Varazdin Development and Entrepreneurship Agency
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Economic and Social Development

15th International Scientific Conference on Economic and Social Development –
Human Resources Development

Book of Proceedings

Varazdin, 9-10 June 2016

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CONTENTS:

1

Globalization and Challenges of the Modern World

SCENT IMPACT ON THE STORE PERCEPTION

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ABSTRACT

Nowadays consumer behavior has an increasing role in launching products on the market. Companies are mainly focused on behavior and movement of consumers in order to meet the consumer's needs and maximize revenue. What will the consumer buy depends on many factors. The look of the environment is not sufficient to achieve a sense of comfort, but the focus is rather shifted on scents that characterize assortment of the store. Since the choice of the store is not random but depends on various factors such as proximity, store design, product range, services offered and similar, it is necessary to examine what impact has the scent compared to other factors in the perception of the store. In this paper we will prove a set of hypotheses which assume that scent has a great impact on consumers' behavior and in creating purchasing decision in the store. Scent plays an important role in creating a perception of the store from which it derives the frequency of visits to the store with pleasant scents which ultimately influence the decision to purchase. When environment is pleasant people spend more time on certain places even though it was not initially planned. In relation to pleasant environment which is influenced by pleasant scents consumers will need less time to make final purchase decision and spend more.
Keywords: consumer behavior, marketing, scent impact, store perception

1. INTRODUCTION

Nowadays consumer behavior has an increasing role in launching products on the market. Although brand has a huge impact on the consumer's purchasing decision, it is closely related to the products placement in the stores due to the fact that the final purchase decision by the consumer is made in the store or point of sale. The fact is that the environment is the most powerful influence when making the final purchase decision. The choice of the store depends on the customer's knowledge, experiences, beliefs, expectations, attitudes and similar. The consumer above all expects not to get only the product purchased in the store, but to get a range of different services (Gutić, 2009). Therefore, it is not surprising that the marketing nowadays evolved into a higher dimension in which the visual aspect of the product is only one of the many factors that affect launching products on the market. Companies are mainly focused on behavior and movement of consumers in order to meet the consumer's needs and maximize revenue. What will the consumer buy depends on many factors. The look of the environment is not sufficient to achieve a sense of comfort, but the focus is rather shifted on scents that characterize assortment of the store. In this paper we will focus on how the scent affects the perception of the store by consumers.

The scent launches emotions in people and therefore differentiates various environments. Companies use a variety of activities in order to standardize the scents in their stores and thus differentiate its products and the impact on consumer spending. Consumers stay longer in stores that have a pleasant scent and scent plays a key role in attracting the consumer's attention to the products and the final decision to buy. Scent marketing has become a whole new branch of the former marketing in which companies pay a lot of attention when placing their products on the market. Nowadays companies give equal attention when creating the distinctive scent of the product as well as the scent of the store through which the product will be placed. Since the choice of the store is not random but depends on various factors such as proximity, store design, product range, services offered and similar, it is necessary to examine what impact has the scent compared to other factors in the perception of the store.

2. THEORETICAL BACKGROUNDS AND HYPOTHESIS DEVELOPMENT

Consumer behavior is a process affected by a range of factors. Factors can positively and negatively affect the decision on the final purchase. The goal of every company is to take advantage of the factors in a positive way in order to directly influence the consumer's decision about the final purchase and ultimately increase revenue. Before choosing the store, consumer evaluates the store according to certain criteria. During the final selection of store consumer uses certain sources of information usually transmitted through the media advertising and/or experience of consumer surrounding. As with the choice of brand a positive customer experience enhances experiential learning and leads to repurchase in the same shop, which eventually turns into a routine trip to the selected store (Kesić, 2006).

In today's evolution of services, purchase has become an experience with a variety of services. Classic customers has higher expectations and for them purchase is affected by a range of factors. Before purchasing certain product, a consumer selects the store. In store selection process, the main impact on store selection has location, design, assortment, courtesy of staff, pricing, advertising activities and services offered. Companies must take into consideration various parameters related to presales, sales and aftersales. If the presales parameters are taken into consideration they will attract consumers in the store with the intention of buying a particular product and/or services. Sales parameters will affect the final decision on the purchase, while the aftersales parameters will affect consumers return to the market with the aim of buying the same and/or other products and/or services. For consumer behavior in the process of making a purchase decision of great importance is the way in which consumers perceive the store (Gutić, 2009). Factors that affect the perception of the store can be divided into the basic factors and the factors that create added value. The basic factors are taken into consideration in all stores/point of sales while the factors that create added value are increasingly represented in the high brands stores.

The basic factors that affect the perception of the store are location, appearance, assortment and disposition of goods. General rule is that the closer the store is to the consumer, the consumers will more likely purchase in that store (Kesić, 2006). When defining store location one must take into consideration the proximity of consumers, ease of access to the store, the type of products offered and the environment. Consumer behavior suggests that the consumer will most likely choose to go to the store which in its vicinity has other stores with similar assortment as evidenced by a large attendance of shopping centers. Consumer will be attracted with store appearance as well. The first visual impression usually is created by external appearance which will attract or repel new consumers. The interior of the store keeps the consumer and therefore it is important that the interior appearance gives the impression of comfort. Some stores are focused on a particular type of product and thus have a small assortment, while others have a very wide range of products. Regardless of its range for each store is most important that the range is full and steady. The belief that the customer will find a product that was previously

3

purchased in the store is a very important factor of trust and commitment to a particular point of sale. Otherwise, if the product with which the consumer was satisfied was not found a second time in the store, it will mislead the consumer into a certain amount of distrust and uncertainty (Gutić, 2009). For attracting the attention of consumers, the consumer must be able to manage the area in a way that desired product is visually accessible. On the visual availability of products greatly affect the concept and structure of the department in the store. When defining the layout of the goods it is necessary to pay special attention to the position and grouping of products.

Factors that create added value are colors, music, scents and services. When attracting the attention of consumers to a store, a key role is played by the color that causes various associations among consumers when making purchasing decisions. Colors evoke launching thoughts and memories. Properly selected colors will positively affect consumer behavior in the store. When defining the appropriate color one must take into consideration that warm colors excite while cold colors have a calming effect. For example, red and yellow colors may enhance the feeling for appetite and therefore it is good to combine them in stores with food (Gutić, 2009). Music has a role for each type of stores, is closely related to the assortment and must be adjusted to the structure of the consumer. In the book "Music in advertising" Gerald Gorn proves that most consumers are choosing products and services with which they listen the music they love. When choosing the music, it is important that the range of products and music are closely correlated. Scent is the fastest trigger for people emotions. Consumers stay longer in stores that have a pleasant smell. A number of products such as food and beauty products have specific scent based on which consumers select those products. Therefore, besides the scent of the actual product one need to think about the environment and shop scent which might play a key role in making the final decision about purchase. With the aim of attracting the largest possible number of consumers, it is necessary to create a greater number of services which store can offer. It is important to pay attention to the service before sales, after sales and supporting services (Gutić, 2009).

2.1. Market analysis in relation with consumer perception
Regarding the topic on using scent within the store as a main initiator of consumers' positive perception, there has been made a number of studies and researches during past few years. All researches indicate the importance of the scent in relation with the consumer perception of the store. One of the researches made at the „Smell and Taste institute" has shown that 84% of interviewed individuals are inclined to buy a pair of sneakers in a store with a pleasant scent, rather than buying in a store which does not have any smell, even more, they are ready to pay 10% higher price for the same product. Researches proved that the scent affects the consumer loyalty, as well as the perception of the quality of products, but also the time which consumers spend in a store.

Using scents within the store can have a positive impact on the consumers' and store employees' behavior. If a customized scent is used in relation with service activities, it can have a great impact on kindness and courtesy of employees, and can cause greater openness and attention showed by consumers. Furthermore, the same scent can also affect consumer time assessments, which means that it can be the reason why customers stay in a store longer than expected. Consumers will spend more time within a space which is fulfilled with a pleasant scent.

In order to choose a scent which will attract targeted consumers, it is necessary to take into account certain variables, such as level of presence of the scent, a fact whether scent is pleasant or not, the way the scent pervades with a certain product and/or service, as well as the relationship between scent and memories. Considering that certain scent can be experienced in different ways which have different effects on the human brain, scent is the most certainly something which is not be ignored by consumers. If the scent is not pleasant to the consumer,

the product and/or service will automatically be considered unpleasant as well. If there are more senses involved, consumers feel more attached to things and places, which means that consequently consumers will spend more money. In stores, consumers react to scents which bring out positive feelings.

