in the 1980s: Variations in the theme*. „Accounting, Organization and Society”, Vol. 20, No. 2/3, p. 104; 94; 96.
14. Kotarbiński, T. (1973). *Traktat o dobrej robocie*. Wrocław, Warszawa, Kraków, Gdańsk 1973, p. 10; 111.
15. Kozien, A. (2021). *Protection of the authenticity and integrity of monuments as a determinant affecting the activities of entrepreneurs-the owners of monuments*. [in:] Cingula, M., Misevic, P., Nedzhad, A. (Eds.). *Economic and Social Development (Book of Proceedings)*, 64<sup>th</sup> International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 21- 31.
16. Kozien, E., Kozien, A. (2017a). *Academic governance as a determinant of efficient management of a university in Poland – legal and comparative perspective*. [in:] Cingula, M., Przygoda, M., Detelj, K. (Eds.). *Economic and Social Development (Book of Proceedings)*, 23<sup>rd</sup> International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 38-47.

17. Kozien, E., Kozien, A. (2018a). *The sustainability development concept under the regulations in force of the Treaty on European Union and the Treaty on the Functioning of the European Union – legal and economical view*. [in:] Ribeiro, H., Naletina, D., da Silva, A.L. (Eds.). *Economic and Social Development (Book of Proceedings)*, 35<sup>th</sup> International Scientific Conference on Economic and Social Development – „Sustainability from an Economic and Social Perspective”. Varazdin: Varazdin Development and Entrepreneurship Agency.
18. Kozien, E., Kozien, A. (2017b). *Commercialization of scientific research results and transfer knowledge and technologies to economy as determinants of development of universities and enterprises in Poland – legal and economic perspective*. [in:] Potocan V., Kalinic P., Vuletic A. (Eds.). *Economic and Social Development (Book of Proceedings)*, 26<sup>th</sup> International Scientific Conference on Economic and Social Development – „Building Resilient Society”, Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 326-335.
19. Kozien, E., Kozien, A. (2018b). *Legal and economic mechanisms of institutional support of implementation of European projects in view of the European Union law*. [in:] Cingula, M., Rhein, D., Machrafi, M. (2018). *Economic and Social Development (Book of Proceedings)*, 31<sup>st</sup> International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 474-484.
20. Kozień, A. (2018a). *Autentyczność i integralność zabytków w świetle źródeł prawa powszechni obowiązującego w Polsce*. „Zeszyty Naukowe Towarzystwa Doktorantów Uniwersytetu Jagiellońskiego – Nauki Społeczne”, No. 21 (2/2018) legal volume, pp. 187-210.
21. Kozień, A. (2018b). *Niematerialne dziedzictwo sportowe w zakresie dorobku kulturalnego polskich artystów i jego prawna ochrona*. [in:] Dobosz P., Biliński M., Górny W., Mazur A., Hadel M., Kozień A. (Eds.). *Problemy ochrony prawnej sportowego dziedzictwa kulturowego i mechanizmy prawa sportowego*. Kraków: Koło Naukowe Prawnej Ochrony Dóbr Kultury Towarzystwa Biblioteki Słuchaczy Prawa Uniwersytetu Jagiellońskiego w Krakowie, Studio Cubus.
22. Kozień, A. (2018c). *Zadania i kompetencje gminy Kraków w zakresie ochrony światowego dziedzictwa*. [in:] Dobosz P., Górny W., Mazur A., Mazurek B., Kozień A. (Eds.), *Samorząd terytorialny, architektura, działa sztuki, prawo*, Kraków: Koło Naukowe Prawnej Ochrony Dóbr Kultury Towarzystwa Biblioteki Słuchaczy Prawa Uniwersytetu Jagiellońskiego w Krakowie, Studio Cubus.
23. Kozień, A. (2020). *Sprawne zarządzanie dziedzictwem kulturowym przez organy samorządu terytorialnego (Efficient Management of Cultural Heritage by Local Government Bodies)*. „Wiadomości Konserwatorskie”, nr 64.
24. Kozień, E. (1998). *Niektóre modele rozwoju organizacji*. „Zeszyty Naukowe Akademii Ekonomicznej w Krakowie”, No. 519.
25. Kozień, E. (2002). *Wybrane modele rozwoju organizacji*. „Zeszyty Naukowe Akademii Ekonomicznej w Krakowie”, No. 577.
26. Kozień, E. (2016). *Kompetencje menedżera zarządzającego projektami*. [in:] Firlej, K. (Ed.). *Menedżeryzm w rozwoju organizacji. Księga jubileuszowa dedykowana Profesorowi Józefowi Machaczce*. Kraków: Wydawnictwo UEK, pp. 71-84.
27. Kozień, E. (2017a). *Application of approximation technique to on-line updating of the actual cost curve in the earned value method*. „Technical Transactions”, Vol.9, 2017(114), pp. 181-195.

28. Kozień, E. (2017b). *Praxeological Concept of Evaluation of Undertaken Actions – Theoretical Approach*. [in:] Jaki, A., Mikula, B. (Eds.). *Knowledge, Economy, Society. Management in the face of contemporary challenges and dilemmas*, Kraków: Cracow University of Economics, Foundation of the Cracow University of Economics, pp. 25-32.
29. Kozień, E. (2018d), *Using the risk-list method for risk assessment in the project*. [in:] Cingula, M., Rhein, D., Machrafi, M. (Eds.). *Economic and Social Development (Book of Proceedings)*, 31st International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 474-484.
30. Kozień, E. (2019). *Ocena sprawności realizacji projektów*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, pp. 37-40.
31. Kozień, E., (1999). *Przedsiębiorczość w rozwoju przedsiębiorstw*. [in:] Targalski, J. (Ed.). *Przedsiębiorczość a lokalny i regionalny rozwój gospodarczy : materiały konferencji naukowej zorganizowanej przez Katedrę Przedsiębiorczości i Innowacji Akademii Ekonomicznej w Krakowie oraz Social Research Center Northumbria w Newcastle (Kraków, 14-15 IX 1999 r.)*. Kraków : Wydawnictwo AE.
32. Kozień, E., Kozień M.S. (2018c). *Using the Fuzzy Logic Description for the Ex Ante Risk Assessment in the Project*. [in:] Ribeiro, H., Naletina, D., da Silva A.L. (Eds.). *Economic and Social Development, 35th International Scientific Conference on Economic and Social Development - "Sustainability from an Economic and Social Perspective" (Book of Proceedings)*. Varazdin: Varazdin Development and Entrepreneurship Agency.
33. Kozień, E., Kozień, A. (2019). *Efficiency of the Principle of Sustainable Development in the European Union Law*. [in:] Ulewicz R., Hadzima B. (Eds.), *Quality Production Improvement - QPI 2019*, Warszawa: Walter de Gruyter (Sciendo).
34. Magliacani, M., (2015). *Managing Cultural Heritage: Ecomuseum, Community Governance and Social Accountability*. Basingstoke, Hampshire, New York: Palgrave Macmillan, pp. 2; 5; 5-6; 6.
35. Mintzberg, H. (2012). *Zarządzanie*. Warszawa: Wolters Kluwer, pp. 27-28.
36. Otręba, R. (2012). *Sukces i autonomia w zarządzaniu organizacją szkolną*. Warszawa: Wolters Kluwer, p. 150.
37. Pearce, D., Turner, R.K. (1990). *Economics of Natural Resources and Environment*. New York: Aldershot/Brookfield.
38. Pruszyński, J.P., (2001). *Dziedzictwo kultury Polski. Jego straty i ochrona prawna*, Vol. I, Kraków: Kantor Wydawniczy Zakamycze, pp. 50; 43-44.
39. Purchla, J. (2013). *Dziedzictwo kulturowe*. [in:] Hausner, J., Karwińska, A., Purchla J. (Eds.). *Kultura a rozwój*. Warszawa: Narodowe Centrum Kultury, p. 44.
40. Roellecke, G. (2005). *Natur- und Denkmalschutz durch privates Eigentum?* [in:] Depenheuer, O. (Hrsg.). *Eigentum Ordnungsidee, Zustand, Entwicklungen*. Berlin, Heidelberg, New York: Springer, pp. 81-91.
41. Skrzydło-Niżnik, I., Dobosz P. (2004). *Significance of the Principle of Sustainable Development for the Protection of National Heritage*, „International Culture Centre Cracow”, January/December 2003, No. 12, Cracow 2004.
42. UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, executed in Paris on 17 October 2003, Dz.U. – Journal of Laws – of 2011, No. 172, item 1018.
43. von Mises, L. (2012). *Human Action. A Treatise on Economics*. Martino Fine Books.
44. Zeidler, K. (2007). *Prawo ochrony dziedzictwa kultury*. Warszawa, Kraków: Wolters Kluwer, p. 26.
45. Zieleniewski, J. (1964). *Organizacja zespołów ludzkich*. Warszawa: PWN, pp. 234-240.
46. Zieleniewski, J. (1981). *Organizacja i zarządzanie*. Warszawa: PWN, p. 198.

47. Zimmermann, J. (2016). *Prawo administracyjne*. Warszawa: Wydawnictwo Wolters Kluwer SA, p. 30.

# THE IMPACT OF EDUCATIONAL LEADERSHIP IN EDUCATION GLOBALISATION

**Amthal Hamad AlOraifan**  
Ministry Of education, Kuwait  
Amthalal.oraifan@gmail.com

## ABSTRACT

*The education globalisation concept has become more effective and active in recent years, especially during this time when all educational and learning institutions suffer from a lack of information and solutions, as well as challenges and threats from the current pandemic. One of the main reasons why education globalisation is effective is that the recent COVID-19 pandemic reflects the need for e-learning, the need for new methods of distance learning and the importance of training teaching and administration staff in schools. A question arises: What are the main challenges in leadership educational globalisation at this time? And what solutions can schools apply to improve school achievements and staff development? This study investigates the best solutions and experiences that many educational institutions have implemented. The study's data was collected by investigating historical documents and prior studies in educational leadership and education globalisation, as well as e-learning and teacher development methods.*

**Keywords:** educational leadership, globalisation, challenges

## 1. INTRODUCTION

Modern globalisation is widespread in all areas, which brings the world together as a small village. Globalisation is linked to economic development. It links the world in a unified economic system that has forced educational institutions to submit to education, technology and generations to achieve these goals. We live in a period of globalisation—there can be no back-peddalling on it. Nations have a minimal decision on whether to globalise. Globalisation is a quickly progressing marvel that creates a consistent discussion on its negative viewpoints (Menon, 2006).

## 2. EDUCATION GLOBALISATION

Education is a major issue for all communities, as it is the cornerstone and an important driving force of the economy. It is the explanation behind social change and scientific development, and it is subject to the effects of progress it has made, both in terms of quality and in terms of content, methods and identified goals. Education, human and social growth is at the heart of a transition that has a profound impact on our society. Science, technology, economy and cultural areas, and various forms of political, economic and cultural colonization are the possible negative impacts of globalisation (Bakhtiari, 2011). Education has become a vital part of popular globalisers. Those nations that have changed from low to higher incomes, such as Singapore, Hong Kong, Taiwan, South Korea, and Ireland, appear to have made partial progress on the basis of a deep commitment to education at all stages, as well as a careful openness to global markets (Bloom, 2005). Education is carried out by these flows and altered. The systems of time and space, modes of finance and administration, the moral climate and social relations that characterised education in post-war welfare societies are all subject to reconstruction in an epidemic of global reforms (Ball et al., 2010). Typically, the most helpful definitions suggest that globalisation is a multifaceted ideological and political phenomenon that is commonly used as an overarching umbrella term to describe the ideological and political process. It is a complex set of economic, social, technical, military and political changes that generally shift investment funds, concepts, products, services, people and businesses beyond domestic and national



boundaries into a larger international realm, which has the impact of expanding the association and interconnectedness between different individuals, societies, ethnic gatherings, government elements and associations from various areas into a more extensive worldwide field (Litz, 2011). There is a lot of talk about the trend of raising awareness of *other cultures*. Others have the knowledge and skills that can make the state *globally competitive*. Several reports demand economic integration under the heading of structural correction, and other concepts that show cautious optimism, not sometimes the figures of reality, are reflected. There are fundamental educational issues at the moment that have been significantly affected by the concepts associated with prioritizing market considerations. They include:

- Should education help to transfer and develop the culture of society to future generations?
- Do individuals help citizens achieve themselves? Or is education simply aimed at producing workers who work (Shweeh, n.d.)?

As a multifaceted social phenomenon, globalisation impacts the lives of people around the world in a variety of ways, but differently. It focuses not only on economic and financial structures, but also on the movement of goods and services, cultural forms, ideas and resources (Ball et al., 2010). However, developed countries have disproportionate effects on developing countries, and there are rapidly growing differences between rich and poor areas in different parts of the world. Possible negative impacts, in particular, include the following:

- Enhancing technical differences and digital divisions between advanced and less developed countries;
- Creating more valid prospects for a new form of colonization for a few advanced countries and countries that are developing;
- Increasing disparities and tensions between areas and cultures;
- Working to promote certain advanced areas' dominant cultures and values (Bakhtiari, 2011).

Globalisation will only support and favour people if they are endowed with knowledge, expertise and abilities—the ability and rights needed to pursue their fundamental livelihoods. They need work and wages, and they need safe ambience. These are the main conditions that motivate them to fully engage as citizens in their local society and global and national cultures. These targets can only be accomplished if sufficient allocations are distributed by national governments. Money for education, basic infrastructure, climate and the development of an institutional system to ensure education, infrastructure and the environment widespread access and opportunities is needed (Bakhtiari, 2011).

### **3. THE ROLE OF EDUCATIONAL LEADERSHIP IN GLOBALISATION:**

Future schools are supposed to be an essential source of development skills for self-learning even if the learner remains a lifelong learner in a continuous learning community, and knowledge and skills remain renewed. However, globalisation dictates that learning continues throughout human life and has shifted its purpose from education for all as a social and educational necessity to excellence for all. Outstanding education ensures a high level of quality of expertise and capabilities. The forerunner in global competition is the result of the effort of every meeting in any country. It is not the result of the performance of a particular minority. There are many responsibilities of school leaders mentioned by Marzano et al. (2005) that can promote better implementation of globalisation in education:

#### **1) Affirmation:**

Affirmation is the extent to which the leader recognises and celebrates school accomplishments and acknowledges failures.

- 2) **Change Agent:**  
It is not uncommon for a school (or any other complex organization) to keep certain practices in place and unchallenged for years or even decades simply because of their historical status.
- 3) **Contingent Rewards:**  
Contingent rewards refer to the extent to which the school leader recognises and rewards individual accomplishments.
- 4) **Communication:**  
Communication refers to the extent to which the school leader establishes strong lines of communication with and between teachers and students.
- 5) **Culture:** By definition, every school has a culture.
- 6) **Discipline:** One important task of the school principal is to protect teachers from undue distractions.
- 7) **Flexibility:** Refers to the extent to which leaders adapt their leadership behaviour to the needs of the current situation and are comfortable with dissent.
- 8) **Focus:**  
In keeping with comments like these, the responsibility of focus refers to the extent to which the leader establishes clear goals and keeps those goals at the forefront of the school's attention.
- 9) **Involvement in Curriculum, Instruction and Assessment:**  
This responsibility addresses the extent to which the principal is directly involved in the design and implementation of curriculum, instruction and assessment activities at the classroom level.
- 10) **Monitoring/Evaluating**

#### 4. CONCLUSION

In conclusion, to catch up with the wave of globalisation, educational departments must prepare to create the right climate, curricula and standards that keep pace with development. Most importantly, educational departments need to prepare school leaders and use the best leadership methods to apply the principles of globalisation in order to involve all parties in the educational system in an effective way.