Fast growth of scent marketing industry is not a phenomenon but a natural evolution sequence of consumer marketing. Consumers have become more and more indifferent to the messages of brands which have visually saturated the market. Regardless the type of communication channel used (television, radio, internet, posters, etc.), the market has become oversaturated by various marketing messages. Visual aspects can no longer be a tool for message differentiation; therefore, innovative companies which are also market leaders, have largely begun to use scent marketing as a tool for sending marketing messages. Considering the economic crisis and decrease in consumption during last few years, scent marketing has brought various enhancements and caused the increase of revenues for certain companies. Companies can no longer allow themselves to ignore the power of scent in connection with the distribution of their products to end consumers. Each product and/or store which wants to get a benefit from scent marketing has to ensure the existence of the ideal scent which will attract targeted number of customers and, in compliance with that, has to implement this certain scent in its stores. All scents have different effects on the human brain; for instance, lavender soothes, while mint stimulates it. Therefore, it is necessary to consider all aspects of consumers' behavior which are intended to achieve, in order to create the ideal scent.

Research conducted at the "Millward Brown" institute showed that 99% of marketing communications is focused on what we hear and what we see while on the other hand 75% of our emotions are stimulated with scent. Successful product placement requires building emotional connections between consumers and products. It is therefore not surprising that the scent has become an essential aspect of marketing products.

2.2. Market analysis in relation with company perception

Companies have become aware of the fact that the sound and the way products look are no longer enough to create strong messages while placing products on the market. It is necessary to take into account all the senses in order to the make a product as more differentiated from others. Therefore, company's goal should be directed to involving as many senses possible in order to attract consumers. Considering the fact that 75% of our emotions are triggered by scent, companies become more and more focused on the product scent. Companies use a variety of scents which are adjusted towards specific goals which intended to achieve, in order to ensure maximum success in placing their product and/or services on the market.

For example, when Rolls Royce started to get complaints regarding its new models, company has come to the conclusion that the main difference between old and new models, besides its modern appearance, is scent. Interior of old models had contained natural scents such as wood and leather, while new models smelled like plastics. Considering the new modern technology used in the production of new models, the only way to get the old scent back in new models was to produce the scent artificially. Taking the old models as a main reference, the whole team conducted a detailed analysis of aroma which had to be achieved. Thanks to that analysis, the company produced the scent. The scent was incorporated into car seats just before vehicles left the factory. This example shows the importance of creating and maintaining the consumer perception of the product even when the company is not aware of the perception. Other well-known car manufacturers use a variety of scents to attract and retain consumers as well. For other industries as well, the scent has a main role while placing products on the market. Company Victoria Secret used specific scents in its stores and its products. Kraft Foods uses special scents for its products in order to intensify the way foods smells, moreover, even in different departments within their stores they use different scents which are in compliance with

an assortment on the shelves. There are many examples of successful companies which maximize their revenues and differentiate their products from the competition thanks to the scents. Many companies were not aware of the importance of the senses while placing products on the market and too often ignored the importance of scent. Companies have become aware that if they focus on the scent and if they use scent in order to create an emotional connection between a consumer and a product, their placement of products on the market will get significantly faster than placement of competitive products which focus exclusively on the visual effect in the store.

Nowadays, when certain products have already historically built certain scents that are in line with the consumer expectations, consumer unintentionally creates expectations regarding scent while entering the particular type of store. Therefore, the scent should be used to ensure that the products within the store are personalized, differentiated and improved.

In this paper we will test the following hypothesis:

- ✓ Hypothesis #1: Scent influence consumer store perception,
- ✓ Hypothesis #2: Scent influence consumer time spent in store,
- ✓ Hypothesis #3: Consumers tend to buy and spend more in store with pleasant scent.

3. DATA AND METHODOLOGY

To test above mentioned hypothesis we have conducted interview based research with consumers in main shopping malls within Zagreb which is a capital city in the Republic of Croatia. The survey instrument was designed in a way to demonstrate the influence of scent on the perception of the store. Selected consumers were asked about their connection with scents, their perception of scents within the store, their perception of scents related to products, store influence on their final purchase decision, and scent influence within the store on time spent in the store and money spent versus money and time initially planned to spend.

Survey was conducted in the period from 10:00 to 19:00, on Fridays and on Saturdays on 100 people and special attention was given to the middle age people, from 20 to 40 years. Considering 100 interviewed people, precisely 98 of them, who were willing to take a moment of their time to fulfill the questionnaire, 53 were men and the rest, 45 of them were women. Considering 53 male respondents, 24 of the interviewed consumers were middle-aged (20-40 years), and the rest, more specific 29 of them were teenagers (15-20 years). They showed a great interest and were willing to fill out the questionnaire and thus participate in the study. Considering 45 female respondents, 25 consumers were middle-aged (20-40 years), and the rest, precisely 25 were teenagers (15-20 years). The instrument of a survey was a questionnaire which contained nine questions. Regarding first question, the respondents had to indicate which gender they belong. The second question included segmentation in connection with age and respondents had to indicate which group of age they belong, age groups were set from 0-5, 6-15, 16-25, 26-35, 36-45, 46-60 and 61 and more. In the third question, respondents had to mark their profession. Offered answers were entrepreneur, craftsman, student, pupil, child and pensioner. Regarding fourth question, respondents had to state whether they feel connection with scents. In fifth questions, respondents had to answer how often they visit stores. Seventh questions asked from respondents to indicate a factor which has the most important influence on their perception of the store. Answers which they could choose were location, appearance, assortment, colors, music and scents. Regarding eight questions, respondents had to evaluate with marks from 1 to 10 the importance of each particular factor in connection with creation of

their perception of the store. In ninth question, respondents had to answer whether a store influences their decision to buy products. Survey instrument has been created in order to prove impact of scent on the perception of the store. The intention of this paper was to check the influence of scent on the perception of the store. The thing which most consumers probably are not aware of is that marketing initiatives of manufacturers are more and more focused on scent marketing. The aim of this type of marketing is to create a scent which will provide product and space individuality in a way to attract and retain consumers. In order to confirm the hypothesis according to which scent do effects the perception of the store and consumption, the following questions were made:

- Do you feel connection with scents?
- Is there any specific scent which brings out emotions?
- How often you visit stores?
- Which factors have the most important influence on the consumers' perception of the store?
- Does the store influence consumers' decision to buy products?

The intention of these questions was to come to conclusion on how much customers care for scent in stores, what is the level they find it important and how it influences their decision to buy products. The most of the respondents feels a strong connection with scents; even 98% of them are connected with scents in very different ways. All respondents think that scents bring out certain emotions in them. Furthermore, 16% of respondents declared that scent has the biggest influence on the perception of the store. Moreover, frequency of customers visiting stores is rather high, even 35% of respondents go to stores almost on a daily basis while 47% of them go to stores at least one per week. Also, 83% of respondents confirmed that stores have the main influence on their decision to buy things.

4. RESULTS
As can be seen from the chart 1, the results of questionnaire show that the majority of consumers, 51% of them, are completely connected with scents, 47% of them are partially connected with scents, while 2% of respondents feels no connection with scents.
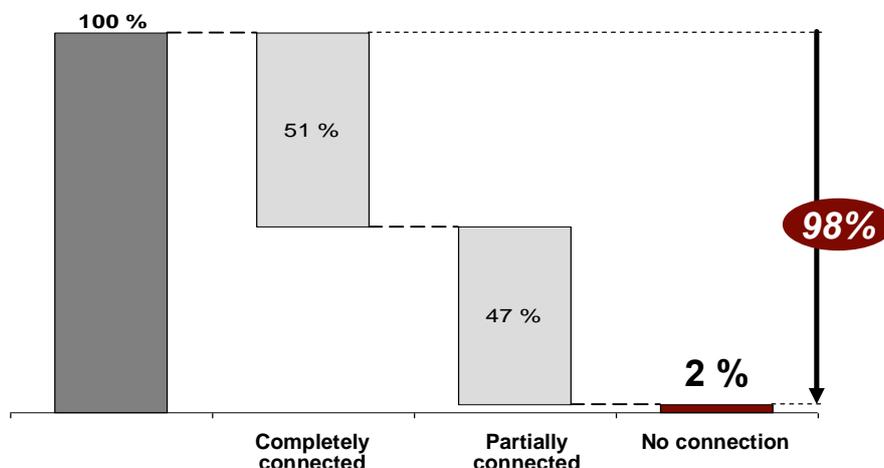
Chart 1: Consumers connection with scents (author's research)

Connection with scents is in very close connection with inducing peoples' emotion through scent. According to that, the chart 2 shows that scents bring out emotions for large number of respondents, 78% of them confirmed that scents have complete influence on their emotions while 22% of respondents said that scents partially induce their emotions.
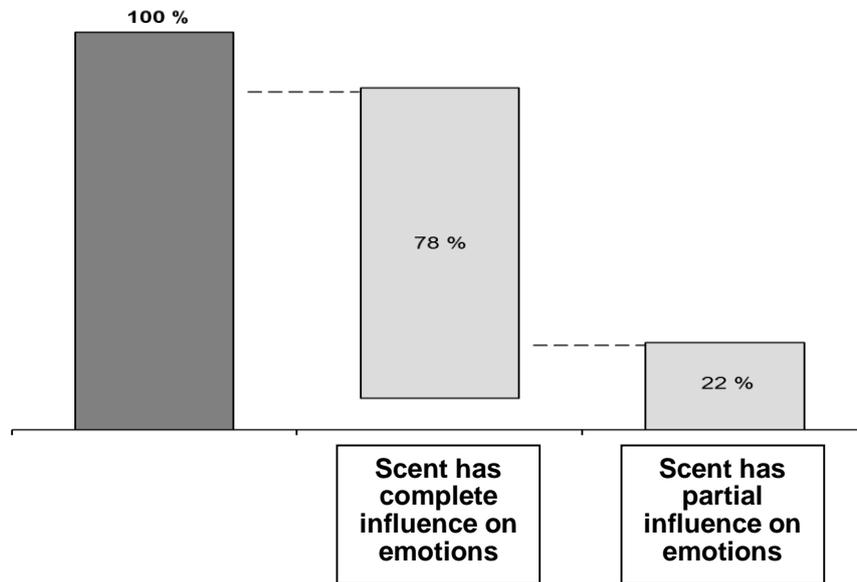
Chart 2: Ratio of inducing customers' emotions (author's research)

Regarding results of questionnaire shown in the chart 2, we can come to conclusion that for all interviewed people scent is the key factor for inducing their emotions.

Besides connection with scents, it was very important to get to conclusion how often respondents visit stores. Regarding customers' visits to the stores, we can see from the chart 3 that even 35% of them go to stores on a daily basis, 47% of respondents go at least once per week while 18% go to stores occasionally.
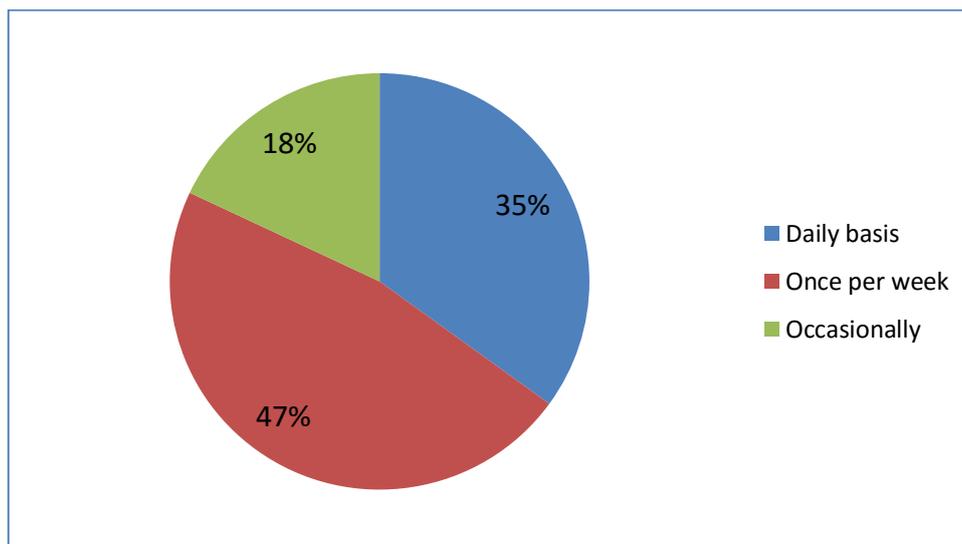
Chart 3: Frequency of customers visiting stores (author's research)

The significant influences to the frequency of going to stores have those factors which create consumers' perception of the stores. If we differentiate factors to the basic ones (location, appearance and assortment) and factor which bring added value (colors, music and scents), it turns out that for 67% of respondents perception of the store is affected by basic factors while for 33% of the respondents perception of the store is affected by factors which represent added value.
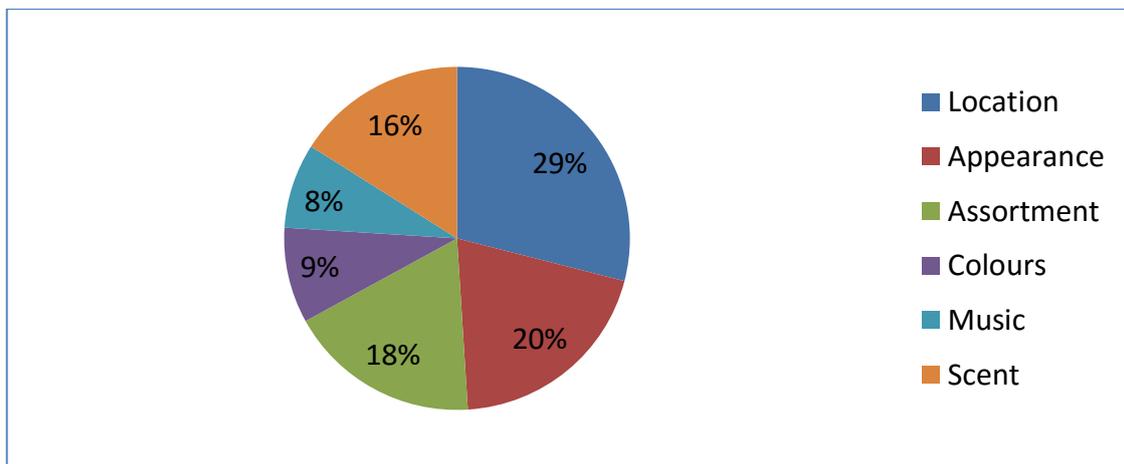
Chart 4: Relevance of each particular factor which create consumers' perception of the store
(author's research)

Furthermore, if we take separately into account each factor which create perception of the consumers' perception of the store, it turns out that for 29% of respondents the most important influence have the location, for 20% of respondents appearance is the most important factor, for 18% of them the most important factor is assortment, for 9% of respondents the most important influence have color's, for 8% of them music is a factor with the biggest influence, while 16% of respondents considers the scent as the most important influencing factor, as shown from the chart 4.

Regarding the survey results shown from the chart 4, there can be concluded that, although larger percentage referring influence relate to basic factors, taking into account factors which create added value, the most significant impact relates to scent when it comes to the consumers' perception of the store.

In order to connect the influence of scent with a final purchase decision in the store, we have investigated the influence of store on the final buying decision made by the consumer. Considering the fact that 83% of respondents, as shown from the chart 5, made a statement that a store has a complete influence on their purchasing decision, we can conclude that the sense of smell has a significant role while creating the consumers' perception during buying product in a store, where the consumer generally makes the final purchasing decision.
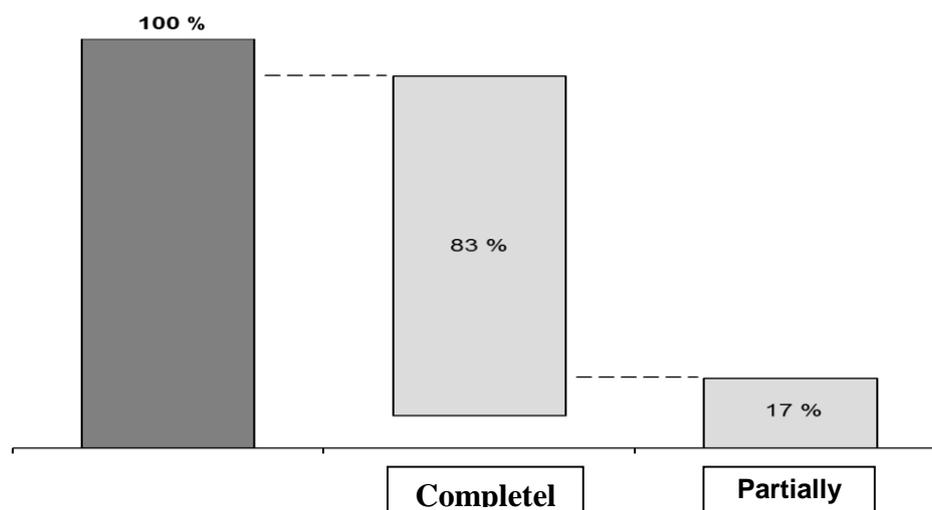
Chart 5: The influence of the store on the consumers' purchasing decision (author's research)

5. CONCLUSION

The questionnaire proves set hypothesis which assumes that scent has a great impact on consumers. More than 50% of respondents confirmed that they feel a strong connection with scents. According to that, the hypothesis which assumes that scents cause an emotion in consumers has been confirmed, which was also affirmed by 78% of the respondents. Consumers also confirmed the influence of the variety of factors on their perception of the store which consequently proves that impact of scent has a significant impact on their perception. At last, it was proved that the scent significantly affect consumers' purchasing decision considering the fact that more than 80% of the respondents clearly answered that a store has a great influence on their purchasing decision.

Scent plays an important role in creating a perception of the store from which it derives the frequency of visits to the store with pleasant scents which ultimately influence the decision to purchase. Scent is the faster emotions trigger and therefore influence environment perception. When environment is pleasant people spend more time on certain places even though it was not initially planned. In relation to pleasant environment which is influenced by pleasant scents consumers will need less time to make final purchase decision and spend more.