#### LITERATURE:

1. Al-Jilali, H. (2011). Education and the challenge of globalization. <http://archives.univ-biskra.dz/bitstream/123456789/269/1/09.pdf>
2. Bakhtiari, S. (2011). Globalization and education: Challenges and opportunities. *International Business & Economics Research Journal*, 5(10). 19030/iber.v5i2.3461.
3. Ball, S., Dworkin, A., & Vryonides, M. (2010). Globalization and education: Introduction. *Current Sociology*, 58. 523–529. 10.1177/0011392110367987.
4. Bloom, D. (2005). Education in a globalized world. *Pontifical academy of sciences, Extra series* 28. <http://www.pas.va/content/dam/accademia/pdf/es28/es28.pdf>
5. Litz, D. (2011). Globalization and the changing face of educational leadership: Current trends and emerging dilemmas. *International Education Studies*, 4(3), 47–61.
6. Marzano, R. Waters, T. McNulty, B. (2005). *School leadership that works: From research to results*. ASCD Publications.
7. Menin, G. (2006). Globalisation and education: An overview. *Pontifical Academy of Social Sciences, Extra Series* 7. <http://www.pass.va/content/dam/scienze-sociali/pdf/es7/es7-menon.pdf>

8. Shweeh, S. (n.d.). The culture of globalization and its relationship to education through education and knowledge.  
<http://archives.univ-biskra.dz/bitstream/123456789/5378/1/7.pdf>

## INSTITUTIONAL REFORM – A NECESSARY CONDITION FOR HEALTH SYSTEM REFORM IN CROATIA

**Denis Buterin**

*Polytechnic of Rijeka, Croatia  
dbuterIn@veleri.hr*

**Vesna Buterin**

*University of Rijeka, Faculty of Economics and Business, Croatia  
vesna.buterin@efri.hr*

**Stella Suljic Nikolaj**

*University of Rijeka, Faculty of Economics and Business, Croatia  
stella.suljic.nikolaj@efri.hr*

### **ABSTRACT**

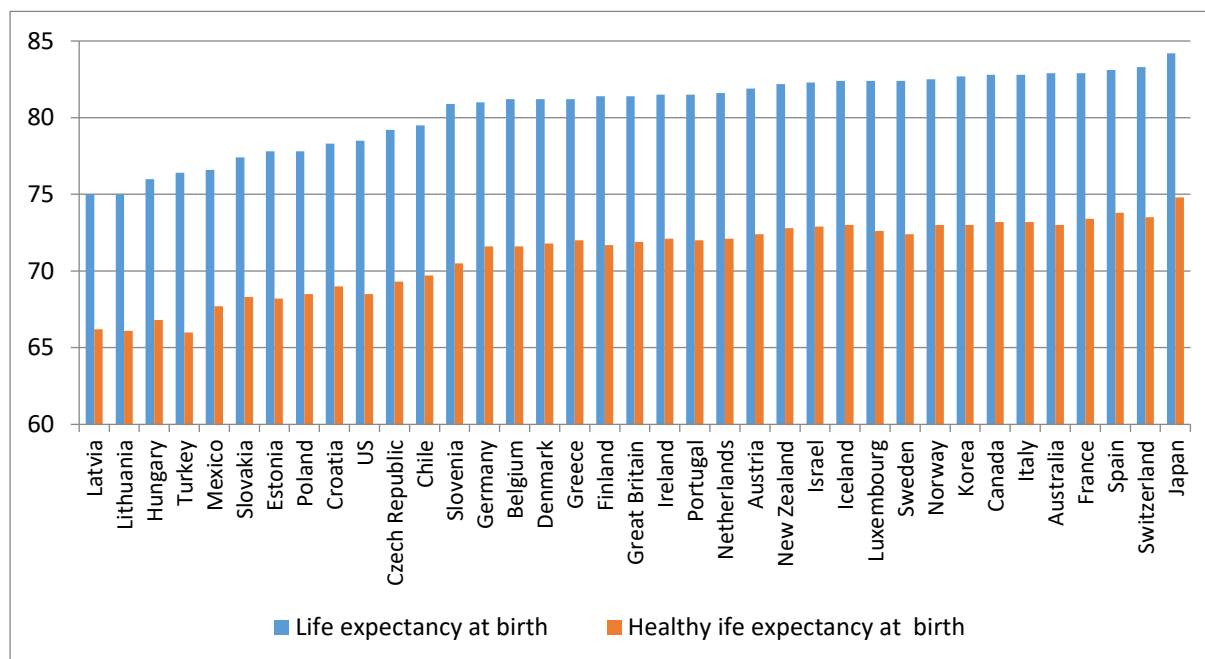
*Even before the COVID-19 virus pandemic, the health system of the Republic of Croatia was subject to frequent questions about the effectiveness of its financing, ie the level of health insurance contribution rates that have a direct negative impact on the competitiveness of the national economy and the scope, quality and quantity of health services which are often perceived in a negative context. There are several main reasons why the health care system needs to be thoroughly reformed: fast and intense development of new health services, the possibility of new pandemics such as the current COVID-19 pandemic, life expectancy causing rising costs and very negative demographic trends in Croatia. The current way of financing the health system is less and less efficient, and the new circumstances related to the COVID-19 pandemic further indicate its sensitivity, so it is necessary to reform its financing to achieve two main goals: efficient financing and avoiding further distortions of the economy. The authors conclude that this can be achieved by changing the tax structure in a way that relieves income and shifts the emphasis to consumption taxation*

**Keywords:** *institutional reform, health system, tax structure, demographic trends, COVID-19 pandemic*

### **1. RELEVANT HEALTH CARE FEATURES**

The importance of the health care system of modern states is twofold: it should serve to preserve health and increase the quality of life, but at the same time it is one of the most important users of public finances. The health care system is essentially a system of protection against the financial risks associated with maintaining health and treatment. Intensive globalization processes which lead to significant structural economic changes and affect economic growth (Radulovic, Kostic, 2020), present dynamic challenges for the health systems. This is presented through overall budgetary pressures both to increase health spending through increased demand determined by forces of income convergence and redistribution (Radosavljević et al., 2020), as well as to reduce overall government spending due to tax saturation of the economy (Hodžić et al., 2020). The first health insurance systems such as the German *krankenkassen* were established as part of national programs to eliminate or at least reduce the risks of complete impoverishment among the working class due to illness, disability and unemployment (Hsiao and Li, 2003). Due to its importance for the health and quality of life of the entire population, today health systems around the world are characterized by an extremely high degree of state regulation, despite the increasing changes introduced into this system by market and private initiatives. Regulation is reflected in the comprehensive organization of the health care system and in the supervision of its functioning.

One of the most widely used composite indicators of a country's health system's effectiveness is life expectancy at birth. Although it is influenced by numerous external factors such as lifestyle, environment, natural disasters, it contains the effects of current health policy and the effects of previous health policies. Another important indicator is life expectancy in health, and it was developed to investigate whether life expectancy is accompanied by a longer period of life in good or poor health (EHLEIS, 2016). While life expectancy at birth is influenced by these external factors over which the health system has no influence, life expectancy in health provides a better view of the effectiveness of the health system. Life expectancy at birth and healthy life expectancy at birth for OECD countries and for Croatia are shown in Chart 1.



*Chart 1: Life expectancy and healthy life expectancy at birth in OECD countries and in Croatia in 2016*

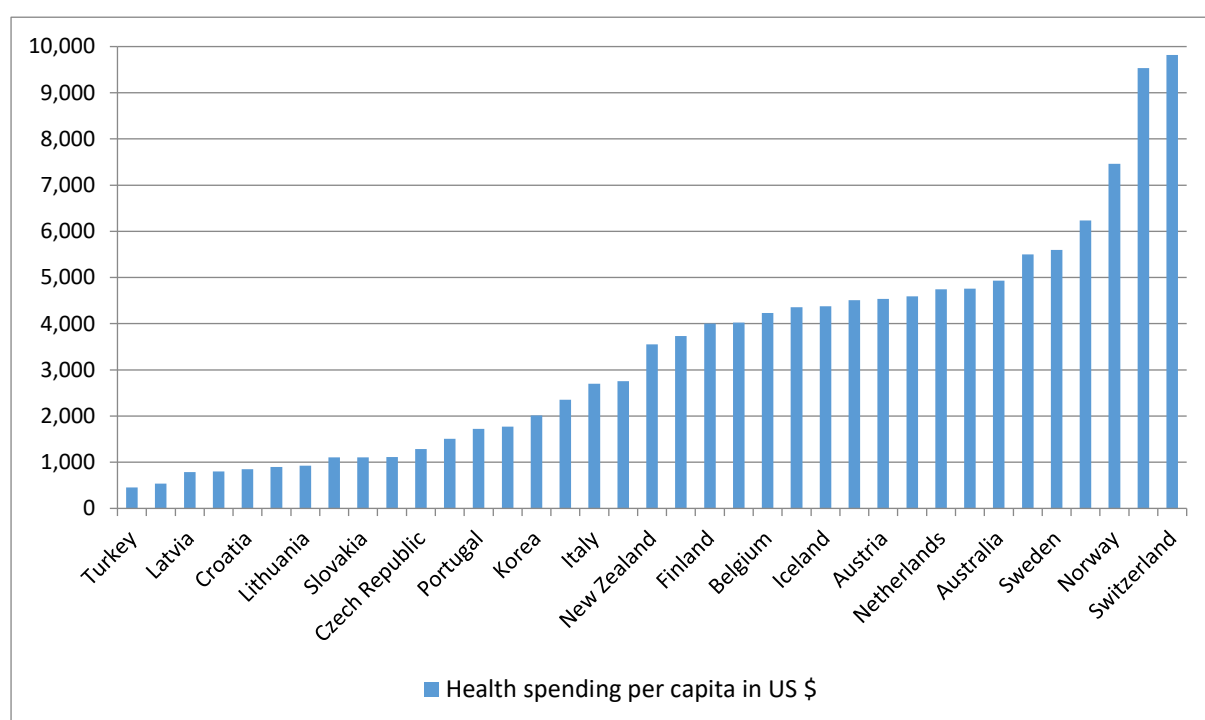
*(Source: WHO, 2018)*

It can be observed that life expectancy as well as life expectancy in health does not depend on the geographical location of the country. Namely, several European countries are at the top almost equally, together with the countries of the Far East and Oceania.

## 2. HEALTH CARE CONSUMPTION

Increased consumption of health systems in recent decades has led to an increase in life expectancy and healthy living although results and current consumption do not always correlate. For example, in Spain and Italy, high life expectancy is accompanied by health spending below the average of the observed countries, while the US with very high consumption has below-average life expectancy and below-average healthy life expectancy. The United States is on a par with Croatia and the Czech Republic, where health care costs far less per capita. This is partly the result of external factors, such as lifestyle and habits, but also the fact that in the US, health care is largely based on market principles, which through market mechanisms leads to increased sales of health services. Although health systems differ from one country to another, in almost all developed countries a certain level of health care is available to all residents, and in most countries most health care spending is financed from public budgets. It can be said that one of the main goals of the health system is to provide equal access to health services to all under equal conditions.

Assuming that poor people are more likely to be ill due to lower levels of education, lifestyle, lifestyle habits, poor nutrition and the like, and that everyone is provided with the same quality and quantity of services, the health system as such should reduce inequality. However, in reality this may not be the case in all countries because there are differences in the consumption of health services related to income levels in such a way that they are somehow less accessible to those with the lowest income (Darvas et al, 2018). This inequality can increase the effects of income inequality due to consequently less time spent at work and lower earnings. Furthermore, it has been shown that the health conditions of parents leave consequences on the cognitive and physical development of their children, thus exacerbating the consequences of the poorer health of the poor. Oglobin (2011) finds that health system inefficiencies are negatively associated with growth and increase income inequality. Research has shown that improving an individual's health leads to an increase in his or her productivity, education, and savings (Bloom and Canning, 2008; Kalemly-Ozcan et al, 2000).



*Chart 2: Health spending in OECD countries and in Croatia per capita in 2015  
(Source: WHO, 2018)*

Among the many studies that conclude that the impact of the health system has a large and significant impact on economic growth are the works of Baldacci et al (2008), which, looking at 118 developing countries between 1971 and 2000, found that investing in education and the health system resulted in increased human capital accumulation and ultimately to higher growth rates; Salla-i-Martin et al (2004) who link health to long-term growth and Bloom et al (2004) who find that health as one of the fundamental factors of human capital has a positive, measurable and statistically significant effect on aggregate growth. On the other hand, there are authors who find that this effect is weak and insignificant (Acemoglu and Johnson, 2007; Acemoglu et al., 2003). They find that an increase in life expectancy or life expectancy as one of the most commonly used indicators of the effectiveness of the health system cannot be linked to an increase in growth rates. In doing so, however, they allow health to make an indirect contribution to growth through its impact on the institutional development of society. Health spending significantly affects the stability and sustainability of public finances.

In developed economies, health systems are financed in three basic ways (Mihaljek, 2014; Gottret and Schieber, 2006):

- 1) Financing mainly from the state budget
- 2) Financing mainly from extra-budgetary funds or social security funds
- 3) Predominantly private financing

Financing from the state budget, ie the Beveridge model, implies that most of the funds are collected from various non-earmarked tax and non-tax revenues, while in the Bismarck model, ie in financing from budget funds, funds are collected through earmarked contributions. A very important difference between these two approaches is not only in the organizational aspect of funding, but in the economic effects of fundraising. Namely, with the financing of contributions, there is a direct debiting of employees' salaries and an increase in labor costs for the employer, which has implications for consumption, competitiveness and economic growth (Buterin et al, 2018). Health economics is a scientific discipline that emerged in the second half of the twentieth century in the United States. Arrow (1963) was the first to give a systematic overview of the specifics of the health services market, which are still largely valid today. The specificity of demand and its main distinguishing feature from the demand for other goods is reflected in its instability and unpredictability. The demand for health services arises in the case of illness, ie in a condition that is significantly different from the normal and normal condition in which a person is otherwise. Such a condition leads to incapacity for work and then to loss or reduction of income opportunities. It can be said that the disease combines health risk, cost in terms of loss of earning capacity and cost in terms of the cost of health services required for treatment. While in underdeveloped countries health services are somewhat considered a luxury good and the demand for them is very elastic, in developed countries the elasticity is lower because the level of health care achieved there is considered standard (Przywara, 2010; Fogel 1999). In both developed and underdeveloped countries, there is a specific type of corruption and fraud in health care that increases the costs of the entire system. Bribery in the provision of medical services, corruption in procurement, unacceptable marketing relationships, embezzlement of drugs and medical devices, and excessive demands for refunds are the most common forms of corruption and fraud in health care (Medeiros and Schwierz, 2015).

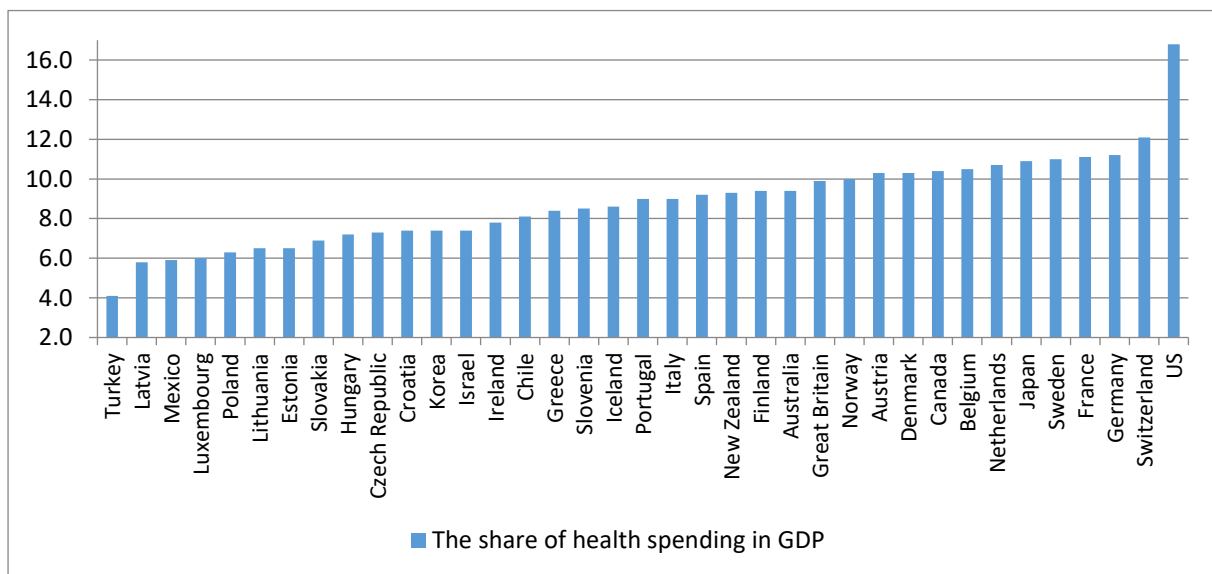


Chart 3: The share of health spending in the GDP of OECD countries and Croatia in 2015  
(Source: WHO, 2018)

Chart 3 shows the share of health spending in gross domestic products of the observed countries. In almost all cases, the share of health care in GDP is higher than six percent, and in most cases it is higher than eight percent. The US is the exception with by far the largest share. A characteristic of almost all health care systems is their increasing consumption, in relative terms as a share of GDP and in absolute terms measured by per capita consumption or total consumption. Expenditures for health systems are not only among the largest items of public spending, but are also among the fastest growing. It can be expected that in the coming decades the pressure for higher health spending will continue due to unfavorable demographic trends, so the problem for public finances of the state will be even greater. For example, Maisonnueve and Martins (2013) believe that by 2060, the share of health spending in the gross domestic product of OECD countries will double. Health spending is growing in the long run because with the overall growth and development, the population's demand for health services is growing. Often the growth of health spending is greater than the growth of the whole economy (WHO, 2015; WHO, 2018). According to a study conducted by Dunn et al (2018), an increase in the incidence of disease treatment participates with about 60 percent in the increase in health care costs, and an increase in the cost of services caused by the introduction of modern technology by just over 20 percent. Both categories are directly related to economic growth and development. Healthcare costs are also increased by wage growth which is not the result of an increase in healthcare productivity but an increase in the productivity of the entire economy and is called the *Baumol effect*. Due to this effect, the relative prices of health services are rising (Pomp and Vujić, 2008). Health consumption can be expressed by the linear equation of consumption as a function of income (Senterre and Neun, 2013):

$$E = a + bY \quad (1)$$

Where  $a$  is the amount of health expenditure when the income is equal to zero,  $b$  is a measure of the change in health expenditure resulting from the unit change in income  $Y$ , ie:

$$b = \Delta E / \Delta Y. \quad (2)$$

According to this equation, consumption increases with increasing income, and that a higher level of income derives a higher level of health spending is agreed by many researchers who study health care from an economic point of view, ie from the point of view of its fiscal sustainability (Okunade and Murthy, 2002; Murthy and Upkolo, 1994; Hitiris and Posnet, 1992).

Precisely because of fiscal sustainability, changes in the health system are needed in terms of increasing revenues while reducing expenditures (Gupta et al, 2012). Increasing the life expectancy of people, ie the overall aging of the population increases the demand for health services and leads to an increase in total costs. The likelihood of getting the disease increases with age, and according to data from the United States, a group of people over the age of 65 spends on average six times more health services than a group under the age of 65. At the same time, this increase in costs is particularly pronounced among people over the age of 85 (Hsiao, 2000). But the aging of the population also causes a very big problem on the revenue side of the system no matter how funds are raised to finance it. However, it should be borne in mind that frequent changes imply an uncertain institutional environment which can have negative implications for growth (Buterin et al, 2017; Olgic Draženović et al, 2018). To assess the risk to the sustainability of public finances over the next few decades, most countries face the need to project future health spending and other components of the social security system.