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A CLUSTER ANALYSIS OF MULTIDIMENSIONAL POVERTY IN TURKEY

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ABSTRACT

There are significant efforts on conceptualizing and measuring multidimensional poverty. In multidimensional approach to poverty, income as a proxy of wellbeing is not seen as a sole indicator for human lives, but other deprivations such as education, health and assets are judged within the analysis. In this paper, it is aimed to find a statistical tool to measure multidimensional poverty. Thus, we will use Turkish Statistical Institute (TurkStat)'s cross-sectional data set of income and living conditions of the households which are published since 2006 and the study will use 2010 data to constitute a statistically significant measure. One of the main advantages of this measure is not to identify an arbitrary poverty threshold for being poor or non-poor, instead, concentrates at their similarities with respect to their scores on various dimensions. Initial analyses show that housing indicators are one of the most important dimensions on multidimensional poverty and thus the households are generally more vulnerable when they are deprived on this dimension.
Keywords: cluster analysis, factor analysis, multidimensional poverty

1. INTRODUCTION

Poverty, as a considerably complex concept in its nature, indicates the level of attainments of people in the society. The conceptualization of poverty also defines its way of measurement which is far more difficult. Sen (1976), in his seminal work, defines two distinct problems in measurement of poverty which are the identification of the poor and aggregation of the results as an index. For the identification problem; in the most basic recognition of poverty, it is usually accepted as an absolute term which is measured with a specific (monetary) poverty line and identifies the poor which are below this threshold level. Roots of this unidimensional approach rely on Booth (1887) and Rowntree (1901)'s studies on poverty and they are mostly concerned with minimum income level which is necessary for physical subsistence. On identifying the poor, Townsend (1962) on the other hand, states that the determination of needs are dependent to social standards and thus the poverty means a relative deprivation which are subject to a change due to society the people live in. For the aggregation step, the problem involves choosing a poverty index and although, there are major studies and indices on unidimensional poverty measurement since the seminal work of Sen (1976)'s[1], recently, the idea of measuring poverty in a multidimensional perspective which is also pioneered by Sen (1979, 1985, 1987, 1992) is more common. Influential Indian economist Amartya Sen suggests that the conflict between the absolute and relative approach could be overcome with a capability approach which considers the functioning of persons and the capabilities of a person reflects the various combinations of functionings he can achieve (Sen, 1979). As also Thorbecke (2007, p.3) states that "most of the remaining unresolved issues in poverty analysis are related directly or indirectly to the multidimensional nature and dynamics of poverty". Inspired by this view, many

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[1] Following Sen's ordinal approach to poverty measurement, it should be noted that there are some significant contributions on poverty measurement with unidimensional axiomatic approach such as Takayama (1979), Thon (1979), Kakwani (1980), Clark, Hemming and Ulph (1981), Chakravarty (1983), Foster, Greer and Thorbecke (1984) and Shorrocks (1995), among others.

studies now agree that poverty is a multidimensional phenomenon which should include many dimensions of human lives such as education, health, participation to social and political activity and so on.

For the last two decades, there are major studies on measuring multidimensional poverty such as axiomatic approaches (Tsui, 2002; Bourguignon and Chakravarty, 2003; Alkire and Foster, 2009), fuzzy approaches (Cerioli and Zani, 1990; Cheli and Lemmi, 1995; Chiappero-Martinetti, 1994; Lemmi and Betti, 2006) and statistical approaches (Schokkaert and Van Ootegem, 1990; Kuklys, 2005; Batana and Duclos, 2008). In general, normative assessments and value judgments are mainly used in all multidimensional poverty measurements while choosing dimensions, but the statistical approaches such as principal components analysis or factor analysis illustrate that in a statistical way which is relied on reducing dimensions. So, in this paper, it is aimed to find a statistical tool to measure multidimensional poverty by reducing the dimensions and then clustering the poor and non-poor to describe a meaningful explanation on multidimensional poverty.

2. MAIN STATISTICAL APPROACHES ON MULTIDIMENSIONAL POVERTY MEASUREMENT

In recent years, statistical (or multivariate) approaches are widely used in multidimensional poverty measurement. The main statistical techniques are varied, from principal component analysis, factor analysis to structural equation models and they are mostly based on the idea of descriptive explanations or latent variables. These approaches are common as a result of their ability to give information about different aspects of poverty such as identifying either a person is poor or non-poor. Descriptive techniques, such as principal components and factor analysis are also useful as a reduction method for dimensions on constructing a multidimensional poverty index. Also, these techniques are easy to apply and certain methods can be used with both ordinal and cardinal data. However, these techniques remain unclear to the properties of the constructed indices satisfy and the results also may be very sensitive to a minor or incidental changes (Alkire, Foster, Seth, Santos, Roche, Ballon, 2015). Factor analysis, for example, is entirely data driven, so different solutions are likely to be obtained from different samples or from the same sample over time (McKay and Collard, 2003). Lastly, these approaches are not independent from value judgments while taking some critical decisions about the methodology. One common approach is *principal component analysis* (PCA) which investigates the linear combinations of the observed indicators in such a way as to reproduce the original variance as closely possible (Krishnakumar, 2008, p. 119). In this analysis, it is aimed to reach a small set of independent linear combinations of K indicators which are called as "components". This analysis are widely used in welfare and poverty studies such as Ram (1982)'s effort on constructing a composite index for economic development and Slottje (1991)'s quality of life index which is based on Sen's capability approach. In addition to these early studies, Nagar and Basu (2002), Biswas and Caliendo (2004) ve McGillivray (2005), Rahman, Mittelhammer and Wandschneider (2005) and Roche (2008) also used PCA as a tool in their analysis of welfare or multidimensional poverty. *Multiple correspondence analysis* (MCA) which is in fact a generalization of PCA is also important because it allows using cardinal and categorical ordinal variables together. Also, according to Asselin (2009), MCA has two important properties which are marginalization bias and reciprocal duality where the former includes the overweighting of smaller categories and latter allows the poverty indicator to satisfy monotonicity axiom. Batana and Duclos (2008), Asselin (2009) and Ezzrari and Verme (2012) constructed different multidimensional poverty indices by using different indicators and countries. *Factor analysis*, as a latent variable model, focuses on explaining the common variance, thus it also differs from PCA which is a descriptive method that interprets the latent structure of a set of indicators on the basis of their total variation (Alkire et al., 2015, p. 97). Factor analysis is also useful on data

reduction and commonly used in multidimensional welfare evaluations as a result of its easy interpretation of factors while establishing the main dimensions. Thus, there are considerable studies about the methodology (Maasoumi and Nickelsberg, 1988; Schokkaert and Van Ootegem, 1990; Whelan, Hannan and Creighton, 1991, p. 58-82; Callan, Nolan and Whelan, 1993; Lelli, 2001; Balestrino ve Sciclone, 2001; McKay ve Collard, 2003, Whelan, Nolan ve Maitre, 2006). But, like other statistical methodologies, factor analysis has some significant limitations, for example, researcher has little control over how the variables form the resulting factors and the analysis itself is not required and theoretical justification in deciding the variables. As a generalization of factor analysis, *structural equation models* have potential to overcome some of these problems. The main characteristic of these models is that it requires a strong theoretical justification before the model is specified, and thus the researcher decides which observed variables are to be associated with which latent unobserved factors in advance (Tomlinson, Walker, Williams, 2008). These models are applied to multidimensional poverty measurement by Wagle (2005), Krishnakumar and Nagar (2008) and Krishnakumar and Ballon (2008). Although there are some other statistical methods such as MIMIC and Rasch models, we will not include them in the paper to focus the main concern of paper, so we will finally mention about *cluster analysis* which is a technique of the classification of similar objects into different subsets that allows grouping the individuals having relatively similar characteristics together (Silber, 2007). Luzzi, Flückiger and Weber (2008)'s paper is one of the attempts on measuring multidimensional poverty by clustering main dimensions such as financial conditions, health, neighborhood and social exclusion.

3. METHODOLOGY AND DATA
Unidimensional poverty measurement shows only one way of human lives and has some limitations. Then, using a multidimensional approach extends the extent of measurement. But processes in the measurement of multidimensional poverty such as choosing dimensions, identification of the poor or weighting procedure may be challenging. In our approach, we base on a relatively descriptive approach to multidimensional poverty and to the idea includes Slottje (1991) and Whelan et al. (1991)'s approaches, as earlier studies. In poverty measurements, although, defining who is poor or not is meant as a first step, as Sen's approach, in our methodology, we will not adopt an arbitrary threshold which divides the population into two distinct groups. Alternatively, we will aim to group the people as poor or non-poor according to their similarities between main capabilities (or dimensions). Thus, as a result, the threshold of poverty itself will be defined by the observation of the various subgroups of the original population (Luzzi et al., 2008, p. 66). Thus, by using factor and cluster analysis and following Luzzi et al. (2008)'s approach, we will primarily check the possible candidates of many variables to provide a meaningful description on poverty by factor analysis. The factor analysis helps us on grouping variables to different factors. Then, we will identify the poor by using a cluster analysis which aggregate individuals according to how similar they are with regard to their various scores of multiple deprivations. On the other hand, one of the main issues of multidimensional case of poverty measurement is to choose basic dimensions between many indicators. In the studies of multidimensional poverty, there are some arguments how to choose basic dimensions and some suggestions are offered (Alkire, 2007). However, selecting the dimensions arbitrarily also involves normative assessments and value judgments. In our factor analysis, we will aim to choose basic dimensions according to statistical results by choosing the appropriate number of latent factors. But we do not claim that this technique is completely excluded from normative assessments and one should be aware that most of these rules cannot avoid value judgments.

Once the indicators are chosen and the reduction is made with a factor analysis, we will identify the groups in the population by using a cluster analysis which involves partitioning of the

population to the subsets. By using an agglomerative hierarchical clustering method for grouping, a similarity index is computed (Luzzi et al., 2008). The distance between the individuals of the groups are processed by using an appropriate criterion such as complete, average or Ward's linkage. Finally, we will choose the final number of clusters by using a statistical procedure which is known as stopping rules and we will use the best two rules which are the rules of Calinski and Harabasz (1974) and Duda and Hart (1973). We use the cross-sectional data of Survey of Income and Living Conditions 2010 of TurkStat (TR-SILC) which is published since 2006 (both as cross-sectional and longitudinal data). This survey includes the various questions about housing conditions, environment, health, education, financial conditions, income, employment and so forth and results show some important aspects of Turkish households.

4. RESULTS OF MULTIDIMENSIONAL POVERTY MEASUREMENT

To illustrate a simple application, we choose nineteen basic variables included in our analysis which reflect the various state of deprivations. Our analysis starts with factor analysis in order to explain what common factors best capture the covariation in all variables. After applying a factor analysis to the variables, it is necessary to determine the appropriate number of latent factors for rotation and interpretation. By this end, it is possible to check the scree plot of eigenvalues to see the point at which the curve bends or basically the eigenvalues of factors which are greater than 1 can be used (Guttman, 1954). In our case, it implies a three-factor solution (eigenvalues are 3.524, 1.426, and 1.080, for the first three factors, respectively).

Table 1. Rotated factor loadings of variables, 2010.

Variable	Factor 1	Factor 2	Factor 3
bath or shower in the dwelling	0.0854	**0.6905**	0.0377
indoor flushing toilet	0.1156	**0.6608**	-0.0256
kitchen in the dwelling	0.0725	**0.6107**	-0.0196
piped water system in the dwelling	0.0509	**0.4670**	0.0063
hot water system in the dwelling	0.2246	**0.5297**	-0.0491
having a computer	**0.1400**	0.1354	-0.1777
having a dishwasher	**0.2124**	0.1820	-0.0417
having a car	**0.1293**	0.0762	-0.0949
shortage of space (housing small)	0.1547	**0.2809**	0.0495
affording one week holiday	**0.6854**	0.0451	-0.0365
affording meal with meat	**0.6417**	0.1211	-0.0617
affording unexpected financial expenses	**0.6640**	0.1080	-0.0639
ability to keep home warm	**0.4265**	0.1548	-0.0387
capacity to replace worn-out furniture	**0.6968**	0.0725	-0.0545
capacity to replace worn-out clothes	**0.4827**	0.1966	-0.0879
having a chronic illness	-0.0520	-0.0058	**0.7073**
having a physical or psychological health problem	-0.0893	-0.0525	**0.7099**
medication needed	-0.1755	-0.0765	**0.1935**
dental examination needed	-0.1031	-0.0099	**0.1357**

A rotation of factors provides us a more meaningful interpretation as seen in Table 1. It seems that the first factor clearly reflects the financial conditions of the households that the variables basically pertains the "*financial deprivation*". First five variables (and shortage of space in the dwelling) load positively and quite high on the second factor and it is obviously related to housing conditions and the problems with the dwelling. Thus we can call this factor as "*housing deprivation*". The last factor has high loadings for variables that are mostly related with the health problems of the individuals, like chronic illness or medication need. Thus we can name this factor as "*health deprivation*". In related studies, Dewilde (2004) and Luzzi et al. (2008)

15

identifies four factors in their analyses. Dekkers (2004), on the other hand (as cited in Luzzi et al., 2008), identifies three factors which are financial poverty, social exclusion and poor mental health. Then the results are dependent to the numbers and nature of selected indicators.

After identifying the factors, we now turn to the results of cluster analysis. As described in the previous section, firstly, closest two groups of individuals are determined by the farthest observations between the two groups and the appropriate number of clusters are determined by using pre-mentioned stopping rules. Large values of the pseudo-F index and small values of the pseudo-t^2 index indicate distinct clustering and one must therefore maximize this statistic (Luzzi et al., 2008, p. 70). As seen at the left side of the table 2, the first eight cluster groupings are investigated and it shows that the solution for two clusters seems appropriate where the lowest pseudo-t^2 values are occurred. The right side of the table 2, on the other hand, shows the mean scores for two clusters. The first cluster which contains the most of the sample can be defined as non-poor cluster where the mean scores are found to be negative on all dimensions. It means that most persons are non-deprived in any of the dimensions. It is clear that the smaller cluster has positive mean scores in all dimensions which means that the persons belonging to this group are deprived in all dimension and can be classified as "multidimensional poor". In particular, it is also obvious that multidimensional poor people have a high positive value at the second factor which means that these group of people suffer most from the housing deprivation and this dimension seems more vital for poor people.

Table 2. Results of stopping rules for clustering and mean scores on the three factors*, 2010

Number of clusters	Pseudo-F	Pseudo-t^2	Cluster	Factor 1	Factor 2	Factor 3	Obs.	%
1	-	2594.00	1	-0.021	-0.176	-0.009	6,193	94,19
2	2594.00	16.09	2	0.347	2.850	0.156	382	5,81
3	1308.18	3022.00	*Total observations in the survey are decreased in proportion of 1/5 by selecting a random sample of total population to run a hierarchical clustering for a sufficient matrix..					
4	2223.76	7304.05						
5	4164.64	276.48						
6	3685.46	832.08						
7	3666.15	125.65						
8	3232.52	559.81						

The results of the study for the proportion of multidimensional poor may seem rather low, in respect of the traditional headcount ratio for Turkey, but it is consistent with Luzzi et al. (2008)'s results. At this point Luzzi et al. (2005, p. 72) suggest different explanations such as the overestimation of the traditional methods or underestimation of their methodology. But the main understanding about multidimensional poverty requires different results than the traditional approaches, because multidimensional view contains a great picture about poverty and measure something quite different.

5. CONCLUDING REMARKS

Poverty is a multidimensional phenomenon. The multidimensional view on poverty denotes a more comprehensive approach than the traditional monetary approaches by expanding the real freedoms that people enjoy. A multidimensional approach focuses on enriching human lives by covering all dimensions of human life, because many human choices extend far beyond economic well-being. Thus, only a multidimensional approach may reach the primary content of development process, by including both economic and non-economic factors and other social, political and cultural variables which make human life more valuable. In this study, we use a descriptive perspective and a statistical approach to identify poor and non-poor persons. Firstly, we use a factor analysis to classify the number of factors between relevant indicators and then employ a cluster analysis to partition total population into subsets.

The results show that multidimensional poverty indicates a different framework for poverty and it differs from traditional approaches by containing a more detailed picture about poverty, without question.

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LINKING HIGHER EDUCATION WITH THE LABOUR MARKET, UNEMPLOYMENT REDUCTION TARGET AMONG YOUNG GRADUATES OF HIGHER EDUCATION

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ABSTRACT

The quality of higher education is a requirement of present society. If until about two decades ago the society's degree of satisfaction with the quality of Romanian education was currently positive, one can nowadays speak of a rather large degree of discomfort, because universities no longer respond to the social requirements. The whole Romanian educational system has many loopholes whose long-term effect will lead to serious economic and social imbalances. A good educational manager is the teacher trusted by other teachers, is that favorite teacher of the students, whose results are noticeable and appreciated by most educational actors. The educational manager's qualities derive from the behavior that they have towards colleagues and students. Educational managers contribute to the formation and development of individuals, but also to the formation and development of society, so that their responsibilities require active involvement, adapted to the cultural, economic and societal context. Facilitating rapid insertion of graduates in active professional life should be the main focus of all universities in the country and abroad, especially since the unemployment rate among young people continues to rise from one year to another. The quality of higher education can be guaranteed inside and outside the university once linking higher education with the labour market is no longer a desirable concept in education management, but an achieved goal. Students need incentives, academics who know to motivate, to raise their interest, to awaken them to reality. This is only possible by teaching some interactive courses that allow the combination of traditional and modern methods of teaching and evaluation.
Keywords: Education management, Higher education, Labour market

1. INTRODUCTION

Managers of teaching institutions must deal with the implementation of a quality education system, as well as take into account the needs of the labour market, so that the graduates can find a job right after graduation. Although the success of an organization depends on its manager, during university education it is quite difficult to take measures because there are a number of managers, and the directives and the changes come from the Ministry of National Education and Scientific Research. Another obstacle that stands in the way of efficient management of the education system is represented by the far too frequent changes of managers, especially in pre-university education. Sitting properly assessed exams would be one of the solutions with positive effects in the education system.