### 3. HEALTH CARE SYSTEM IN CROATIA

The first examples of public health care in Croatia were recorded hundreds of years ago. In Zadar, in 559, during the Byzantine rule, the oldest xenodochium was opened - a hospital for sick foreigners (Skitarelić et al, 2016). The pharmacy of Mala braća in Dubrovnik, which was founded in 1317 and has been operating continuously for more than 700 years, is considered to be the first public pharmacy in the world (Nosić, 2017). The internationally accepted term *quarantine* (from the French *quarantaine* - about forty days) was conceived and first introduced in the world in Dubrovnik in 1377, as a measure of prevention against infectious diseases (Lang and Borovečki, 2001). The beginnings of a systematic approach to health care in Croatia can be seen in the time of the Austro-Hungarian monarchy. The first Rijeka hospital, which still operates today, was founded in 1572 (Medved, 2013). The first law regulating health care in Croatia was passed in 1874 (HZJZ, 2019). Here it is worth mentioning Andrija Štampar who was one of the pioneers in preventive medicine in Croatia and the world and one of the founders of the World Health Organization and the first president of its general assembly. His beliefs that every human being has the right to health and his approach are thought to have greatly influenced the creation of the World Health Organization (Zile Hyde, 1958; Brown and Fee, 2006). His definition of health as a state of complete physical, mental and social well-being, and not just the absence of illness or disability, is still accepted and written in the preamble of the founding act of the World Health Organization (WHO, 2014).

#### 3.1. Health care system reforms

Following the adoption of the Workers' Insurance Act of 1922, the Central Office for Workers' Insurance was established in Zagreb as the holder of health insurance in Croatia. Although the said law began to be implemented only in 1937, it is believed that its establishment began the provision of comprehensive organized health insurance in Croatia (HZZO, 2019). After the end of the Second World War, compulsory health insurance, which covered the majority of the population, was organized within the institutions in charge of social insurance. By 1979, about 85 percent of the Croatian population had health insurance (Zrinščak, 2008). The system gradually became highly decentralized and highly politicized, which greatly limited its effectiveness (Turek, 1999). According to research by the World Health Organization (WHO, 1999), the Croatian health care system at the time was a unique combination of self-government, health insurance funds, a neglected primary care network, and health care organizations that were only formally independent of politics. This system was expensive and poorly organized, its efficiency was low, so the need for its restructuring arose. In 1990, the Republic Fund for Health Insurance and Health of Croatia was established, the functioning of which in the first years was largely limited by the current bad situation and significant financial debts, transition shocks and the war. The system soon found itself in so much trouble that its functioning came into question, so in 1993 the first of a number of health care reforms was implemented. Characteristic of all previous reforms of the system are attempts to collect higher revenues and better cost management, but all of them have mostly resulted in short-term successes with renewed growth of debts and losses in health care. In the period from 1994 to 2017, 14 health system rehabilitations were carried out in Croatia (Vončina and Rubil, 2018). Covering health losses increases the expenditure side of the budget, and as the health system continues to regularly accumulate losses and unpaid arrears, a radical multi-level system reform is needed. The first level is to achieve satisfactory efficiency by reorganizing health care institutions and health care segments. The second level, closely related to the first, relates to better expenditure management. The third level refers to the revenue side of the health system because the existing method of financing does not allow its smooth functioning.

### 3.2. Financial characteristics of the health care system in Croatia

Prolonging life expectancy leads to a growing contingent of older people. Consumption of health services by the elderly is above average. Observing the total health expenditure in Croatia, its continuous growth can be noticed. Despite all attempts to limit the growth of health care costs, control and rationalize them, and discourage users from participating in the price of the service, the costs of the health care system have almost doubled in less than two decades. From 2000, when they amounted to HRK 13.3 billion, until 2018 they increased by 82 percent and amount to HRK 24.2 billion, and public health expenditures in the period from 2015 to 2017 accounted for about 17 percent of expenditures state budget. Due to the fact that after several years of recession, the gross domestic product grew faster than the growth of costs in public health, their share decreased from 6.7 in 2015 to 6.4 percent in 2017 (HZZO 2019a; DZS 2018). In public health spending, the largest expenditures were realized in hospital health care, dispensing of prescription drugs and in primary health care, and their movement is shown in Chart 4.

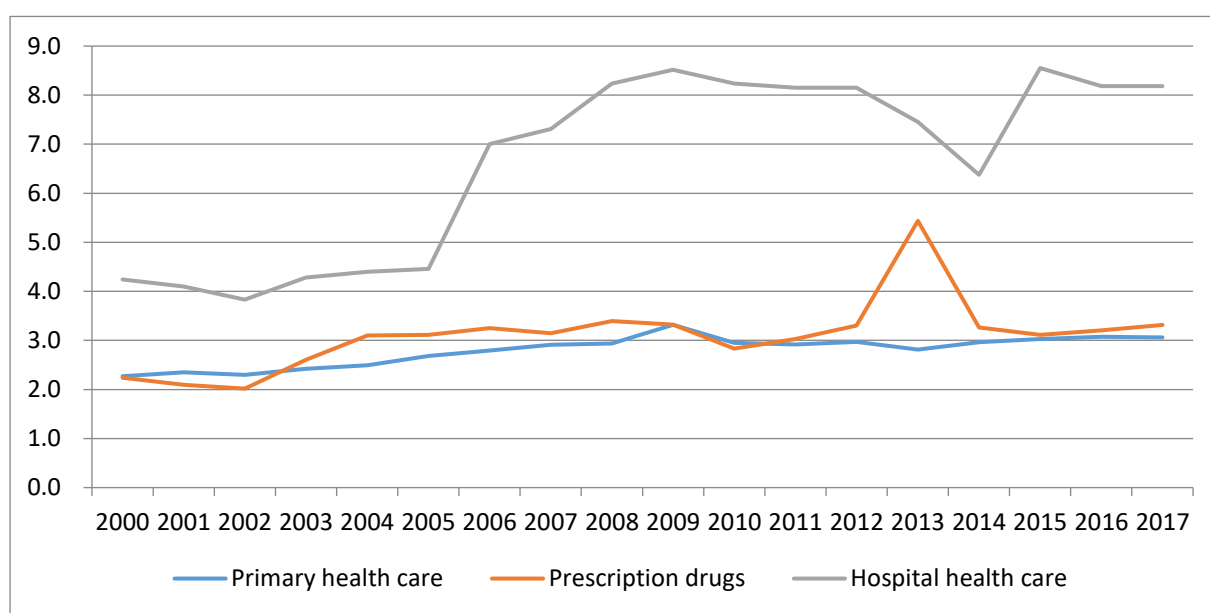
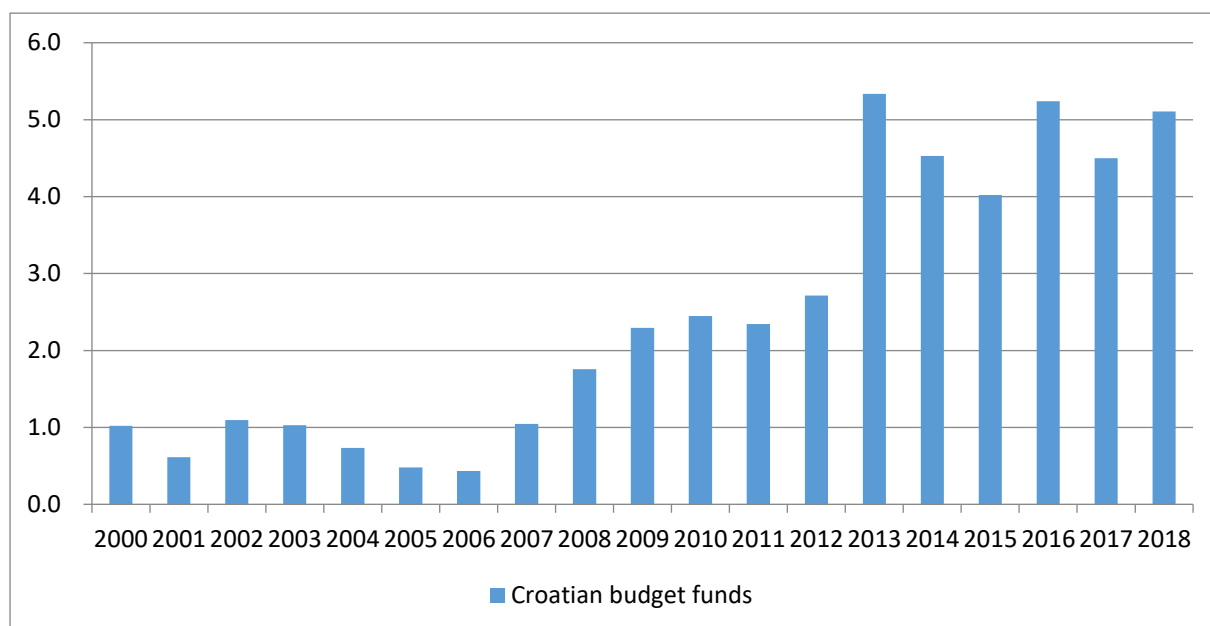


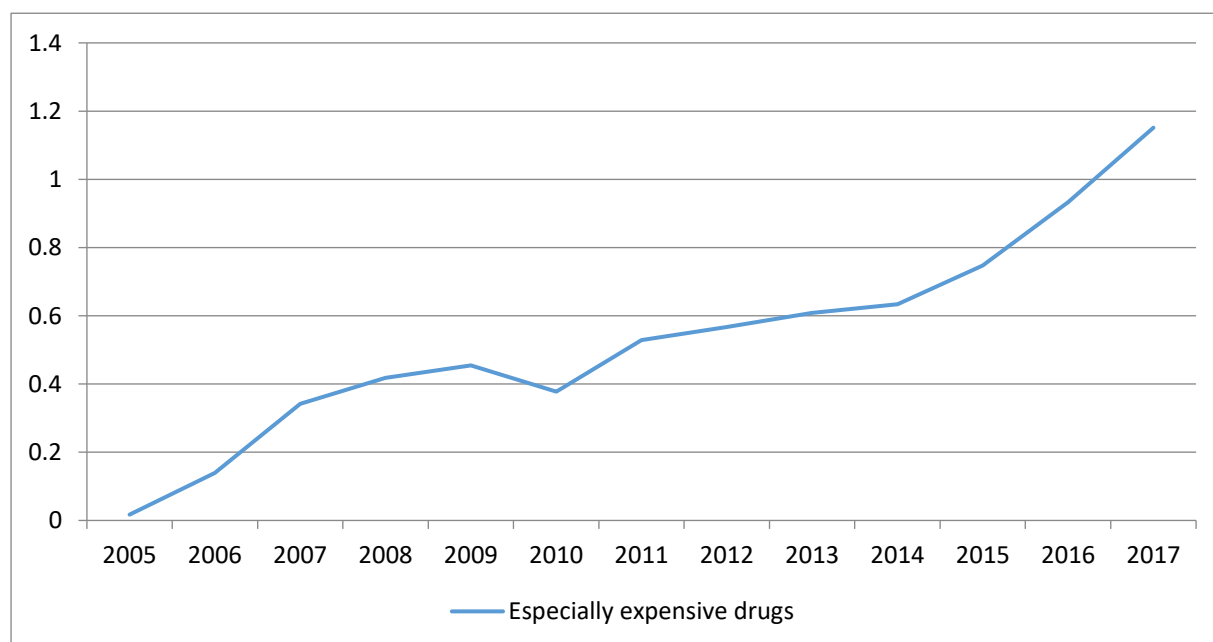
Chart 4: The most important segments of health spending in Croatia, in billions of kunas  
(Source: HZZO, 2019a)

Although primary health care consumption is growing, its share in total health care costs is still below 15 percent, which shows that this segment of health care still cannot solve the majority of health problems. Despite the reforms and measures taken so far, no success has been achieved in curbing hospital spending, so they have become the main generator of rising health care costs in general. The demographic structure of the Croatian population indicates that health spending will be even higher in the coming decades, while the number of active insured persons, ie those who actually pay contributions, will be lower and consequently the importance of budget financing of health care will increase. In the same period in which total health care costs rose 82 percent, the budget share in those costs increased fivefold. Although this includes the costs of rehabilitation of the health system, which do not have a permanent character, the increase in health spending is constant, while the increase in income from health contributions is insufficient to cover it. It is quite certain that in the years to come the growth of health spending will be even greater, partly due to the development of medicine and the application of new and more expensive methods of treatment, and partly due to the natural needs of an increasing number of mature and elderly residents. The possibility of new challenges such as the COVID-19 pandemic should also be taken into account.



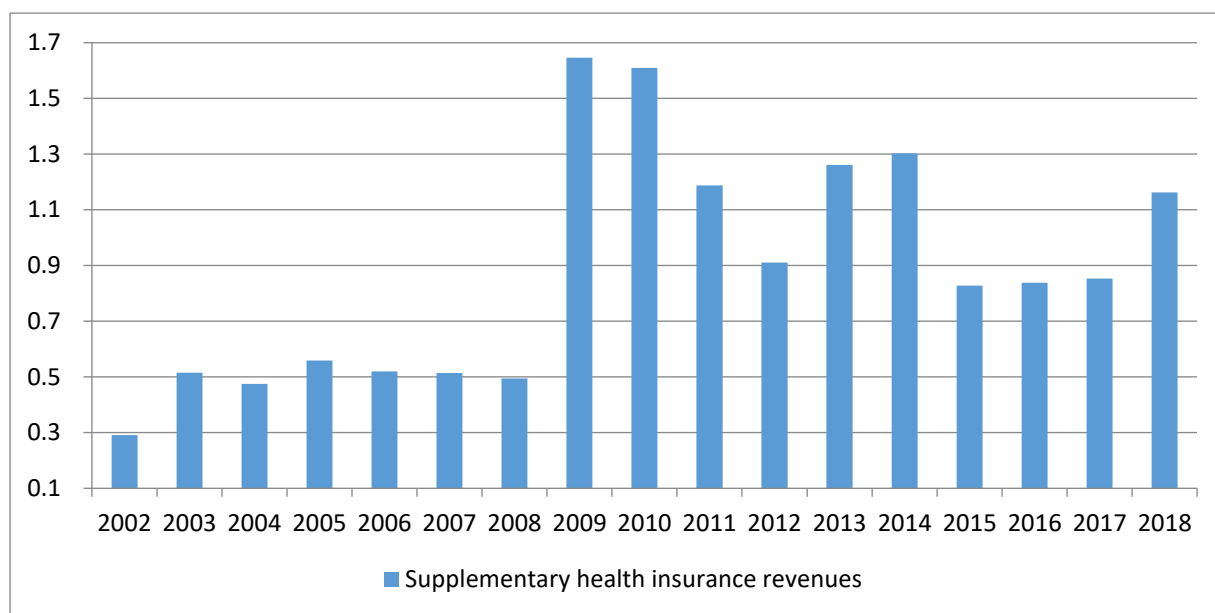
*Chart 5: Budget funds in public health spending, in billions of kunas  
(Source: HZZO, 2019a)*

Already on the consumption of particularly expensive drugs in Croatia, shown in Chart 6, one can see the increase in costs caused by the development of science and modern methods of treatment.



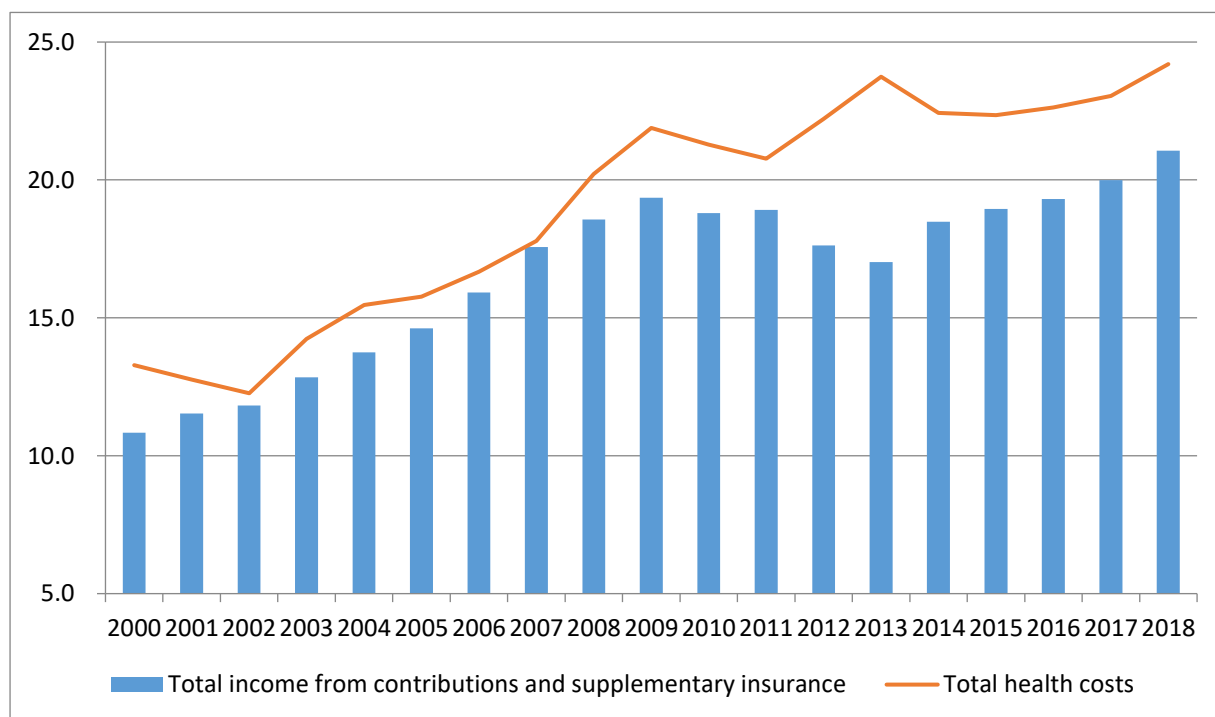
*Chart 6: Consumption for particularly expensive drugs in Croatia, in billions of kunas  
(Source: HZZO, 2019a)*

Consumption of particularly expensive drugs is growing because the Croatian Health Insurance Institute every year adds new, extremely expensive drugs to the current list of drugs used in the treatment of malignant or rare diseases, which give better results in treatment than those used so far (HZZO, 2019a).