The Bologna trial has supported governments' concerns for economic growth and rapid employment of graduates, but it seems that the existing rules for Romanian universities are not sufficient or are not well implemented, so that in 2016 the number of graduates who have not found jobs in the first months after completing their studies is very high. Although there are authorities that monitor the evolution of universities and the quality of undergraduate education, there is still a lack of correct classification of providers of undergraduate programs, as well as

a lack of a statistic regarding the graduates who have found a job in the field of their studies within one year. Higher education quality is reflected in the results of our graduates, and the speed with which they can find a job.

The correlation of university education with the requirements of the labour market is not only the responsibility of educational managers and universities, but in order to be implemented and to have the desired results, it requires the active involvement of all organizations who need employment, a high interest on the part of each student, but also objective and enthusiastic teachers engaged to convey information in a unique and empathetic way. Most students and master trainees lack motivation, which can be called the precursor of success or failure. Where there is no motivation, there is no success and there can be no satisfaction. To motivate the student means to ensure that at the end of the years of study he/she will be able to develop a professional career, and that comes from the collaboration with the business media and from the applicability of the information transmitted in class.

The paper represents an attempt at presenting the current situation of the higher education system from the perspective of the Romanian labour market and, at the same time, an accentuation of the need for linking higher education system with the requirements of the labour market. The objective of this work consists in demonstrating the relationship between academic preparation and the requirements of the labour market, which is why we have approached the educational management from the perspective of the labour market and have highlighted the need to establish a relationship between the current requirements of the labour market and the higher education system. The findings can be viewed as recommendations for improving the present system of education and facilitating access of higher education graduates to the labour market, thus contributing to the economic and social development of the country.

2. THE HIGHER EDUCATION SYSTEM FROM THE PERSPECTIVE OF THE LABOUR MARKET

The Romanian academic education system needs a careful reform, even though in recent years there have been developed and implemented multiple projects with the aim of increasing the performance of students. The most important change derives from the choice of appropriate managers, endowed with reason and passion to work with pupils/students and for them. Continuous participation in training courses of an educational manager and all teachers is more than beneficial for the whole process of education. Through these courses, teachers will adapt easily to educational changes and will learn how to properly use new didactic methods and means, realizing at the same time, the need to modernize the education system and to use technology and information.

The manager's credibility is an essential condition for guaranteeing success. In the case of an educational manager, reliability "consists in the possibility to combine the powers of both teacher training field and resource management" (Niculescu, 2010, 21). There are teachers who, though very well prepared, do not know how to convey information and to make themselves understood. It is often said that such people have no pedagogical tact. Or, for a leading position, pedagogical tact and knowledge in the domain of human resources management are important. To reduce the rate of unemployment among young people and to ensure transition from student life to professional life, education providers should be more sensitive to the needs of the labour market, because "changes in the nature of the skills are often dictated by the constraints of the labour market or market pressure" (Bevan, Cowling, 2007). In this sense, a solution would be for each manager of education at the university level to build his/her managerial strategy based

on the conclusions extracted from a thorough analysis of the requirements of the labour market. Such analysis carried out by each manager education from the higher education would lead to finding the most effective solutions concerning the issue of unemployment among young people. Being aware of the importance of statistics about the number of higher education graduates who have found a job or not within a certain period of time, graduates could help developing the statistics on their own initiative.

The secret of a developed society on all levels is "lifelong learning to acquire higher powers: to check, to conceive, create and invent" (Niculescu, 2010, 14). Not all individuals have the capacity to invent, to create, to establish their own business, in their case the intervention of specialized personnel in professional counseling is necessary. While there are professional counselors to help future students and masters trainees to discover their skills and capacity, the number of higher education graduates who will not use the diplomas decreases. There are not few young people who go to a college just because the name "sounds interesting" or because "it pays well" to work in that field. This kind of motivating factors does not ensure the completion of higher education nor guarantee the insertion of these young people on the labour market. A coach, a counselor can help young people to know their strengths and how to improve them following pecializations that fit and will provide future professional perspectives.

Active participation in the courses began to be increasingly rare. Students' skepticism comes from observing the increasingly difficult economic situation and the large number of immigrants. The impossibility of a future professional recognition persuades many students not to get actively involved, but to attend the courses just because it is a prerequisite in order to be able to sit the exam and because the parents would not accept their giving up the studies. Students are not the only ones to blame, because a teacher who does not know how to attract the audience will not be able to obtain good results. Innovation always attracts, the more so when the teacher knows to create interest. Active participation involves testing the knowledge, creativity development, implementation of acquired information and desire to perform and receive feedback, all of which are a guarantee of adaptation without any difficulty in any group.

Also from the perspective of the labour market, we can analyze the issue of volunteerism during student years, especially as the system of the points gathered through volunteering and the participation of students in different social projects are currently applied. This system represents an important step for supporting the extracurricular activities of the students. Non-governmental student organisations work with young people and for them. Their purpose is to involve more students in activities that lead to solving the student issues. They assume the role of a bridge between student problems and the university which they attend. In the case of volunteering, motivating students is a real challenge. The method of presenting the values, mission and goals of the organizations can be the first, but also the last contact of some of the students with that student organisation. Those who do voluntary work act in various educational projects, studying, improving, forming, setting the bases of strategies and student programs, interacting, running for various positions, but, most importantly, getting ready for the professional career, because the information they acquire during volunteering, the powers and abilities they form and develop, will help them to integrate more easily into the team at work.

Granting of scholarships of the Erasmus type and allowing the realisation of free exchanges of experiences is another way to stimulate students and master trinees. Through educational programs, students have the opportunity to get to know other cultural values and other education systems, to interact with students and scholars from other countries, to put their knowledge in practice. Unfortunately, study scholarships obtained by educational programs do not cover all

the expenses of the students, which cause many of them not to sign up for such an experience. Knowledge of other cultures and educational systems allows students to form an overall picture of the professional future within the country or abroad. At the same time, they can come up with proposals for improving the current system of higher education. Study scholarships, merit scholarships and social ones should not be neglected, especially since their value is quite small and does not motivate students to get good grades.

Through a positive educational management, universities can play a significant role as regards motivation for work and profession. It is not difficult, especially since "motivation for work develops in the family in the first few years of life, with the trend towards independence of the human being. (...) Professional background should be built since school while carrying out the educational process "(Cojocaru, Socoliuc, 2007, 151-152). Motivation is maintained by education by demonstrating the applicability of information, as new generations of students put a huge emphasis on the usefulness of the information.

E-learning is a new concept, but useful for a university education system whose aim is the facilitation of the access of graduates on the labour market. Using computers, Internet connection and all methods and means of modern communication allows the development of expertise in computer software extremely useful for the profesional future of the students. E-learging has determined the emergence of virtual universities, which, at present, are not seen as being very effective for the Romanians, under the conditions in which many graduates of high school want just to obtain a degree and not to study in order to assimilate the knowledge to help them to have a professional career. It is important for the society and not only that a virtual university should include "modern education technologies and, in particular, the unlimited possibilities offered by open and distance learning via the internet. Virtual iesniversity must be able to combine in the best way possible the modern with substantial scientific knowledge" (Bodea, Andone, 2007, 53). Limiting ourselves to the use of the Internet and new information technologies within universities, without diminishing the physical access of the students to the course, we list some of the economic benefits deriving from these: rapid and uninterrupted access to information resources, ecological advantages, large storage capacity, the individuality of learning, diverse dynamic technologies, reducing the time and cost of study, use of modern pedagogical methods, increase retention, etc. Man is a social being, requires interaction, and it cannot be replaced by technology, which means that school performance will be achieved most likely as soon as technology is used in the presence of academics, not without them.

The fact that the higher education of Romania influences the degree of employment and unemployment rate is not a novelty, just as it is not a novelty that there are problems at the level of higher education, issues that are starting to be more and more prevalent. Soon, reforming the education system will be vital, otherwise many universities will risk to close doors. In the center of this system should be the concern for quality and the needs of the labour market.