*Chart 7: Revenue from supplementary health insurance, in billions of kunas  
(Source: HZZO, 2019a)*

The observed increase in supplementary insurance revenues in 2009 was the result of an almost fourfold increase in the number of insured persons due to the 2008 reform, when the share of health care costs increased and the number of categories exempted from health care obligations decreased. However, even with these revenues, the Croatian Health Insurance Institute cannot function without additional budget funds. The ratio of total contribution income and total supplementary insurance premium on the one hand and health care costs on the other is shown in Chart 8.



*Chart 8: Overview of health care costs and income from supplementary insurance premiums and contributions, in billions of kunas  
(Source: HZZO, 2019a)*

Healthcare costs are constantly higher than the total contributions and premiums, so the difference is currently covered from the budget. Since 2014, the negative difference is between 3.1 and 3.9 billion kuna, but the real problem for the future functioning of the system lies in the fact that it is realistic to expect an increase in this gap as costs tend to grow while opportunities to further raise rates contributions are very limited.

Year	Salary contributions	Income contributions		Total
		Health insurance contribution	Contribution to safety at work	
1994	7.50	7.50		15.00
1995	7.00	7.00		14.00
1998	9.00	9.00		18.00
2000	9.00	7.00		16.00
2002	9.00	7.00	0.47	16.47
2003		15.00	0.50	15.50
2012		13.00	0.50	13.50
2014		15.00	0.50	15.50
2019		16.50	0.00	16.50

*Table 1: Changes in the rates of compulsory health contributions  
(Source: Računovodstvo, revizija i financije, 2019)*

Since 2019, the rate of compulsory health insurance contributions has increased from 15.0 to 16.5 percent, but this increase went relatively unnoticed because two other contributions were abolished at the same time, so the total burden on wages remained lower by 0.7 percent. However, this has exhausted such painless possibilities of obtaining additional income for health care, because apart from health and pension benefits, there are no more contributions for the abolition and compensation of the rate increase. The origin of the financial problems of the Croatian health care system lies in the unfavorable demographic structure and unfavorable demographic trends, and to this can now be added the unpredictable risks of new pandemics, such as the pandemic of the COVID-19 virus.

#### 4. CONCLUSION

It could be said that the revenue segment of the future health care reform essentially does not fall into the domain of decision-making in the health care system because it brings with it far-reaching effects on the entire Croatian economy, and not only on health care. Achieving long-term financial sustainability of the health care system without compromising the stability of public finances and without jeopardizing the competitiveness of the economy is an important problem of Croatian economic policy, the solution of which should be carefully and systematically addressed. Increasing contribution rates, expanding co-payments and increasing the scope of services and the percentage of out-of-pocket payments have a negative effect on the competitiveness of the economy and on household consumption, and have only short-term effects. If we take into account the demographic tendencies of the Croatian population that indicate the near end of the sustainability of financing the health system through contributions, or in the way it has been done for decades, it is clear that such measures would not ensure long-term sustainability.

Here it is necessary to make the biggest step forward and change the concept of health care financing in such a way that it is sustainable in the long run, that the system is efficient and that health care financing is not a limiting factor in the competitiveness of the economy. Institutional change proves to be a necessity of reforming the financing and functioning of the health insurance system of the Republic of Croatia. Changes in the taxation system, ie structural changes in tax policy is one of the most complex tasks of the overall economic policy, whose long-term and far-reaching implications can be reflected in many economic and social areas, and this needs to be approached with particular caution. It is necessary to ensure the long-term sustainability of the system by changing the tax structure, ie by relaxing direct taxes and obligatory contributions while placing greater emphasis on indirect taxes. Through institutional change, it is possible to achieve the sustainability of the health insurance system while encouraging the competitiveness of the Croatian economy.

**ACKNOWLEDGEMENT:** *The publication of this paper has been supported by University of Rijeka under the project "Smart cities in function of development of national economy" (unirdrustv-18-255-1424), and this paper was funded under the project line ZIP UNIRI of the University of Rijeka, for the project ZIP-UNIRI-130-5-20.*

## LITERATURE:

1. Acemoglu, D., Johnson, S., Robinson, J. (2003), Disease and Development in Historical Perspective, *Journal of the European Economic Association*, 1, 2-3, 397-405
2. Acemoglu, D., Johnson, S. (2007), Disease and Development: The Effect of Life Expectancy on Economic Growth, *Journal of Political Economy*, 115, 6, 925-985
3. Baldacci, E., Clements, B, Gupta, S., Cui, Q. (2008), Social Spending, Human Capital, and Growth in Developing Countries, *World Development*, 36, 8, 1317-1341
4. Arrow, K. (1963), Uncertainty and the Welfare Economics of Medical Care, *The American Economic Review*, 53, 5, 941-973
5. Bloom, D., Canning, D., Sevilla, J. P. (2004), The Effect of Health on Economic Growth: A Production Function Approach, *World Development*, 32, 1, 1-13
6. Bloom, D., Canning, D. (2008), Population Health and Economic Growth, *Commission on Growth and Development Working Paper* 24
7. Brown, T., M., Fee, E. (2006), Andrija Stampar – Charismatic Leader of Social Medicine and International Health, *American Journal of Public Health*, 96, 8, 1383
8. Buterin, V., Škare, M., Buterin, D. (2017), Macroeconomic model of institutional reforms' influence on economic growth of the new EU members and the Republic of Croatia // *Ekonomika istraživanja*, 30, 1, 1572-1593
9. Buterin, V., Grdinić, M., Olgić Draženović, B. (2018), Impact of institutional framework and tax policy on foreign direct investment in selected European Union countries // *Economic and Social Development (Book of Proceedings) 35th International Scientific Conference on Economic and Social Development – "Sustainability from an Economic and Social Perspective" / Humberto Ribeiro, Dora Naletina, Ana Lorga da Silva (ed.), Lisbon, Portugal: Varazdin Development and Entrepreneurship Agency, 2018. str. 129-141*
10. Darvas, Z., Moës, N., Myachenkova, Y., Pichler, D. (2018), The macroeconomic implications of healthcare, *Bruegel Policy Contribution*, 11, 1-22
11. Dunn, A, Liebman, E., B., Shapiro, A. (2018), Decomposing Medical-Care Expenditure Growth, u *Measuring and Modeling Health Care Costs*, ur. Aizcorbe, A. et al, University of Chicago Press, Chicago
12. DZS (2018), *Statistički ljetopis Republike Hrvatske*, Državni zavod za statistiku Republike Hrvatske, Zagreb

13. EHLEIS (2016), Očekivano trajanje života u zdravlju u Hrvatskoj, European health & life expectancy, Izvješće po zemljama, Izdanje 10
14. Fogel, R. W. (1999) Catching Up with the Economy, American Economic Review, 89, 1, 1-21
15. Gottret, P., Schieber, G. (2006), Health Financing Revisited, A Practitioner's Guide, The World Bank, Washington DC
16. Gupta, S., Clemens, B., Coady, D. (2012), The Challenge of Health Care Reform in Advanced and Emerging Economies, u The Economics of Public Health Care Reform in Advanced and Emerging Economies, ur. Clemens, B. et al, IMF Publications, Washington DC
17. Hitiris, T., Posnett, J. (1992), The determinants and effects of health care in developed countries, The Journal of Health Economics, 11, 2, 173-181
18. Hodžić, S., Demirović, A., Bečić, E., The relationship between fiscal policy and economic growth in CEE countries, Proceedings of Rijeka Faculty of Economics: Journal of Economics and Business, 38, 2, p. 653-666
19. Hsiao, W. (2000), What Should Macroeconomics Know About Health Care Policy?, IMF Working Paper, WP/00/136
20. Hsiao, W., Li, K., T. (2003), What is a Health System? Why Should We Care, Harvard School of Public Health Working Paper 33
21. HZJZ (2019), HZJZ, Retrieved 17.4.2020 from <https://www.hzjz.hr/ravnateljstvo/hzjz>
22. HZZO (2019), Hrvatski zavod za zdravstveno osiguranje kroz povijest, Retrieved 17.4.2020 from <https://www.hzo.hr/o-zavodu/povijest/>
23. HZZO (2019a), Izvješća, Retrieved 27.4.2020 from <https://www.hzzo.hr/o-zavodu/izvjesca/>
24. Kalemli-Ozcan, S., Ryder, H., E., Weil, D. (2000), Mortality Decline, Human Capital Investment, and Economic Growth, Journal of Development Economics, 62, 1, 1-23
25. Lang, S., Borovečki, A. (2001), Zdravstvene i socijalne institucije staroga Dubrovnika, Revija za socijalnu politiku, 8, 3, 301-308
26. de la Maisonnueve, C., Martins, J., O. (2013), Public spending on health and long- term care: a new set of projections, A going for growth report, OECD Economic Policy Papers, No. 6
27. Medeiros, J., Schwierz, C. (2015), Efficiency estimates of health care systems, European Economy – Economic Papers 549
28. Medved, M. (2013), Crnice iz crkvene povijesti Rijeke vezane uz odnos kršćana i zdravstva, Acta medico-historica Adriatica: AMHA, 11, 1, 113-130
29. Mihaljek, D. (2014), Kako financirati zdravstvo u doba financijske krize, u O Zdravstvu iz ekonomske perspektive, Ekonomski institut, Zagreb
30. Murthy, N., R., V., Upkolo, V. (1994), Aggregate health care expenditures in the United States: evidence from cointegration tests, Applied Economics, 26, 8, 797-802
31. Nosić, S. (2017), Ljekarna Male braće: 700 godina zdravlja Dubrovčana, Franjevački samostan Male braće, Dubrovnik
32. Oglobin, C. (2011), Health Care Efficiency Across Countries: A Stochastic Frontier Analysis, Applied Econometrics and International Development, 11, 1, 5-14
33. Okunade, A., A., Murthy, N., R., V. (2002), Technology as a „major driver“ of health care costs: a cointegration analysis of the Newhouse conjecture, Journal of Health Economics, 2, 1, 147-159
34. Olgić Draženović, B., Buterin, V., Buterin, D. (2018). Strukturne reforme zemalja CEE-a u tranzicijskom razdoblju – pouke i zaključci, Zbornik Veleučilišta u Rijeci, 6, 1, 127-142. <https://doi.org/10.31784/zvr.6.1.8>

35. Pomp, M., Vujić, S. (2008), Rising health spending, new medical technology and the Baumol effect, CBS Discussion Paper 115
36. Przywara, B. (2010), Projecting future health care expenditure at European level: drivers, methodology and main results, *European Economy – Economic Papers* 417
37. Računovodstvo, revizija i financije (2019), Obračun plaće, naknada i neoporezivi primici, *Stručne informacije za 2019. godinu*, 2/2019, 4-26
38. Radosavljević, G., Babin, M., Erić, M., Lazarević, J. (2020), Income convergence between Southeast Europe and the European Union, *Proceedings of Rijeka Faculty of Economics: Journal of Economics and Business*, 38, 1, p.183-214
39. Radulović, M., Kostić, M., Globalization and economic growth of Eurozone economies, *Proceedings of Rijeka Faculty of Economics: Journal of Economics and Business*, 38, 2, p.
40. Sala-i-Martin, X., Doppelhofer, G., Miller, R., I. (2004), Determinants of Long-Term Growth: A Bayesian Averaging of Classical Estimates (BACE) Approach, *The American Economic Review*, 94, 4, 813-835
41. Senterre, R., E., Neun, S., P. (2012), *Health Economics – Theory, Insights, and Industry Studies*, šesto izdanje, South-Western College Pub, Mason
42. Skitarelić, N., Nežirović, R., Skitarelić, N. (2016), Pregled povijesti zadarskog zdravstva, *Radovi zavoda za povijesne znanosti HAZU u Zadru*, 58, 469-496
43. Turek, S. (1999), Reform of health insurance in Croatia, *Croatian Medical Journal*, 40, 2, 143-151
44. Vončina, L., Rubil, I. (2018), Can people afford to pay for health care? New evidence on financial protection in Croatia, *World Health Organization Regional Office for Europe*, Copenhagen
45. WHO (1999), *Health Care Systems in Transition: Croatia*, European Observatory on Health Care Systems, drugo izdanje
46. WHO (2014), *Basic documents*, forty-eighth edition, World Health Organization, Geneva
47. WHO (2015), *World Health Statistics 2015*, Retrieved 17.5.2020 from [https://www.who.int/gho/publications/world\\_health\\_statistics/2015/en/](https://www.who.int/gho/publications/world_health_statistics/2015/en/)
48. WHO (2018), *World Health Statistics 2018*, Retrieved 17.5.2020 from [https://www.who.int/gho/publications/world\\_health\\_statistics/2018/en/](https://www.who.int/gho/publications/world_health_statistics/2018/en/)
49. van Zile Hyde, H. (1958), A Tribute to Andrija Štampar, M. D., 1888-1958, *American Journal of Public Health*, 48, 12, 1578-1582
50. Zrinščak, S. (2008), *Zdravstvena politika*, u Puljiz et al: *Socijalna politika Hrvatske*, ur. Puljiz, V., Pravni fakultet Sveučilišta u Zagrebu, Zagreb



## **BUSINESS LESSONS FROM AN EARLY ENTREPRENEUR: THE CASE OF DOÑA GRACIA NASI**

**Eduardo Manuel de Almeida Leite**

*CiTUR; ESTG, University of Madeira, Funchal, Portugal  
eduardo.leite@staff.uma.pt*

**Humberto Nuno Rito Ribeiro**

*GOVCOPP; ESTGA, University of Aveiro, Portugal  
hnr@ua.pt*

**Sandra Raquel Alves**

*CEOS.PP; ESTG, Polytechnic Institute of Leiria, Portugal  
raquel.alves@ipleiria.pt*

**Joanna Kurowska-Pysz**

*WSB University, Dąbrowa Górnicza, Poland  
jkurowska@wsb.edu.pl*

**Amelia Ferreira da Silva**

*CEOS.PP; Porto Accounting and Business School, Porto Polytechnic, Portugal  
acfs@iscap.ipp.pt*

### **ABSTRACT**

*The sixteenth century was a fertile period in the economic field, with the transition from feudalism to mercantilism, the widening of business geography, the West meeting the East by sea (Cape Route), ships, maritime instruments and cartography were high-technology, as well as great political and social uncertainties – kingdoms in permanent conflict, changing borders, persecutions, and migrations. Within this context, the life of Doña Gracia Nasi reveals a history of leadership and commitment to business and noteworthy “values”. This paper suggests that businesses represent more than numbers and points that the most relevant business facts are not available for review in accounting and financial documents, as they occur behind the scenes. All of this presents companies as an institution vulnerable to social rules. Being of a cross-disciplinary nature, the research assumes that personal relationships and personal situations often influence business relationships. Using a holistic approach, comprehending different set of theories, including contingency theory, functionalism, and relationship theory, this paper examines the contributions of the case of Doña Gracia to business knowledge. The research results highlight the fact that financial, managing and social dominance can be easily overruled by gender, religion and trade disputes, in particular in times of uncertainty, being the life of Doña Gracia a fine example of such and reminding everyone today about the dangers of any form of political, social or economic extremism.*

**Keywords:** *Business, Doña Gracia Nasi, Entrepreneurship, Businesswoman, Gender*

### **1. INTRODUCTION**

The sixteenth century could have been the Portugal golden age, had Portugal been able to break free from the feudal system of land tenure and the mannered intellectual tradition of scholasticism. In fact, according to Irvin (2008), Portugal had a unique chance to participate fully in the capitalist economic development of the world. However, unfortunately, Portugal's ability to do that was limited by their socio-political and intellectual milieu and, of course, by the constraints of geography, culture and international politics.

The life and business of Doña Gracia Nasi could illustrate this from a holistic way. This paper looks at the life of Doña Gracia Nasi from the lens of contingency theory. It localized and interpreted her business decisions under the context of her personal relationships, historic, social and political circumstances and highlight the business lessons that we can bring to contemporary world. The economies of developed countries support the idea that more entrepreneurship leads to higher levels of economic growth and innovation. Thus, in these countries, it is incredibly common to find educational programs for entrepreneurship. Therefore, such education is promoted and implemented into school curricula in many of the European member countries (Oosterbeek, Praag and Ijsselstein, 2010; Welsh, Tullar, & Nemat, 2016). Very often, these programs aim to encourage women's economic participation to boost gender equality. The objective of the program is to inspire women to gain self-confidence and motivation, become proactive, creative and create supportive systems for women owned businesses. The very deep assumption under the dissemination of these kind of policies and programs is that "the underutilization of women's economic potential is a global challenge, spanning countries at various stages of development, and gains can be made across the board" (World Bank, 2018). Indeed, according to Bart and McQueen (2013), "historically, *gender equality* has been the focus of most arguments for increasing the representation of females in the boardroom which in and of itself is a strong argument for higher numbers of women on corporate boards". The history of Doña Gracia Nasi can be understood as a case study of entrepreneurship on business. This paper starts with a brief presentation of Doña Gracia's life and business. The next section introduces the theoretical framework and justifies the methodological approach. It follows the historical interpretation and sociological analysis of her case, before the final remarks and conclusions.

## 2. DOÑA GRACIA'S LIFE AND BUSINESS

It is documented that Doña Gracia was born in 1510 in Lisbon within a high-class Spanish immigrant family, being registered as Beatrice de Luna. Her brother may have been "Dr. Agostinho Miquez, the royal physician and professor of medicine at the University of Lisbon" (Birnbbaum, 2003, p. 2). Her parents, who may have immigrated to Portugal from Aragon, were Alvaro and Phillipina de Luna (Salomon & Leoni, 1998). The fact that she was born into an upper-class family permitted her to explore the resources and prestige needed to be part of the high ranks of Portuguese society, a society that was highly stratified by its economic structure. Doña Gracia was not a unique case in Europe as a wealthy woman in business leadership. Interestingly, historians report that women were highly active in the business world of post-Medieval Europe (vid. e.g. Andrée Aelion Brooks, 2002). Table 1 provides a snapshot overview of her vast range of businesses, the family conflicts that plagued her businesses and the ever-present role of government in business regulations.

*Table following on the next page*

*Table 1: Doña Gracia's Businesses*

Type of Business	Years in Operation	Place(s) of operation	Business Conflicts	Stated reason for conflict
Merchant Banker and International trade/bills of exchange	1504-1521	Lisbon and Europe	Conflicts with João III	Crowns need for money
Banking Spice trade, import and export markets	Until 1537	Lisbon	Fear of losing money	Issue of Husband's will
	1537-1545	Antwerp	Self-exile from Lisbon	Relations with brother-in-law and English monarchs
	1543	Antwerp	Taking control of Diogo's assets and making her one of the richest women in Europe	Right of family control, hostile takeover of assets
	1546-1552	Italy	Recuperation of loans.	Attempted hostile takeover by sister
Export and customs duties	1553-1569	Turkey	Relationships with the Sultan	Family issues leading to business battles

*Source: Leite (2013)*

The data on Table 1 shows that Doña Gracia consistently sought both new business opportunities and places in which the government would interfere in both her business and private life to the least extent (for more information vid. Leite, 2013; Leite, 2020a; Leite, 2020b). A survey of historical records shows that despite her great business judgment, Beatrice de Luna is rarely mentioned. Just as Portuguese textbooks tend to gloss over the Inquisition, so too do Portuguese textbooks simply tend to ignore her existence, and a search of the business libraries and databases also confirms this “having fallen off the pages of history”. The reasons for this historical silence may be many and it is beyond the scope of this paper to enter into historical speculation.

### 3. THEORETICAL AND METHODOLOGICAL FRAMEWORK

This paper is of a cross-disciplinary nature, and thus it is assumed that personal relationships and personal situations often influence business relationships. Without a proper understanding of Doña Gracia's place within her macro and micro historical contexts, it becomes impossible to understand her business dealings. Only recently have historians rediscovered the life of Beatrice de Luna (Doña Gracia Nasi). Her life was contextualised in the present work through a couple of major biographical works: Andrée Aelion Brooks's (2002) book, *The Woman who Defied Kings*, and Cecile Roth's (1960) work, titled *Doña Gracia of The House of Nasi, a Jewish Renaissance Woman*. Unfortunately, since many of the original documents dealing with the Inquisition's role in Portuguese business have either been lost, the interrelationship studied here between Portuguese economic policy and the Inquisition is based on documents of a theoretical nature. Cohen (1992), in *The Sephardic phenomenon: a reappraisal*, surmises that the reasons for these historical anomalies, many of which occurred in Doña Gracia's life, were due to the fact that the Inquisition's main purpose was the removal of the Portuguese entrepreneurial class. For these reasons, this paper examines the contributions of the case of Doña Gracia to business knowledge. To understand this research topic, we consider Janak (2010) by stating that it may be useful to remember James Garraty's three-tiered typology of biographical subjects, sorted by the writer's over-all view of the importance of individual intelligence and character in determining the course of events. First were subjects who are significant only because of the times in which they lived; second were subjects who were forceful individuals that changed the trend of events; and third were subjects who were not

controlled by themselves or their times but rather an outside force, such as luck, chance or destiny. On the micro level, following Garraty's typology, the challenge then is to determine if Doña Gracia is nothing more than a daughter of her times, if she changed the course of business history or if she was merely lucky or unlucky in her business dealings. Garraty may have oversimplified Doña Gracia's life-paradigm in that in reviewing her life, we note that she both influenced her environment and was a product of that environment. On a macro level, it is important to understand Doña Gracia's life as an ideological symbol and how ideological control through the Portuguese Inquisition became an important tool in setting the tone of Portuguese financial history for centuries to come. To interpret Doña Gracia, their social context and better understand her business decisions, we resort to some concepts from the classical sociological and psychological theorists, such as: Max Weber (1930; 2005), Talcott Parsons (1960) (functionalism), Martin Buber (1958) (relationship theory) and Kübler Ross (1969).

#### 4. INTERPRETATION AND SOCIOLOGICAL ANALYSIS

We begin our analysis by examining Doña Gracia from the perspective of the Weberian symbolic interaction. A specific part of Doña Gracia's life can be seen as a representation of Portugal in its economic transition. Born after the forced conversions of 1497, she spent her life in a world in which she was neither a Jew nor a Christian. As such, and from the perspective of macroeconomics, she was a major player in a nation that was in economic flux. Portugal was no longer an open and tolerant country and soon would become a close-minded society in which capitalism could no longer flourish. From this perspective, her life represents a symbol of changing commercial and financial activities, a nation on the road from entrepreneurial discovery to a pastoral society that would look inward rather than outward and soon would cease to be a major player on the world stage. Her final flight from Portugal may be seen as representation of the end of Portugal's age of openness, as well as the beginning of the kingdom's decline. Talcott Parsons introduced the theory of functionalism, which means that, in this perspective, social systems are connected and interactive with everything. Thus, a simple change in any letter, such as 'a', would impact not only the next letter, in this case 'b', but also the whole alphabet. Doña Gracia financial history indicated that, in the sixteenth century, Portuguese religious intolerance and other systemic decisions had an impact in the country. Hence, the entrepreneurial spirit was no longer welcome and, in our view, the abandonment of the country by Doña Gracia represents the flight of business from Portugal. Martin Buber's theory of the *I-Thou/I-It* represents perhaps a key idea found in this paper. The key is that businesses are based on more than pure numbers, that often the evaluation a business must also include a number of qualitative variables, such as loyalty, commitment to the business and the relationship, not only between individuals but also to the business itself. In fact, Buber's me and you represent more than metaphysics or systematic theology. It represents a reflection on human existence, based on the *I-Thou/I-It*. According to Buber, there is no affirmation of the "I" without the other, be it that. That is, when the man says "I", in fact, it means the relationship with "you" or the contemplation with "That", respectively: i) the world as a relationship (recognition), *I-Thou*; the world as experience (contemplation), *I-It*. Thus, from Buber's perspective, businesses and companies are more than just numbers. So, the entrepreneur's willingness to sacrifice for the sake of business may be proportional to the level of commitment to the company success. In the same way, due to Doña Gracia love for her daughter Reyna, she may have made several irrational business choices based on the mother-daughter relationship. Therefore, this acts in direct opposition to the belief that business executives make solely rational choices based on hard facts. We finish the business trajectory analysis with a study of its three most powerful authoritarian players in the sixteenth century context: the king, the nobility and the Church. Together they form each of these three nation's systems.

According to Weber (1930), and from the system's perspective, sixteenth century Portugal highlights the centralised power of the king. From a symbolic and interactive perspective, we know that the king dominated everything according to his desires, even a rich person like Doña Gracia. thus, the example of the persecution of Dona Gracia, and her business interests, may have served a threefold purpose: (i) a message to other wealthy people, men or women, that no matter how much money they have, who ruled was the King in unification of the Church; (ii) the ability to indicate to the Crypto-Jewish community that they were clearly under his power; (iii) an indication that the entrepreneurial spirit within Portuguese society may have come to its conclusion. It is also a clear sign of who actually holds power. The king clearly indicates that small institutions could not go too far astray from the desires of the large institution. If we interpret this from the perspective of modern businesses, we may note that the strong will tolerate competition from the weak only to a certain point, after which the strongest may attack unexpectedly and decimate the weak. If we combine Martin Buber's relationship theory with Talcott Parsons' ideas about functionalism, we can also deduce about the trilogy on which the government of Portugal in the sixteenth century (king, nobility and Church) was based. Thus, they formed a strategic alliance to govern and, eventually, made decisions that seemed irrational from the point of view of economic development and the future of the country. However, on closer inspection, we can conclude that they went in the direction of social control and with a strategy of maintaining status and power. In other words, from an outside perspective, the decision of the ruling class appears to be irrational, but within this context, this decision becomes rational, following the Parsonian theory, and produced social vibrations throughout the entire socio-political system. Moreover, Catholicism, which acted as an "ideology" in the conflict between the system and Doña Gracia, was the guideline for the future, permitting no other religious options. In this context, it is also interesting to establish a parallel between the theories of Thomas Kuhn (1962) and the ideas expressed by the psychologist Elisabeth Kübler-Ross (1969). Kübler-Ross (1969) is not an economic or political analyst; she is a psychologist whose work addresses the behaviours and attitudes of patients toward death. Nevertheless, her work has much to teach us about why there is so much resistance to shifts in paradigm or ideology. In 1969, Kübler-Ross published her famous book *On Death and Dying*, where she builds the hypothesis that humans go through five distinct psychological stages before death, which are: denial, anger, bargaining (or magical thinking), depression and, finally, acceptance. Comparing Kübler-Ross (1969) with the hostile disputes that occurred towards Doña Gracia, it seems she had the same attitude towards the to the latent threats to its businesses and to the dangers that she personally ran. She refused to admit that her business would come to an end in Portugal. Initially, these hostilities were denied and not tied to a larger and more complex ideological problem. It is true that her social position, as a result of her wealth and financial power, allowed her to have a different status from other humble New Christians, but only as long as she did what the authorities demanded of her, such religious practice, loans or even different types of corruption. However, as we know from the study of the needs of the system, neither the public Christian practice, nor loans or bribes that Doña Gracia did, met all the system desires. In this line, it was necessary to bargain, both with King John III, making preferential trade agreements, and with important people in the Venetian Senate. Trading options were sold out. One may conclude that Doña Gracia entered a phase of awareness of the dangers towards her business, finally accepting these dangers and then running away from Portugal to Antwerp. Until she understood the need for paradigmatic socioeconomic change, Doña Gracia put at risk not only the House of Mendes but also her own life. In the same line of reasoning of Kübler-Ross (1969), but in different contexts, Jack Welsh (2005), former CEO and chairman of General Electric, wrote an opinion article in *The Wall Street Journal*, in September 2005, entitled "The Five Stages of Management Crisis". The context of the article was the aftermath of Hurricane Katrina and the devastation left behind in New Orleans.

In his opinion, the management of this calamity occurred in five stages: denial, restraint, shame, “Blood on the Floor” and the problem remains. Although the context is not directly related to business, the truth is that Jack Welch’s analysis can also help us to understand the phenomenon of management, learning why companies are resistant to paradigmatic or ideological shifts. For a better understanding, we have expanded the five stages of Welch about the Katrina disaster to eight, allowing us to better analyse business and management in Portugal and understanding the reasons of their failure. Synthesizing, these stages are: denial, decrease, disorganisation, assembling resources, adaptation or inadequacy, shame, sacrifice and conclusion. Analysing the business disputes where Doña Gracia was the target, according to these stages, we then have:

- **Denial:** it may have been related to the fact that the House of Mendes was a kind of company that we might call today “too-big-to-fail”. As the largest Portuguese financial company at the time and one of the largest in Europe, it had no competition amongst other companies, so there was no reason to be alarmed.
- **Decrease:** the phase where the company begins to believe that there may be, in fact, a problem, not directly related to business and competition between companies, but a problem that initially can be solved. The leaders may have assumed that they could handle this “minor” problem with nothing more than a loan or bribe to the ruling authorities. During this phase, the company’s management had to act in a more discrete manner.
- **Disorganisation:** a phase in which the company is faced with the reality and complexity of the problem and is beginning to get a sense of its own power and purpose, despite other rival companies. This fact became clearer after the death of Francisco Mendes, when it was suggested that Doña Gracia should arrange a marriage for her daughter Reyna with someone from the Old Christian class.
- **Assembling resources:** once Doña Gracia was aware of the problem, she tried to mobilise all the resources to be able to find solutions. By claiming business in Brussels, she prepared a response to King João III’s response. Her brother-in-law, chairman of the (northern) European subsidiary of the House of Mendes based in Antwerp, proved to be her greatest ally.
- **Adaptation or Inadequacy:** it can be concluded that Doña Gracia was able to gather the resources that allowed her to fight back, either against the king or the Inquisition, since the House of Mendes continued its business in Antwerp. She also managed to avoid the marriage of her daughter with an Old Christian, a fact that led to two consequences: this meant that she would maintain control of the business and the hope to marry her daughter within the principles of Judaism. Moreover, the Inquisition was also avoided, thereby avoiding the worst scenario for a New Christian - a public conviction for heresy.
- **Shame:** Doña Gracia felt no shame; not from the actions of the king or even from the Inquisition.
- **Sacrifice:** finally, there was also no sacrifice for Doña Gracia, since she had succeeded in continuing her activities in her new base in Belgium. Doña Gracia was able to avoid the marriage of her daughter, for business purposes, and therefore hold on and control the House of Mendes.
- **Conclusion:** the system controlled the people but lost the entrepreneurial spirit and the ability to gain money through the economy.

## 5. CONCLUSIONS

We can conclude that Doña Gracia represents the exclusion of new Christians, or the Church's authoritarian operation in Portuguese society. This partly explains the reason for Portugal's resistance to breaking with its feudal and static socio-economic system, moving definitively towards the capitalist and emerging world with liberalism.

Then, all the difficulties of Dona Gracia represent the tension between cultures and misaligned strategic options, leading to the conflict and abandonment of Portugal of the entrepreneurial spirit and business evident in the figure of Doña Gracia. According to Weber (1930), values are defined within a social context, analysing what may be acceptable and what may not be acceptable depending on the social context. This is what the socio-cultural Catholic Portuguese of the sixteenth century did not recognise; more precisely, the fact that Doña Gracia was a businesswoman. Instead, they tried to convince her to marry her daughter to an Old Christian. In the Crypto-Jewish context, in which Doña Gracia lived, as well as in the rest of Protestant Europe, this was not the case. From a Weberian viewpoint, we can interpret Doña Gracia's fleeing from Portugal as a "failure" of the Portuguese system. This failure resulted in not only Doña Gracia's flight but also in the departure of the business, men's or women's, particularly new Christians/Jews due to the Portugal macro-economic choices. As one could understand from the most relevant business facts in the history of Doña Gracia, a review in the scope of an accounting and financial analysis is neither available nor relevant, because the most important events occurred behind the scenes. Furthermore, more critical than business or financial skills were other characteristics, such as gender or religion. In fact, the managing skills of Doña Gracia were mostly downplayed, resulting in additional problems and even resulting in trade disputes, underlying the fact that being a successful businesswoman was not enough to be recognised by society and to thrive overall in life. We can always learn from history, and, in the specific case of Doña Gracia, we can recognise that businesses have a significant importance for the economy of countries, contributing decisively to its growth or, conversely, to its impoverishment. The life of an entrepreneur can be very challenging, but there is nothing romantic about it. In fact, an entrepreneur takes a lot of risks. Its activity requires a great commitment, a spirit of sacrifice and a higher work capacity and technical knowledge. Through the case of Doña Gracia we examined that the entrepreneurial business activity is particularly more demanding for the female gender, together with the handicapping role of culture and religion.

**ACKNOWLEDGEMENT:** *This work was financially supported by the research unit on Governance, Competitiveness and Public Policy (UIDB/04058/2020) + (UIDP/04058/2020), funded by national funds through FCT - Fundação para a Ciência e a Tecnologia*



## LITERATURE:

1. Bart, C., & McQueen, G. (2013). Why women make better directors. *International Journal of Business Governance and Ethics*, 8(1), 93-99.
2. Birnbaum, M. (2003). *The Long Journey of Gracia Mendes*. Budapest, Hungary: Central European University Press.
3. Brooks, A. A. (2002). *The Woman Who Defied Kings: The Life and Times of Doña Gracia Nasi*. Minnesota, Paragon House.
4. Buber, M. (1958). *I and Thou*. New York: Charles Scribner's & Sons Ltd. (Original work published in 1923).
5. Cohen, M. A. (1992). *The Sephardic phenomenon: a reappraisal*. *American Jewish Archives*, 44(1), 1-79.

6. Irvin, J. (2008). Paradigm and Praxis: Seventeenth-Century Mercantilism and the Age of Liberalism. (Electronic Thesis or Dissertation). Retrieved from <https://etd.ohiolink.edu/>
7. Janak, E. (2010). *Adventitiously blind, advantageously political: John Eldred Swearingen and social definitions of disability in progressive-era South Carolina*. *Vitae Scholasticae*, 27(1), 4–25.
8. Kuhn, T. S. (1962). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
9. Leite, E. (2013). An academic contribution toward qualitative evaluations of surprise business takeover attack: an historical perspective. Ph.D. Thesis, UTAD, Vila Real, Portugal.
10. Leite, E.; Ribeiro, H.; Alves, S.; Silva, A.; Leite, A. (2020a), The Power of Elite on Business: A Case from the Early Mercantilism Period, *Economic and Social Development Book of Proceedings, 63th International Scientific Conference, Zagreb, Croatia*, 120-132.
11. Leite, E.; Ribeiro, H.; Alves, S.; Silva, A.; Pereira, J. (2020b), An Alternative Q-Theory for the Examination of the Hostile Takeovers Phenomenon, *Economic and Social Development Book of Proceedings, 63th International Scientific Conference, Zagreb, Croatia*, 302-314.
12. Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2010). The impact of entrepreneurship education on entrepreneurship skills and motivation. *European economic review*, 54(3), 442-454.
13. Parsons, T. (1960). *Estrutura e Processo nas Sociedades Modernas*. Harvard University.
14. Ross, K. (1969). *On Death and Dying*. Touchstone Rockefeller Center, New York.
15. Roth, C. R. (1960). *A History of the Marranos*. Philadelphia: Jewish Publication Society.
16. Salomon, H. P.; Leoni, A. (1998). *Mendes, Benveniste, De Luna, Micas, Nasci: The state of the Art*. *The Jewish Quarterly Review*, Vol. 88, No. 3/4, Jan. - Apr., 1998.
17. Weber, M. (1930). *The Protestant Ethic and the Spirit of Capitalism*, Unwin Hyman, London & Boston.
18. Weber, M. (2005). *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons, Taylor & Francis e-Library.
19. Welch, J. (2005). The Five Stages of Management Crisis. *The Wall Street Journal*, 14 September.
20. Welsh, D. H., Tullar, W. L., & Nemati, H. (2016). Entrepreneurship education: Process, method, or both? *Journal of Innovation & Knowledge*, 1(3), 125-132.
21. World Bank, (2018). An operational guide to women's entrepreneurship programs in the World Bank. Finance, Competitiveness, and Innovation Global Practice. World Bank Group



## STRATEGIC OF MODELS OF POST-INDUSTRIAL DEVELOPMENT OF INDUSTRIAL ENTERPRISES IN TERMS OF THE CONCEPT OF NATIONAL SECURITY

**Venelin Terziev**

*Georgi Rakovski Military Academy, Sofia, Bulgaria  
University of Rousse, Rousse, Bulgaria  
Kaneff University Hospital, Rousse, Bulgaria  
vkterziev@gmail.com*

**Vladimir Klimuk**

*Baranavichy State University, Republic of Belarus  
klimuk-vv@yandex.ru*

### ABSTRACT

*This study proves the necessity of shifting an economy away from development that focuses on raw materials and of policies for import substitution. The typology of strategies for import substitution is suggested. Factors influencing the effectiveness of the strategy of import substitution are revealed. A mechanism for controlling the efficiency of the import substitution strategy is proposed. To assess the level of development of foreign economic cooperation, a system of analytical indicators is proposed. Based on the assessment of the level of foreign economic activity (based on traditional and introduced indicators), the comparative, potential advantages of Russia are revealed. The import grid of the profitability of trade partners is proposed based on the testing of data on the countries of the Eurasian Economic Union. The differentiation of trade partners on the profitability of participation in foreign economic cooperation was carried out. Econometric models for studying the dynamics of Russia's foreign trade turnover have been developed with the aim of forecasting its level and the possibility of promptly adjusting the country's economic development strategy.*

**Keywords:** *Import substitution, Development strategy, Foreign economic cooperation, Vector of economic security, Econometric model*

### 1. INTRODUCTION

The raw material model of a country's economic development must give way to a more efficient one, based on the rationalization of the resources used, the stimulation of labor, the preservation of strategic types of raw materials, co-production operations, and the synergy of capital. This model reflects the non-raw trajectory of a country's development (Mariev, Naberezhneva, Tatarkin, 2014).