3. THE ADAPTATION OF THE HIGHER EDUCATION SYSTEM TO LABOUR MARKET REQUIREMENTS

Education management is "a complex and dynamic activity through which the educator (teacher, father etc.) in his capacity as a leader, develops and applies in an educational field (family, educational institution, other institutions that may have educational meanings) specific strategies designed to determine the educational attainment of the proposed goals" (Niculescu, 2010, 26). This definition can be completed, stating that, through the realization of the proposed educational goals pupils and students will be able to easily integrate into professional life. If we

think of education through labour market needs, we note that education prepares the individual for an active life professionally. "By default, university education aims to provide students with the knowledge, skills, abilities, values, attitudes and tools to assist them in developing in the context of existing opportunities in society, to be able to fulfill personal goals, to be able to contribute to the formation of the public property, to integrate into society" (Korka, 2009, 68). From here, we extract the idea that to be active on the labour market, individuals need professional advice and specializations that provide them with secure jobs following completion of undergraduate studies and a master's degree. The quality of higher education is evaluated by the Romanian Agency for Quality Assurance in Higher Education and by the Council of Academic Evaluation and Accreditation in Romania, according to the standards and performance indicators established by legislation. In addition, "the quality of education is evidenced both by the professionalism of our graduates, as well as the national recognition of the performance of teachers' scientific knowledge in such institutions" (Korka, 2009, 11). We have elite academics, intelligent graduate students, but still there are many changes to do at the level of this learning cycle. Creating, within universities, departments that connect students with the economic environment constitutes an important step for students, being a real test of the daptation of the higher education to the needs of the labour market. Monitoring student progress, as well as identifying the number of graduates of the undergraduate studies and master's degree who have found a job in the field of their education and the number of months needed for finding a job should be on the list of priorities of educational managers and future managerial decisions should be made according to the statistics. In this regard, some universities have their own databases and have even a Center for Counseling and Career Guidance. Student progress is not difficult to realize. It takes staff to monitor, carry out statistics, analyse and present the situation. However, to be able to establish the real number of graduates who were employed in 3 months/a year after graduation/master, it takes not only additional personnel, but also the involvement of graduates, willing to participate in these studies unanimously. Drawing the ALUMNI Association closer to universities would be ideal. The accuracy of the data is very important for the future of the society, of universities and of the national economy. Detailed presentation will help prospective students and their parents to reflect on the studies they choose. The data, together with the needs of the labour market, will provide a very clear perspective on the very popular areas, and the future graduates will be guided towards specializations that were less sought by students in previous years. The practice of undergraduates and master students within the ideal stage in the case of some of the universities whose students are used to getting hold of certificates and devising imaginary practice reports, based on designs found on the Internet or from friends. There are few who are obliged to perform their practice in the institutions with which the university has a contract. And there are even fewer students who realize the significance of carrying out the actual classroom practice. Practice raises the chances of employment; that is why some companies are willing to pay for this period of practice, to be able to recruit students to form according to the required standard. To stimulate students, internship programs were also created. Recently, volunteering within the non-governmental organizations started to be taken into consideration for practice, on the basis of a certificate issued by the organization in which it was carried out. This encourages volunteering. Instead of facilitating access of bachelor's and master's graduates on the labour market, the rapid development of higher education system can be considered an obstacle for young people who want to work. The financial interests of the state and those who have set up their own universities have contributed to the increase in the number of graduates of higher

education, which has hindered their placement on the labour market. There are currently 49 state universities and 56 private universities. In 2014, according to data published on the website of the National Institute of Statistics, 541,149 people were admitted to university (table 1), 414,229 of them being enrolled in the undergraduate cycle. The negative consequences of the existence of such huge numbers of universities are many, but perhaps the most serious is that specializations are approximately the same, and the market is saturated with graduates of law, economy, engineering.

Table 1. Number of people admitted to university in 2014 (date taken from the site of INSSE and processed by the author)

Education form	Type	Number for 2014
Higher education (bachelor's degree, master's degree, postuniversitary courses, doctorate, programs)	Public education	464.149
	Private education	77.504
Total		**541.653**
Bachelor's degree	Public education	345.336
	Private education	68.893
Total		**414.229**

The number of those admitted to college is very high, as people are admitted based on a file to most specializations and higher education is very permissive. There should be more stringent regulations in this respect, because the number of unemployed persons under 25 years old who have turned to Local Agencies for Employment in 2015 is 22.71% of the total number of people enrolled at these agencies. 40.48% of young people under 25 are graduates of higher education (table 2), which confirms the accusations above, namely that the specializations chosen by the students do not provide a job. Without knowing if they accepted posts listed below their level of training, 55.29% of the graduates of higher education under 25 have managed to get a job last year (2015). It is a relatively good percentage for a country with a poorly developed economy, but, surely, the percentage of higher education graduates under 25 who find a job could be increased if they entered specializations which are popular on the market.

Table 2. Number of people registered to ANOFM in 2015 (date taken from the site of ANOFM and processed by the author)

	Number of people	%
Total of people benefitting from active measures of stimulating employment	993.409	100
Out of which: under 25	225.627	22,71
Out of which: university graduates	91.330	40,48
Total of jobs taken in 2015	354.029	35,64
Out of which: under 25	75.069	21,20
Out of which: university graduates	41.503	55,29

To show the evolution of unemployed people under 25 with higher education, we searched for statistics in 2014 and 2015 on the web site of the National Agency for Employment, taking as its representatives the months of July and December. We chose July because it is the month in

25

which the students complete studies taking their diploma exams and December because it is the end of the year and already 5 months away from graduation. According to data in table 3, in July 2014 and 2015 the same percentage of unemployed under 25 was recorded – 16.70%, noting that in July 2015 the total number of unemployed people under 25 was lower by 1663 people (table 3). However, the largest number of unemployed people under 25 was registered in December 2014.

Table 3. Evolution of unemployed people registered to ANOFM between 2014 and 2015 (data taken from the site of ANOFM and processed by the author)

	July 2014		**December 2014**		**July 2015**		**December 2015**	
		%		**%**		**%**		**%**
Total number of unemployed people	460.990	100	478.338	100	451.168	100	436.242	100
Unemployed under 25	77.008	16,70	78.185	14,35	75.345	16,70	67.702	15,52
University graduates	3.621	4,70	5.933	7,59	2.868	3,81	3.629	5,36

Of the unemployed people under 25, graduates of higher education represent a not very high proportion, which would be a pleasant surprise if we did not take into account the data contained in table 3. On average, there have been more than 70000 of unemployed people under 25 who needed an agency for employment every year during the last two. Looking on chart 1, where we find the percentage of those under 25 who have completed higher education, we find that the reality is sadder than we thought and that, although there are very many students registered in college, not all complete the studies. There is, however, the possibility for the number of people enrolled in 2015 in some form of higher education to have fallen considerably, the young people choosing to look for work and not go to college, being demoralized by the reality in which they live.

Chart 1. The evolution of the unemployed under 25, university graduates (data taken from the NEA website and processed by author)
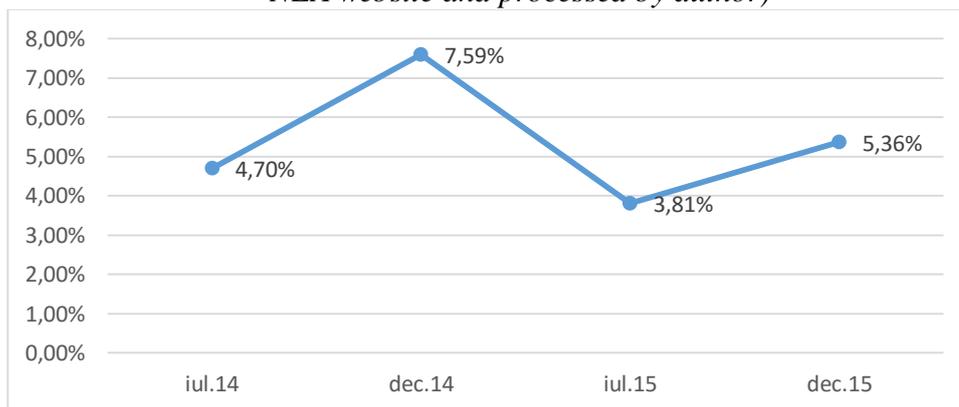
It is important to state that these statistics do not show the pure reality, since not all people who do not have a job are recorded at the County Employment Agencies. Here it becomes evident that the problems faced by the Romanian society from the perspective of job vacancies are waiting for urgent resolution, and adapting the Romanian education system to the needs of the labour market represents a prerequisite. A successful university system includes: good results in examinations, the transmission of knowledge that can be applied easily, sustainable

specializations, increase in professional cohesion, satisfaction at work, awareness of the role of academics, increasing the prestige of universities (Niculescu, 2010, 123), as well as the rapid insertion of graduates in the labour market, linking the education system with the requirements of the labour market, reducing the number of unemployed, economic, social and cultural development. All this should no longer be regarded as an ideal, but it should be turned into reality as soon as possible, so that it takes performing educational managers who know the loopholes of the system to which they belong and which have the "weapons" needed to deal with the challenges of society.