### 2. STRATEGIC MODELS OF POST-INDUSTRIAL DEVELOPMENT OF INDUSTRIAL ENTERPRISES

The linkage of production to the huge, but still depleted, reserves of raw materials in a country leads to a stagnation in the economy, a systemic collapse due to the conditional consistency of the organizational, technical, and economic forms of functioning that are being implemented. Unlimited access to raw materials in a country leads manufacturers to the plume of inert existence, leading to the following problems (Guskova, Salimova, Gorin, 2016):

- An irrational use of raw material resources, increase in prices for final products;
- A decrease in labor productivity due to a weak system of motivation;
- A decrease in the proportion of innovative products in total production;
- An increase in the difference in volumes of exports and imports;

- The unwillingness to radical changes in the sphere of organizational and technical reforms for failures in the supply of raw materials;
- The danger of increasing the level of environmental harm, which acts as one of the barriers to accessing foreign markets.

The solution to the identified problems will give way to an effective strategy for the development of a country's industrial complexes. An objective assessment of reality requires a new approach to the use of available resources. One of the mechanisms for implementing this approach is import substitution, the purpose of which is determined by the increased competitiveness of domestic products. The efficiency of the import substitution vector is formed by the quality of strategy development for its implementation, aimed at creating organizational, economic, production, environmental, institutional conditions for increasing the competitiveness of domestic products (Matveeva, Chernova, Klimuk, 2015; Chernova, Klimuk, 2016a). Depending on the goals, levels, and opportunities of the policy in the direction of import substitution, the following typology of strategies is proposed (Figure 1).

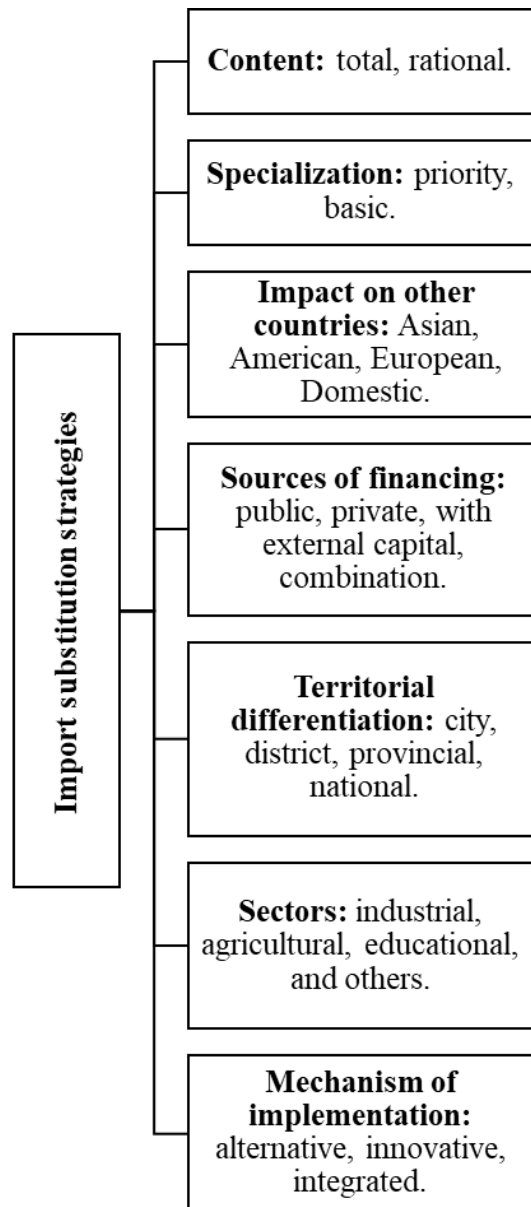
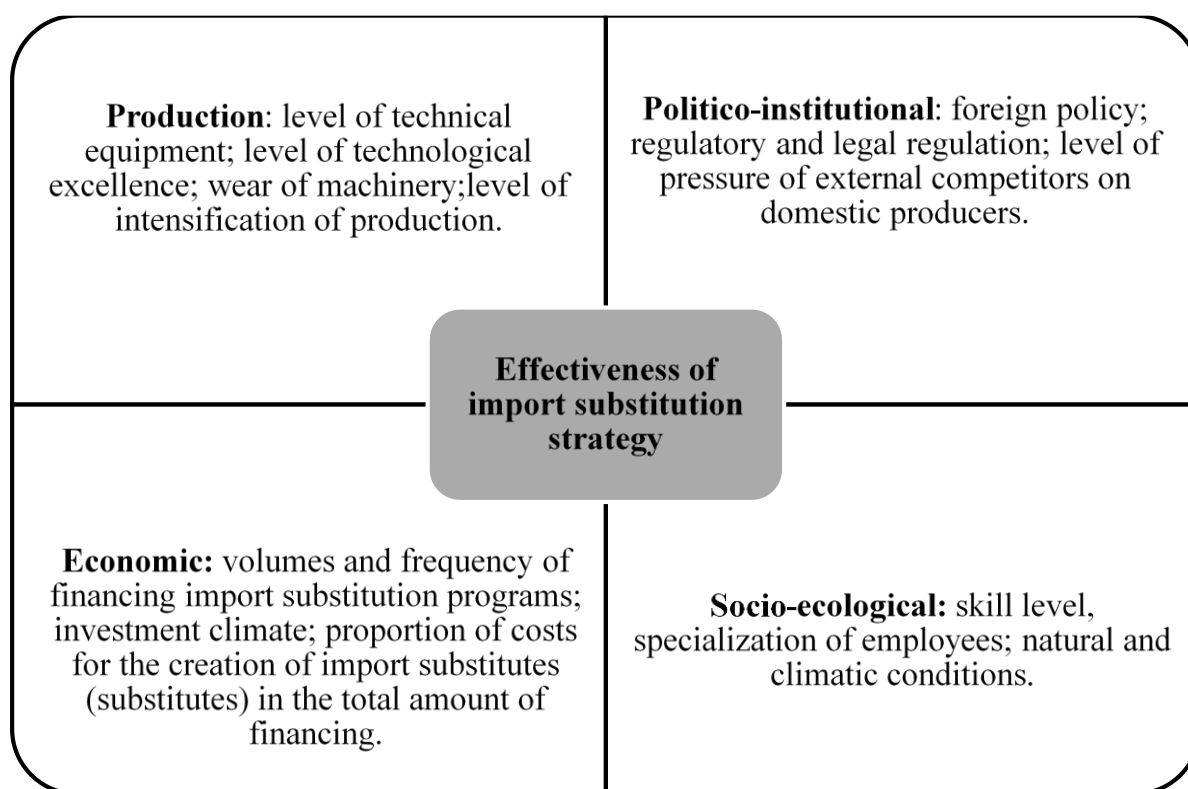


Figure 1: Typology of the import substitution strategy

Based on the identified priorities and the development opportunities of the country (region), the appropriate import substitution strategy is selected:

- In terms of the mechanism of implementation:
  - Alternative - a complete rejection of the product produced earlier with imported raw materials, and production at the enterprise is completely new;
  - Innovative - based on the creation of new component-substitutes by domestic producers;
  - Integrated - the unification (vertical, horizontal) of enterprises to achieve a synergistic effect.
- In terms of content:
  - Total - all components of the product must be replaced;
  - Rational - selective replacement of imported components, with regard to price and quality.
- In terms of specialization:
  - Priority - replacement refers only to groups of prospective products;
  - Basic - replacement of all imported goods by domestic ones.
- In terms of sectors: industrial, agricultural, educational and other strategies;
- In terms of territorial differentiation: city, district, provincial, national;
- In terms of sources of financing: public, private, with external capital, combination;
- In terms of the country's impact on others: Asian, American, European, domestic.

The effectiveness of the strategy of import substitution can be determined on the basis of factorial influence, allowing for the optimal allocation of resources for the implementation of priority areas of industrial development (Figure 2).



*Figure 2: Factors influencing the effectiveness of import substitution strategy*

In order to achieve the effectiveness of the strategy of import substitution, a mechanism for managing the strategy for its implementation is proposed in the country (Figure 3).

The interaction of each component of the mechanism will provide opportunities for integrating rational methods of import substitution, increasing the competitiveness of domestic products.

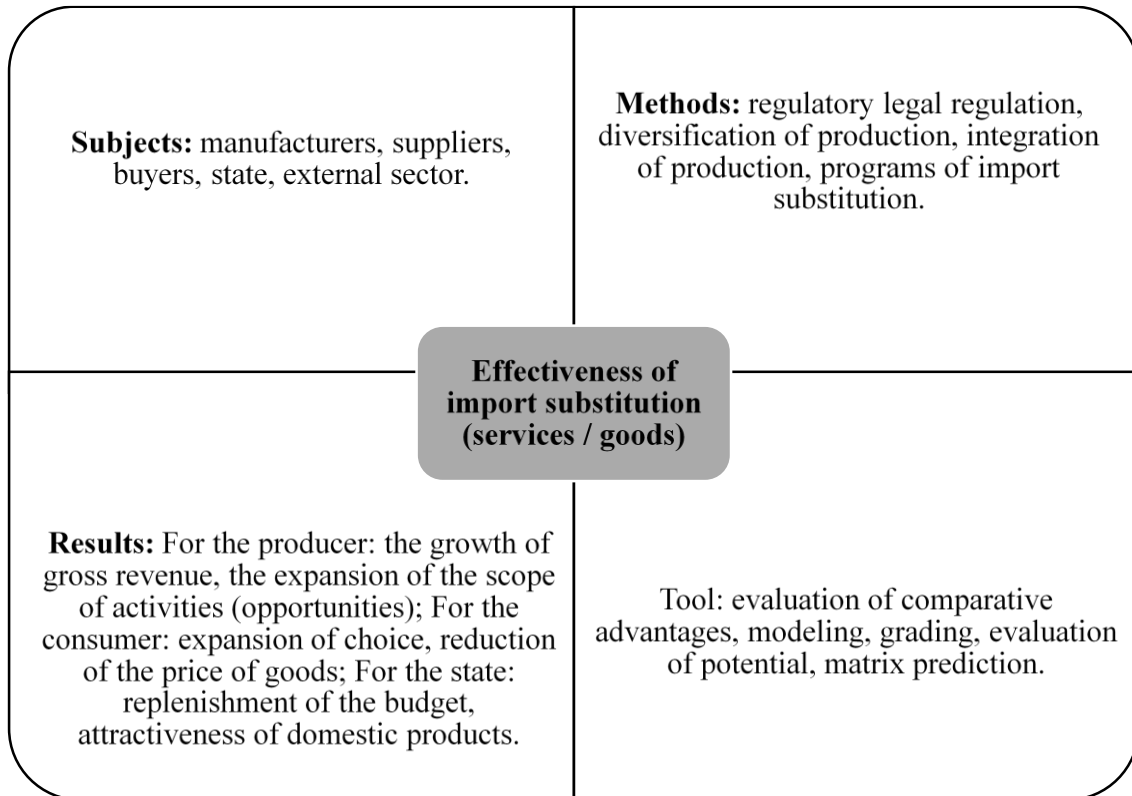


Figure 3: Mechanism for controlling the efficiency of the import substitution strategy

In order to identify the level of development of foreign economic cooperation, the logistics load, and the level of integration in the globalization economic process, additional indicators are proposed:

- *The index of commodity import-dependence (ID)* - is used to compare and assess the superiority of imports relative to exports for a selected group of goods in order to determine its competitiveness, which indicates prospects for the country's economy:

$$ID = \frac{IM_j^i}{IM_{total}} \div \frac{EX_j^i}{EX_{total}}, \quad (5)$$

$IM_j^i$ ,  $IM_{total}$  – the volume of imports of goods  $i$  into country  $j$ , the total amount of imports to the country;

$EX_j^i$ ,  $EX_{total}$  – the volume of exports of goods  $i$  from country  $j$ , the total amount of exports from the country.

If  $ID > 1$ , then this indicates the status of the country's (region's) import dependence of the investigated group of goods.

If  $ID = 1$  - an equilibrium foreign economic policy.

If  $ID < 1$  - the state of export-oriented development strategy of the country for a selected group of goods.

- *The index of globalization of the country (IG)* - characterizes the level of the country's integration into the globalization economic process:

$$IG = \frac{IM_i}{IM_{global}} \div \frac{EX_i}{EX_{global}}, \quad (6)$$

$IM_{i, global}$  – the volume of imports into country  $i$ , the global volume of imports, respectively;

$EX_{i, global}$  – the volume of exports from country  $i$ , global exports, respectively.

If  $IG > 1$ , then this indicates the unilateral nature of globalization - import dependence (passive globalization).

If  $IG = 1$  - the country conducts a moderate bilateral foreign economic policy.

If  $IG < 1$  – the country is characterized by an active vector of globalization (export-oriented policy).

*Foreign trade balance at 1 km. (FTkm)* - characterizes the level of logistical superiority of the country relative to trading partners:

$$VTkm = \sum \frac{E-I}{D}, \quad (7)$$

$D_{ij}$  – the distance from country  $i$  to the trading partner - country  $j$ ;

$I_{ij}$  – the volume of imports into country  $i$  from country  $j$  - trading partner;

$E_{ij}$  – the volume of export of country  $i$  to country  $j$  - the trading partner.

The maximization of this indicator characterizes the efficiency of the logistics chain and determines the most advantageous option out of the alternatives when developing a map of imports of an individual product. Calculations show that the comparative advantages of Russia in foreign trade are shown only in its production of goods from chemical industries (from 2011), and that potential advantages were the country's oil and metal cutting machines (in 2013), but in recent years, these benefits have been lost. Potential advantages are characteristic for meat and milk products, which can be explained by the implementation of the policy of import substitution. The country is characterized not by an import-dependent policy, but by a course of rational import substitution. If looking at the flow of goods between Russia and Belarus, a high level was observed throughout the time period under study. According to the proposed indicators, the following conclusions can be drawn: the country's import dependence is characteristic for the chemical industries, metals and products produced by them, and especially, machines and equipment (which confirms the low activity and competitiveness of manufacturers of engineering products). The country is generally characterized by its export-oriented policy, which is due to the implementation of the import substitution policy as an objective necessity and a real variant of anti-crisis development. In the countries of the Eurasian Economic Community, Russia is strengthening foreign economic relations, which is confirmed by the growth of the foreign trade balance, per 1 km. of the path that is covered, determining the benefits of choosing a trading partner (Klimuk, Tarasova, 2019).

The achievement of the effect of progressive foreign economic dynamics for a country is determined by a number of factors differentiated by the following groups that affect the growth of export potential and the reduction of import dependence (Klimuk, Lazdins, 2019a; Klimuk, et al. 2018):

- Production:
  - proportion of innovative products in total production;
  - labor productivity;
  - proportion of scientific personnel in the total number of employees;
  - rate of change in the material consumption.
- Economic:
  - dynamics of the average interest rate on loans to organizations;
  - rate of change in the volume of investments in fixed assets;
  - proportion of costs for technological innovation in the total amount of costs;
  - price indices for exported and imported goods.
- Geopolitical:
  - proportion of sanctioned goods in total exports and imports);
  - distance of transportation;
  - natural and climatic conditions.

The presented groups of factors have an exogenous and endogenous influence on the efficiency of foreign economic activity, serving as a platform for the formation of a competitive model of the functioning of the country. The quantitative expression of alternative development models should logically be represented by instruments of econometric modeling, in particular - by means of correlation-regression analysis (Table 1).

Model	Function type		R-square	F	Equation	
VTkmbyRCA, T, ID	Linear		1,00	65535	$VTkm = 5,058581 - 1,54707 \cdot RCA - 0,22084 \cdot T + 0,20265 \cdot ID$	
Calculation results:	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015	Sum of the squares of the difference
-actual	4,8	3,72	3,22	3,16	3,21	1,397
-stimulated	3,62	3,72	3,22	3,16	3,21	

*Table 1: Econometric models of the study of the dynamics of foreign trade turnover (WTO) of Russia in the system of impact factors*

### 3. CONCLUSION

The correspondence of the constructed linear model characterizes the expediency of its application as a basis for the development of a country's economic development strategy. The constructed model is used as a means of forecasting the level of a country's foreign economic development on the basis of a group of factors of influence and is used for operational regulation, making optimal decisions regarding the foreign economic policy pursued, and achieving the national security objectives of the state (Terziev, Georgiev, 2020; Terziev, 2020a-b; Terziev, 2019b). Thus, the proposed evaluation and analytical toolkit for the study of foreign economic development of the country, including the system of indicators, import map, and econometric factor model, is characterized by novelty - in terms of assessing the quantitative level of import dependence, export potential, the optimal choice of trade partners, the operational regulation of foreign economic activities, forecasting the development vector - and can be used by the management of enterprises involved in foreign economic relations, for the development of an economic development strategy, and by authorities to create conditions for national security of the state.

**LITERATURE:**

1. Mariev, O.S., Naberezhneva, E.P. Tatarkin, A.I. (2014). *The main directions of optimization of the sectoral structure of Russia's foreign trade on the basis of an assessment of comparative advantages.* // Humanities and Social Sciences, №5, 2014, pp. 22-40.
2. Guskova, N.D., Salimova, T.A., Gorin, I.A. (2016). *Analysis of the state of problems of import substitution in the Russian Federation.* // Bulletin of the Samara State Economic University, №2 (136), 2016. pp. 11-17.
3. Matveeva, L.G., Chernova, O.A., Klimuk, V.V. (2015). *Evaluation of the effectiveness of import substitution policies in industry: methodological tools.* // News of the Far Eastern Federal University. Economics and Management, 2015, No. 3 (75). pp. 3-14.
4. Chernova, O.A., Klimuk, V.V. (2016a). *Rational import substitution as an imperative for the implementation of a new model for the development of the Russian economy.* // Bulletin of the Samara State Economic University, No. 5, 2016, pp. 32-37.
5. Klimuk, V., Tarasova, A. (2019). *Digital economy in Belarus and Russia: leading underpins of a new reality.* // Proceedings of the 3rd International Conference on Social, Economic, and Academic Leadership (ICSEAL 2019), pp. 421-427.
6. Klimuk, V.V., Lazdins, V. (2019a). *Interaction of education, science and business in terms of digital economy development.* // Proceedings of the 2019 International Conference "Economic science for rural development". Jelgava, LLU ESAF, 9-10 May 2019, pp. 37-48.
7. Klimuk, V.V., Yakovlev, G.I., Izmailov, A.M., Dzabrailova, L.H., Chetyrbok, N.P. (2018). *Evaluation tool of condition of foreign economic relations in Russia and Belarus within import substitution.* // Ubiquitous Computing and the Internet of Things: Prerequisites for the Development of ICT» seriiknig «Studies in Computational Intelligence» izdatel'stva Springer. Mezhdunarodnoy nauchno-prakticheskoy konferentsii-biyennale «Sistemnyy analiz v ekonomike - 2018» (data provedeniya: 21 – 23 noyabrya 2018 g.; mesto provedeniya: g. Moskva, Finansovyy universitet pri Pravitel'stve RF (Klimuk, V.V., Yakovlev, G.I., Izmailov, A.M., Dzabrailova, L.H., Chetyrbok, N.P. Evaluation tool of condition of foreign economic relations in Russia and Belarus within import substitution. // Ubiquitous Computing and the Internet of Things: Prerequisites for the Development of ICT» seriiknig «Studies in Computational Intelligence» izdatel'stva Springer. Международной научно-практической конференции-биеннале «Системный анализ в экономике - 2018» (дата проведения: 21 – 23 ноября 2018 г.; место проведения: г. Москва, Финансовый университет при Правительстве РФ).
8. Terziev, V., Georgiev, M. (2020). *The place of programming in the state's social policy.* // Review of Behavioral Aspect in Organizations and Society, 2(1), 2020, pp. 25-30. <https://doi.org/10.32770/rbaos.vol225-30>.
9. Terziev, V. (2020a). *Social programming in the context of social economy development in Bulgaria.* // 51st International Scientific Conference on Economic and Social Development (Rabat, 26-27 March 2020), Economic and Social Development (Book of Proceedings), 2020, pp. 387-396, ISSN 1849-7535.
10. Terziev, V. (2020b). *Programming as mechanism of managing, oriented towards results.* // Economic and Social Development (Book of Proceedings), 50th International Scientific Conference on Economic and Social Development Development, 13-14 February 2020, Chelyabinsk, 2020, pp. 92-98, ISSN 1849-7535.
11. Terziev, V. (2019b). *The role and place of social programming in public governance.* // Proceedings of SOCIOINT 2019- 6th International Conference on Education, Social Sciences and Humanities 24-26 June 2019- Istanbul, Turkey, International Organization Center of Academic Research, Istanbul, Turkey, 2019, pp. 354-362, ISBN: 978-605-82433-6-1.

## THE CONCEPT OF A DYNAMIC ENTERPRISE IN AN ECONOMIC AND PRAXEOLOGICAL APPROACH

**Ewa Koziene**

Cracow University of Economics,  
Faculty of Economy, Finance and Law,  
Institute of Economics, Department of Organization Development  
ul. Rakowicka 27, 31-510 Cracow, Poland  
koziene@uek.krakow.pl

### ABSTRACT

*Enterprises are one of the basic entities conducting economic activity, and also have a significant impact on the economic development of societies. Over the centuries, companies, under the influence of exogenous and endogenous factors, have been subject to the development process. The development of enterprises is related to changes in their legal form, size, object and scope of activity. The concept of "enterprise" can be explained on the basis of economic, management and legal theories. The term "enterprise" also has legal definitions, especially at the level of national legislation and the European Union legislation. The term "enterprise" can be used in legislation with basically three senses, namely subjective, functional and objective. On the other hand, in the theory of economics, an enterprise is recognized as an economic and social category that is explained on the basis of neoclassical, managerial, behavioral and new institutional economics. The contemporary context of a dynamic enterprise can be considered in the field of dynamic economy, the basis of which is human action, which in fact means change. Rapid and unpredictable external and internal changes force enterprises to undertake actions aimed at achieving success and strengthening their competitive position. The success of an enterprise can be considered on the basis of the theory of human action, which is characterized by purposefulness in both economics and praxeology. The goal of every enterprise is to survive, and above all to develop, hence the actions taken to achieve the goal should be carried out in an efficient and effective manner. The activities of enterprises defined as dynamic can be assessed both in terms of quantitative as well as qualitative criteria. The aim of the article is to identify the external and internal possibilities of the functioning of a dynamic enterprise from the economic and praxeological perspective.*

**Keywords:** Change, Dynamic enterprise, Economy, Praxeology

### 1. INTRODUCTION

Enterprises are one of the basic entities conducting economic activity, and also have a significant impact on the economic development of societies. Over the centuries, enterprises, under the influence of exogenous and endogenous factors, were subject to the development process (Kozień, 1998; Kozień, 2002). The development of enterprises is related to changes in their legal form, size, subject and scope of activity (Kozień, 1999; Kozien, 2017). The very concept of "enterprise" can be explained in terms of economic, management and legal theories. The term "enterprise" also has legal definitions, especially at the level of national legislation and the European Union. The term "enterprise" can be used in legislation with basically three senses, namely subjective, functional and objective. On the other hand, in the theory of economics, an enterprise is recognized as an economic and social category that is explained on the basis of neoclassical, managerial, behavioral and new institutional economics. The contemporary context of a dynamic enterprise can be considered in the field of dynamic economy, the basis of which is human action, which in fact means change. Rapid and unpredictable external and internal changes force enterprises to undertake actions aimed at achieving success and strengthening their competitive position.



The success of an enterprise can be considered on the basis of the theory of human action, which is characterized by purposefulness in both economics and praxeology. The goal of every enterprise is to survive, and above all to develop, hence the actions taken to achieve the goal should be carried out in an efficient and effective manner. Both routine and non-routine activities (projects) of the enterprise are associated with risk (Kozień, Kozień, 2018c; Kozień, 2018d; Kozień, Kozień, 2019; Kozień, 2020). The activities of enterprises defined as dynamic can be assessed both on the basis of quantitative criteria, as well as qualitative. The aim of the article is to identify the external and internal possibilities of the functioning of a dynamic enterprise from the economic and praxeological perspective.

## **2. ENTERPRISE - AN INTERDISCIPLINARY APPROACH**

It is difficult to disagree with E. Lipiński, who stated that the company is one of the greatest inventions of mankind (Życie Warszawy, 1984). In the literature on the subject, the term "enterprise" is defined in many scientific disciplines in the dimensions of history, economy, law, management and praxeology. Referring to history, the enterprise appeared at a specific stage of economic development, but the initial forms did not have the characteristics of an enterprise, but of a farm. Historically, the first manufactories established in England are considered the progenitor of the company. Manufactures, despite the lack of a technical division of labor, low technical equipment of work, as well as arduous working conditions in the process of economic development, initiated the formation of enterprises, which over time became an important organizational and legal innovation. The enterprise is interpreted as a complex system influenced by exogenous factors, i.e. political, economic, legal, social, cultural, technical and endogenous factors related to the enterprise's development potential. In the theory of economics, an enterprise is generally described in terms of profit maximization as well as efficiency and its measures. On the other hand, in financial terms, the enterprise is analyzed in terms of its value, analyzing the basic financial indicators. In law, an enterprise is an entity whose form and structure are defined in a given legal system. However, referring to the provisions of the Treaty on the Functioning of the European Union, it is difficult to indicate a normative definition of the term "enterprise". Only in the jurisprudence of the Court of Justice of the European Union (formerly the European Court of Justice - ECJ) on the basis of an extensive interpretation based on Art. 101 and 102 TFEU<sup>3</sup> stipulates that an enterprise is "any entity engaged in economic activity, regardless of its legal status and the method of financing" (ECJ rulings in cases: C-41/90, C-159 and 160/91, C-244 / 94, C-55/96, C-67/96, C-115-117 / 97, C-219/97, C-180/98 to C184 / 98, C-309/99, C-217/05). The definition of an enterprise formulated in this way is general. In the discipline of management, the management context is described and explained using the example of an organization. One example of organization is the enterprise which is analyzed in the framework of enterprise theory. It should be emphasized that the theory of enterprise is rooted in both economic theory and management theory.

## **3. ENTERPRISE THEORY - AN ECONOMIC AND PRAXEOLOGICAL PERSPECTIVE**

The development of the theory of the enterprise can be considered in the purposeful and temporal dimensions of global changes and trends combining social, economic and natural capital (the concept of sustainable development) (Kozien, Kozien, 2018a; Kozień, Kozień, 2019). In the discipline of economics, the essence of the enterprise is explained by the neoclassical theory, which analyzes the enterprise in the context of market theory, i.e. it treats it as a link between the market of goods and services and the market of production factors, as well as mechanisms of interaction. By focusing on external relations, the neoclassical theory ignores the internal organizational context of the enterprise and thus treats it as the so-called A "black box".

The enterprise itself limits it to the role of a producer with a specific technology. The neoclassical company theory puts emphasis on the analysis of the company's adaptation processes to the requirements of the environment, which is an important element of the dynamic concept of an enterprise. The active form of enterprise behavior under equilibrium conditions is indicated by L. Walras, P.H. Wicksteed and E. Barone, who justify such an approach by the fact of striving to minimize costs at a given level of production determined by demand (Chamberlin, 1993). Since the neoclassical economic theory narrows down the scope of an enterprise analysis only to external factors, the following theories can be used to analyze the development of an enterprise more fully:

- 1) Managerial theory of the enterprise,
- 2) Behavioral theory of the enterprise,
- 3) New institutional economics.

The managerial theory of the enterprise is equated with the so-called a managerial revolution consisting in the separation of ownership from management, as well as the growing importance of large corporations. In the managerial theory, compared to the neoclassical theory, the enterprise is not a "black box" but is seen as an organization with a complex internal structure. Changes in the company's behavior are influenced by the operating strategy, taking into account the current market structure. An important issue raised in managerial theory is the problem of management control (control systems) in the context of separation of capital ownership from its management. The rationality of the company's activities is explained on the basis of neoclassical and managerial theory, using the theory of equilibrium of a company operationalized with a specific form of the enterprise's objective function. Behavioral theory of the enterprise focuses on the analysis of the mechanism of resource allocation within the enterprise, as opposed to the neoclassical and managerial theory, the subject of which is the method of market allocation of resources. The behavioral theory of an enterprise treats an enterprise as a coalition of individuals or groups of individuals. It is people who define the objectives of the enterprise of a subjective - rational nature, which may be the cause of various conflicts. Strong connections between behavioral theory and management theory should be emphasized, especially in the field of explaining organizational behavior, which has an impact on the development of the microeconomic theory of the company in contemporary economic thought. The basic unit of analysis in the new institutional economics is the transaction. Its role results from contractual relations in an economy in which the enterprise is perceived as "bundles" and "heirs" of contracts. Hence, the starting point for analyzes in the new economic theory of the company is the contract. The theory of contracts is a link between the activities of the company and the market, explains the effects of their activities, and creates conditions for the optimization of the institutional order inside the company and in relation to the environment. The cooperation of many economic entities on the market involves the costs of coordinating activities, which are determined by transaction costs, including: costs of gathering information about the market, costs of management and concluding contracts, and costs of control (Boehlke, 2010). In conclusion, the basis of the economic theory of enterprise is human action, but not considered in terms of profit as the motive of human action, but as a choice, which points to the relationship between economics and praxeology, or the science of efficient operation. The subject of praxeology is action understood as a realized and transformed will into action. The "will" means the ability of a person to choose between different states of things, that is, to choose some and reject others. Human action determines looking at the world through purposefulness and knowledge of the cause-effect relationships linking the states of things (Englis, 1930, p. 15). In other words, human action is deliberate behavior, it is a deliberate reaction of the subject to external conditions (Kozień, 2017b).

The task of praxeology is to make people aware, and also to formulate general recommendations regarding the efficiency of actions (Kotarbiński, 1973; Cabała, 2007). The term "efficiency" refers to the general evaluation of activities, which is based on other, complementary evaluation criteria such as effectiveness, benefit, economy (Kotarbiński, 1973; Pszczołowski, 1978). Human action is considered in the present tense and is directed to the future, but the results of human action are uncertain (Mises, 2011). Human action is one of the factors causing change. On the other hand, change is an inherent feature of economics, and one can precisely define dynamic economics. The economic and praxeological dimension of the theory of a dynamic enterprise focuses on external factors influencing the development of the enterprise, at the same time indicating the efficiency of human activities in the context of the effectiveness of achieving goals.

#### **4. THE CONCEPT OF A DYNAMIC ENTERPRISE**

The practical importance of the development of the concept of a dynamic enterprise results from the pace of changes taking place in the environment, as well as the lack of satisfactory results resulting from the use of the traditional approach to enterprise management. This situation prompts both theoreticians and, above all, practitioners of the theory of enterprise to develop a dynamic approach using the achievements in the field of economic theories, management and praxeology. The shaping of the dynamic approach was significantly influenced by the concept of organization (enterprise) as an open system of operation. The characteristic attributes attributed to this system include: dynamic variability, homeostasis, negative entropy, as well as equifinality, i.e. the ability to achieve a given goal by various effective methods. The nature of the operating systems should be seen not so much in terms of things as in terms of functionality. This means that these systems are constituted as a result of actions taken in interaction with the environment. The success of modern enterprises is based on the only constant guideline of action, which is change. Both exogenous changes related to the environment of the enterprise, as well as endogenous changes taking place in the enterprise, and more precisely, the dynamics of these changes, determine the path of enterprise development. The basic assumption of the concept of a dynamic enterprise is to create value for external (regulators, recipients, suppliers, competitors) and internal stakeholders. The expectations of the stakeholders in line with the mission and vision of the company determine activities at all levels and areas of management. The dynamics of actions taken in an enterprise is examined over time. Time as an economic category has value as a valuable but non-renewable resource. Actions are aimed at change and therefore are subject to time, in other words, each change assumes a time sequence, i.e. the concepts of change and time are inextricably linked. Considering activities in terms of time, we can distinguish periods before the action, during the action, and after its completion. The dynamics of the praxeological context of action has a future dimension. From the point of view of praxeology, the evaluation of the efficiency of an enterprise (entrepreneur) concerns ex ante and on-line activities. The ex post evaluation of the efficiency of activities undertaken in an enterprise refers to the achieved results, i.e. successes characterized by uncertainty, which means that human actions (entrepreneurs), i.e. the results of actions, are uncertain. The uncertainty of the company's operations is considered in terms of the intensity and changes of conditions that affect the functioning of the enterprise.

#### **5. ELEMENTS AND PROCESSES OF A DYNAMIC ENTERPRISE**

A dynamic enterprise is a complex system, i.e. a whole consisting of interrelated elements, remaining in interactive relationships with the environment (Platonoff, 2009). The environment of the enterprise is not only a source of dependence but, above all, uncertainty.

The conditions of the general environment of a company include:

- Political and legal conditions related to the state system as well as the applicable norms of generally applicable law (national law, international law, law established by European Union bodies). Government regulations, as well as the international policy that allows or limits the development opportunities of enterprises.
- Economic conditions that are related to the general economic situation expressed by basic qualitative and quantitative measures of its development.
- Demographic and cultural conditions that relate to the structure and development of society as well as the applicable norms and system of values.
- Technological conditions that are related to the development of scientific research and the implementation and availability of their achievements (Kozień, 2019).

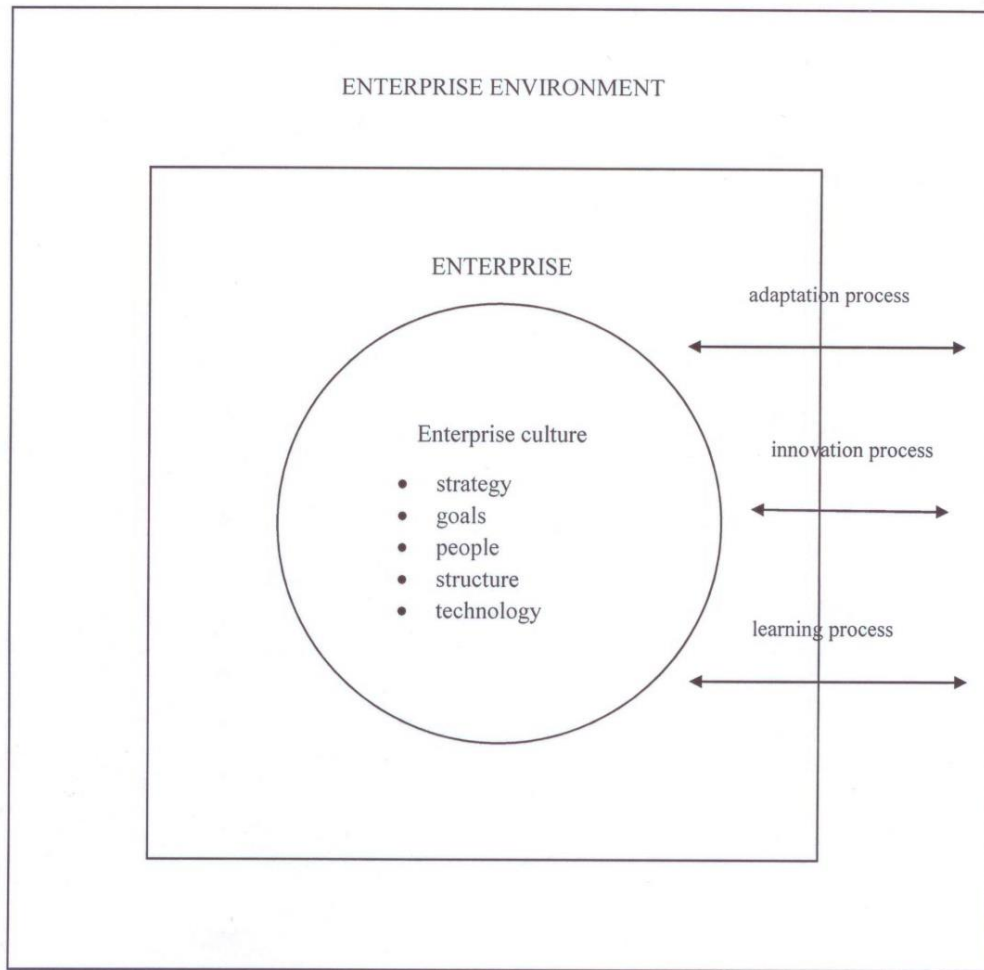
Moreover, an important element of the company's environment are co-operating relations with other organizations, both in the public and private sectors. Relationships between enterprises and universities are of particular importance, as well as in the sphere of culture in the protection of cultural heritage (Kozien, Kozien 2017a; Kozień, 2018c; Kozień, 2018a; Kozień, 2018b; Kozień, 2020; Kozien, 2021). The key elements of the enterprise are:

- a strategy that relates to the company's activities aimed at creating unique value in the future,
- goals are the basis for the existence of any enterprise, they allow for planning and assessment of the efficiency of activities,
- people as the most important element of the enterprise, especially the quality of human capital related to knowledge and skills,
- a structure that determines the dynamic dimension of the relationship between the company's organizational unit,
- technology understood from the perspective of technological progress, it is not only about production technologies but also information technologies,
- corporate culture that combines all its elements from the perspective of social norms and value system.

On the other hand, the essential processes characteristic of a dynamic enterprise are:

- the adaptation process is based on the company's quick response to dynamic changes in the environment. The essence of the company's ability to adapt is agility understood as a philosophy of efficient iterative action oriented towards the future,
- the process of innovation consists in taking actions that go beyond the existing forms and methods using the development potential of the enterprise, broadly understood innovations, including product, process, organizational and marketing innovations,
- the learning process understood as the company's ability to collect, create and distribute knowledge, information and experience, as well as the ability to collaborate learning even in hyperdynamic conditions,
- the efficiency of the communication process including the following elements: context (conditions), participants, message, channel, noise, immediate feedback in direct communication and delayed feedback in indirect.

*Figure following on the next page*



*Figure 1: A dynamic enterprise  
(Source: own study)*

## 6. CONCLUSIONS

The stability paradigm from the perspective of the dynamics of environmental changes is insufficient to describe an enterprise as a complex system, as proved in their research by Weick, Perrow and Pascal (Weick, 1977; Perrow, 1984; Pascal, 1990). The adaptive approach is helpful, as it enables the current perception of the perception of the business-environment relationship, while the prediction of these relationships is actually difficult. Instability, complexity and unpredictability of the environment forced entrepreneurs (decision makers) to change their approach to enterprise management and replace strategic planning with strategic thinking. An effective diagnosis of the environment enables the company to find new opportunities. Currently, a dynamic understanding of the strategic aspects of the company's operations is the way to achieve goals and success. The company's vision is an interpretation of the current changes taking place in a hyperdynamic environment. These changes are not specified, and decision-makers are based on assumptions about future events, then the discrepancy between the expected and actual changes is called random changes (Stacey, 2001; Rokita, 2009). The concept of a dynamic enterprise model is based on random changes. The greater the influence of random factors originating in the enterprise's environment, the greater the uncertainty and, consequently, the unpredictability of changes taking place in the enterprise. In this situation, the learning role of the enterprise is important, especially the effectiveness of team learning. Enterprises wishing to survive and develop further are forced to undertake adaptive measures, despite difficulties in assessing their effects in the future.

According to the chaos theory, when there are random (unpredictable) changes in the environment in addition to closed, i.e. predictable, and limited changes, i.e. predictable changes, the company will be on the border of states: from stable to unstable equilibrium. This limit state can be considered in terms of the type of feedback. An enterprise under the influence of negative feedback loops achieves stability, while under the influence of positive feedback loops it is in a state of instability (unstable equilibrium). Summing up, it should be stated that each enterprise must cooperate with the environment in order to deliver the value expected by the society. It also means that it must be permanently innovative regardless of the type and scope of changes from closed to undefined. Each change requires different actions. In practice, closed and undefined changes often occur simultaneously, hence the company is required to be able to undertake both routine and non-routine activities of an innovative, flexible nature. Efficient response and finding solutions by the company to various types of changes in the environment is possible through knowledge management and the implementation of innovative projects (Kozien, Kozien, 2018b; Kozień, 2016; Kozień, 2017a). Knowledge management is not only about collecting and processing it, but about creating new knowledge and being willing to share it. The functioning of an enterprise as an open system depends on adaptive abilities related to adapting to the changes in the environment. The dynamic concept of the enterprise finds development in intelligent enterprises, in which people of the Millennium generation may be better able to meet the challenges of a hyperdynamic environment.

#### LITERATURE:

1. Boehlke, J. (2010). *Firma we współczesnej myśli ekonomicznej, Studium teoretyczno – metodologiczne*. Toruń: Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika,.
2. Cabała, P. (2007). *Wprowadzenie do prakseologii. Przegląd zasad skutecznego działania*. Kraków: Akademia Ekonomiczna w Krakowie.
3. Gruszecki, T. (2002). *Współczesne teorie przedsiębiorstwa*. Warszawa: PWN.
4. Chamberlin, E. (1993). *The Theory of Monopolistic Competition*, Cambrige.
5. Kotarbiński, T. (1973). *Traktat o dobrej robocie*. Warszawa, Kraków, Gdańsk: Zakład Narodowy im. Ossolińskich, Wrocław.
6. Kozien, A. (2021). *Protection of the authenticity and integrity of monuments as a determinant affecting the activities of entrepreneurs-the owners of monuments*. [in:] Cingula, M., Misevic, P., Nedzhad, A. (Eds.). *Economic and Social Development (Book of Proceedings)*, 64<sup>th</sup> International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 21- 31.
7. Kozien, E., Kozien, A. (2017a). *Academic governance as a determinant of efficient management of a university in Poland – legal and comparative perspective*. [in:] Cingula, M., Przygoda, M., Detelj, K. (Eds.). *Economic and Social Development (Book of Proceedings)*, 23<sup>rd</sup> International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 38-47.
8. Kozien, E., Kozien, A. (2018a). *The sustainability development concept under the regulations in force of the Treaty on European Union and the Treaty on the Functioning of the European Union – legal and economical view*. [in:] Ribeiro, H., Naletina, D., da Silva, A.L. (Eds.). *Economic and Social Development (Book of Proceedings)*, 35<sup>th</sup> International Scientific Conference on Economic and Social Development – „Sustainability from an Economic and Social Perspective”. Varazdin: Varazdin Development and Entrepreneurship Agency.

9. Kozien, E., Kozien, A. (2017b). *Commercialization of scientific research results and transfer knowledge and technologies to economy as determinants of development of universities and enterprises in Poland – legal and economic perspective*. [in:] Potocan V., Kalinic P., Vuletic A. (Eds.). *Economic and Social Development (Book of Proceedings), 26<sup>th</sup> International Scientific Conference on Economic and Social Development – „Building Resilient Society”*, Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 326-335.
10. Kozien, E., Kozien, A. (2018b). *Legal and economic mechanisms of institutional support of implementation of European projects in view of the European Union law*. [in:] Cingula, M., Rhein, D., Machrafi, M. (2018). *Economic and Social Development (Book of Proceedings), 31<sup>st</sup> International Scientific Conference on Economic and Social Development*. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 474-484.
11. Kozień, A. (2018a). *Autentyczność i integralność zabytków w świetle źródeł prawa powszechni obowiązującego w Polsce*. „Zeszyty Naukowe Towarzystwa Doktorantów Uniwersytetu Jagiellońskiego – Nauki Społeczne”, No. 21 (2/2018) legal volume, pp. 187-210.
12. Kozień, A. (2018b). *Niematerialne dziedzictwo sportowe w zakresie dorobku kulturalnego polskich artystów i jego prawna ochrona*. [in:] Dobosz P., Biliński M., Górny W., Mazur A., Hadel M., Kozień A. (Eds.). *Problemy ochrony prawnej sportowego dziedzictwa kulturowego i mechanizmy prawa sportowego*. Kraków: Koło Naukowe Prawnej Ochrony Dóbr Kultury Towarzystwa Biblioteki Słuchaczy Prawa Uniwersytetu Jagiellońskiego w Krakowie, Studio Cubus.
13. Kozień, A. (2018c). *Zadania i kompetencje gminy Kraków w zakresie ochrony światowego dziedzictwa*. [in:] Dobosz P., Górny W., Mazur A., Mazurek B., Kozień A. (Eds.), *Samorząd terytorialny, architektura, działa sztuki, prawo*, Kraków: Koło Naukowe Prawnej Ochrony Dóbr Kultury Towarzystwa Biblioteki Słuchaczy Prawa Uniwersytetu Jagiellońskiego w Krakowie, Studio Cubus.
14. Kozień, A. (2020). *Sprawne zarządzanie dziedzictwem kulturowym przez organy samorządu terytorialnego (Efficient Management of Cultural Heritage by Local Government Bodies)*. „Wiadomości Konserwatorskie”, nr 64.
15. Kozień, E. (1998). *Niektóre modele rozwoju organizacji*. „Zeszyty Naukowe Akademii Ekonomicznej w Krakowie”, No. 519.
16. Kozień, E. (2002). *Wybrane modele rozwoju organizacji*. „Zeszyty Naukowe Akademii Ekonomicznej w Krakowie”, No. 577.
17. Kozień, E. (2016). *Kompetencje menedżera zarządzającego projektami*. [in:] Firlej, K. (Ed.). *Menedżeryzm w rozwoju organizacji. Księga jubileuszowa dedykowana Profesorowi Józefowi Machaczce*. Kraków: Wydawnictwo UEK, pp. 71-84.
18. Kozien, E. (2017). *Identification of Stage Phase Growth in the Checklist Method Using Different Statistical Parameters*. [in:] Yongqiang Li., Hunjet A., Roncevic A., (Eds.). *Economic and Social Development (Book of Proceedings), 20<sup>rd</sup> International Scientific Conference on Economic and Social Development*, Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 538-545.
19. Kozień, E. (2017a). *Application of aproximation technique to on-line updating of the actual cost curve in the earned value method*. „Technical Transactions”, Vol.9, 2017(114), pp. 181-195.
20. Kozień, E. (2017b). *Praxeological Concept of Evaluation of Undertaken Actions – Theoretical Approach*. [in:] Jaki, A., Mikula, B. (Eds.). *Knowledge, Economy, Society. Management in the face of contemporary challenges and dilemmas*, Kraków: Cracow University of Economics, Foundation of the Cracow University of Economics, pp. 25-32.

21. Kozień, E. (2018d), *Using the risk-list method for risk assessment in the project*. [in:] Cingula, M., Rhein, D., Machrafi, M. (Eds.). *Economic and Social Development (Book of Proceedings)*, 31st International Scientific Conference on Economic and Social Development. Varazdin: Varazdin Development and Entrepreneurship Agency, pp. 474-484.
22. Kozień, E. (2019). *Ocena sprawności realizacji projektów*. Kraków: Wydawnictwo Uniwersytetu Ekonomicznego w Krakowie, pp. 37-40.
23. Kozień, E., Kozień, M.S. (2019). *Ex-ante risk estimation in the production project*. "System Safety: Human – Technical Facility – Environment", Sciendo, vol. 1, issue 1, pp. 708-715.
24. Kozień, E. (2020). *Assessment of technical risk in maintenance and improvement of a Manufacturing Process*. "Open Engineering", Vol. 10, iss. 1, pp. 658-664.
25. Kozień, E., (1999). *Przedsiębiorczość w rozwoju przedsiębiorstw*. [in:] Targalski, J. (Ed.). *Przedsiębiorczość a lokalny i regionalny rozwój gospodarczy: materiały konferencji naukowej zorganizowanej przez Katedrę Przedsiębiorczości i Innowacji Akademii Ekonomicznej w Krakowie oraz Social Research Center Northumbria w Newcastle (Kraków, 14-15 IX 1999 r.)*. Kraków : Wydawnictwo AE.
26. Kozień, E., Kozień M.S. (2018c). *Using the Fuzzy Logic Description for the Ex Ante Risk Assessment in the Project*. [in:] Ribeiro, H., Naletina, D., da Silva A.L. (Eds.). *Economic and Social Development, 35th International Scientific Conference on Economic and Social Development - "Sustainability from an Economic and Social Perspective" (Book of Proceedings)*. Varazdin: Varazdin Development and Entrepreneurship Agency.
27. Kozień, E., Kozień, A. (2019). *Efficiency of the Principle of Sustainable Development in the European Union Law*. [in:] Ulewicz R., Hadzima B. (Eds.), *Quality Production Improvement - QPI 2019*, Warszawa: Walter de Gruyter (Sciendo).
28. Mises L. (2011). *Ludzkie działanie. Traktat o ekonomii*, Warszawa: Fundacja Instytut Ludwiga von Misesa.
29. Orzeczenie ECJ w sprawach: C-41/90 *Klaus Hofiier i Fritz Elser v. Macrotron GmbH*.
30. Orzeczenie ECJ w sprawie: 1991 1-1979, pkt 21; C-159 i 160/91 *Christian Poucet v. Assurances Generales de France I Caisse Mutuelle Regionale du Languedoc-Roussulon*.
31. Orzeczenie ECJ w sprawie: 1993 1-637, pkt 17; C-244/94 *Federation Francaise des Societes d'Assurance, Societe Patemelle-Vie, Union des Assurances de Paris-Vie i Caisse d'Assurance et de Prevoyance Mutuelle des Agriculteurs v. Ministere de l'Agriculture et de la Peche*.
32. Orzeczenie ECJ w sprawie: 1995 1-4013, pkt 14; C-55/96 *Job Centre coop, arl*.
33. Orzeczenie ECJ w sprawie: 1997 1-7119, pkt 21; C-67/96 *Albany International BV v. Stichting Bedrijfspensioenfonds Textielindustrie*.
34. Orzeczenie ECJ w sprawie: 1999 1-5751, pkt 77; C-115-117/97 *Brentjens' Handelsoedememng BV v. Stichting Bedrijfspensioenfondsvoor de Handel in Bouwmaterialen*.
35. Orzeczenie ECJ w sprawie: 1999 1-6025, pkt 77; C-219/97 *Maatschappij Drijvende Bokken BV v. Stichting Pensioenfonds voor de Vervoer en Havenbedrijven*.
36. Orzeczenie ECJ w sprawie: 1999 1-6121, pkt 67; C-180/98 do C-184/98 *Pavel Pavlov i inni v. Stichting Pensioenfonds Medische Specialisten*.
37. Orzeczenie ECJ w sprawie: 2000 1-6451, pkt 74; C-309/99 *J.C.J. Wouters, J.W. Savelbergh, Price Waterhouse Belastingadviseurs BV v. Algemene Raad van de Nederlandse Ordevan Advocaten*.
38. Orzeczenie ECJ w sprawie: 2002 1-1577, pkt 46; C-217/05 *Confederation Española de Empresarios de Estaciones de Servicio v. Compañía Española de Petroleos SA*.
39. Pascal, R.T. (1990). *Managing on the Edge. How Successful Companies Use Conflict to Stay Ahead*. London: Viking Penquin,.



40. Perrow, C. (1984). *Normal Accidents. Living with High Risk Technologies*. New York: Basic Books.
41. Platonoff, A.L. (2009). *Zarządzanie dynamiczne, nowe podejście do zarządzania przedsiębiorstwem*. Warszawa: Difin.
42. Rokita, J. (2009). *Dynamika zarządzania organizacjami*. Katowice: Wydawnictwo Akademii Ekonomicznej w Katowicach.
43. Stacey, R.D. (2001). *Complex responsive proces in organizations: learning and knowledge creation*. New York, London: Routledge.
44. Pszczołowski, T. (1978). *Mała encyklopedia prakseologii i teorii organizacji*. Wrocław, Warszawa, Kraków, Gdańsk: Zakład Narodowy im. Ossolińskich.
45. Weick, K., (1977). *Organizational desing: organizations as self – organizing systems*. „Organizational Dynamics”, autumn.
46. *Życie Warszawy*, 1984