4. CONCLUSION

The present generation of pupils and students is an honest generation that loves the concrete and does not find the applicability of the information that they receive in school. Often, these young people are considered careless and lazy when it comes to efforts in class. The reality is, however, another, one that does not offer too many perspectives to current and future graduates of higher education, because the education system has not been adapted to the needs of the labour market in the last two decades. Young people who do not have a secure job are hopeless, are skeptical and introvert and are thinking about leaving the country as soon as they finish high school or when they turn 18 or are thinking about opening their own business. But there are also young people who want everything without offering anything but they enter another category. Society needs spectacular transformations at the educational level. Besides the fact that universities should renew their strategies and be more careful when choosing managers, it is also necessary to stimulate the young people through effective programmes of studies. Of course the state has an important role in these changes, and the granting of aids to that effect would be more than beneficial. At the same time, universities should draw up advantageous contracts with large companies to prepare students for the required fields. Encouraging volunteerism and conducting actual practical training must not be omitted, though. Also, let us not lose sight of the idea that education plays a major role in creating human capital, thereby contributing to economic growth and increase of production similar to physical capital (Drăcea and others, 2010). Analysis of the effects generated by government policies in the field of education on economic growth represents a subject deserving special attention, given the positive impact of the increase in education spending on economic growth.

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LONGER LIFE WITH WORSENING PENSION SYSTEM? AGING POPULATION IMPACT ON THE PENSION SYSTEM IN TWO COUNTRIES: ROMANIA AND CROATIA

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ABSTRACT

Around the world, the demographic trends show that countries are facing major problems like the declining of the birth rate and the rising of the life expectancy. Due to increase of the older people by 2.6% per year, faster than the annual increase of the total population, which is 1.2% per year, we are confronted with the aging population phenomenon. This phenomenon determines the rising of the old-age dependency ratio, requiring pension reforms adjustments in most countries. Amid these difficulties, throughout this paper we seek to analyze the impact of the aging population on the public pensions in two countries: Romania and Croatia. Also, our research is underlining the necessity of awareness of these difficulties by the Romanian and Croatian people and finding alternatives to supplement public pension.

Keywords: *aging population, comparative analysis, pension difficulties, Romania and Croatia, statistical research*

1. INTRODUCTION

Population aging, driven by the growing share of people over 65 in the population structure in all the states, amid rising life expectancy and declining birth population, has a direct influence on pension systems.

Globally, the elderly population grows at a rate of 2.6% per year, faster than the annual growth of total population, which is 1.2% per year. A study by the United Nations, published in 2009, shows that the percentage of people aged over 60 years increased from 8% in 1950 to 11% in 2009 and is expected to reach 22% by 2050 (Department of Economic and Social Affairs Population Division, United Nations, New York, 2010, p. XXV).

In Croatia, life expectancy will increase from 74 years for men in 2013 to 79.3 years in 2040 and 82.7 years in 2060. For women, life expectancy will increase from 80.7 years in 2013, to 84.8 years in 2040 and 87.6 years in 2060 (European Commission, 2015, p. 329). Romania joins the international trend shown to increase life expectancy, amid falling birth rate. Thus, in Romania, life expectancy will increase from 71.2 years for men in 2013 to 77.8 years in 2040 and 81.8 years in 2060. Women's life expectancy will increase from 78.2 years in 2013 to 83.5 years in 2040 and 86.7 years in 2060 (European Commission, 2015, p. 384).

Internationally, pension systems are mostly a combination of a public component and a private one. The most popular of pension systems constitute a minimum pension, guaranteed by the

public pension system, known as the PAYG system - "Pay-as-you-go", supplemented by a private pension, based on the personal contribution insured.

The direct effects of population aging are a *decrease in the amount of social security contributions in pension expenditure* as a result of reducing the number of contributors *and increase in pension expenditure* due to increased number of beneficiaries.

Amid these problems, this paper seeks to analyze some variables that characterize the demographic factor and public pensions in Romania and Croatia. It's about impact analysis of the following variables: the dependency ratio of the population over 65 relative to the population between 20 and 65, the replacement rate of pensions relative to net wages, the replacement rate of pensions relative to gross wage ; and coverage of retired population over 65 years over the share of pension expenditure in GDP.

The paper is organized as follows: the organization of pension systems in Romania and Croatia; a detailed description of the data used and methodology applied; a separate section regarding the achieved results and discussions thereof. In the last part of the paper the research findings will be presented.

2.   ORGANIZATION OF PENSION SYSTEMS IN ROMANIA AND CROATIA

At EU level, there isn't a common pension scheme, valid for all member states, but there are **differentiated pension schemes**, that generally include: a state component, respectively the pillar fully financed from social security contributions of participants to PAYG public pensions; the private occupational pensions component made up established by the contract of employment or mandatory private pensions; and voluntary pension component, constituted by individual accounts.

In **Romania**, the pension system is structured on the model proposed by the World Bank in 1994, namely the multi-pillar, with the following components: Pillar I, representing public pensions, under the supervision of the National Public Pensions - CNPP; private pensions system, with its two components: the second pillar II - private compulsory administrated component, launched in May 2008; and pillar III - voluntary pension component, launched in May 2007.

In **Croatia**, the pension reform was initiated in 1999. The pension system is also organized as multi-pillar: the public pension pillar I - PAYG, under the supervision of Croatian Pension Insurance Institute (CPII); Pillar II - mandatory pension funds and third pillar III of voluntary pension funds, introduced in 2002, under the supervision of Croatian Financial Services Supervisory Agency.

3.   DATA AND METHODOLOGY

To study the impact of aging on public pensions, we have analyzed certain data on demographic factors in both countries surveyed, Romania and Croatia, in correlation with spending on public pensions.

A first indicator that reveals the demographic factor in Romania and Croatia is **the ratio of population over 65 and the population aged 20-65 years**.

Thus, based on data provided by the National Institute of Statistics, in *Romania,* the total population fell from 23,206,720 people in 1990 to 22,435,205 persons in 2000, reaching 19,913,193 people in 2014 (Yearbook of the National Institute of Statistics in 2014 and Romania Tempo online database), of which:

- The population over 65 years has had an upward trend from 2,985,513 people in 2000 (representing 13.31% of the total population) to 3.375.500 people in 2015 (over 17% of the population);

- The number of population aged 20-65 years registered a downtrend from 13,689,834 persons in 2000 (over 61% of the total) to 12.332.760 million people in 2015 (over 62% of the total).

According to a study realised by Vasile Ghitau, whose conclusions were presented in January 2015, "Romania is entering its 26th year of demographic decline and until 2050 Romanian population will decrease to around 17 millions. Romania's demographic problem has become thus a national safety issue." (Ghetau, V., Demographical Studies Centre of the Romania Academy).

In *Croatia*, according to the 2001 census, of the total population of 4.43746 million people (Census 2001 http://www.dzs.hr/default_e.htm), the population aged 20 to 65 was 2,671,375 people (60 % of total population), and the population over 65 years was 693.540 (15.7% of total population).

The next census in 2011 the population of dropped compared to year 2001 la 4,284,889 of which the population aged 20 to 65 fell to 2,629,654 people (over 61% of the total), and the population over 65 years of rose to 758 633 people (17.7% of total population) (Census 2011 http://www.dzs.hr/default_e.htm). In 2014, the total population in Croatia dropped to 4238 thousand.

Data on demographic factor in Croatia and on public pensions were extracted from the Statistical Yearbook of the Republic of Croatia (http://www.dzs.hr/Eng/ Publication/stat_year.htm), supplemented by the Croatian Pension Insurance Institute. Official data are available for the period 2005-2014, as follows:

- The population over 65 years has had an upward trend from 752 800 people in 2005 (representing 16.95% of the total population) to 795 100 people in 2014 (18.76% of total population);

- The number of people aged 20-65 years decreased from 2.9568 million people in 2005 (66.56% of total population) in 2014 to 2.5671 million people (60.57% of total population).

Based on these data, we have determined **the dependency ratio** of the two countries, the ratio of people over 65 and people between 20 and 65 (Figure 1).
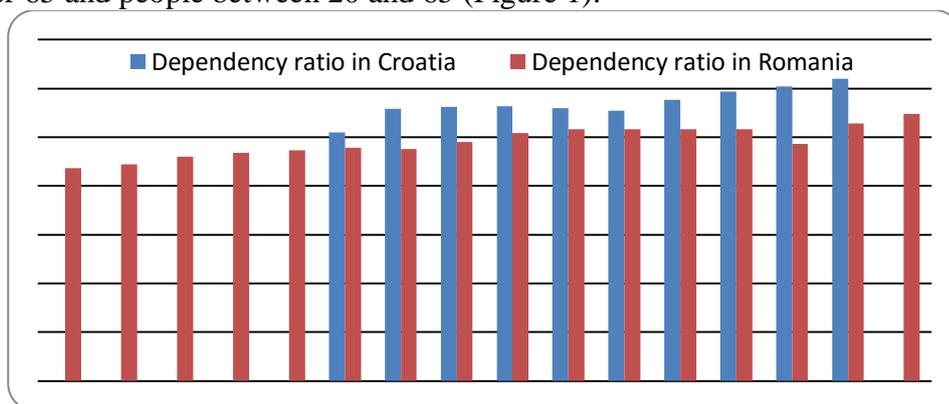
Figure 1. The dependency ratio of the population aged over 65 in relation to the population aged between 20 and 65 years in Romania and Croatia
Source: data extracted by the authors from the Romanian Statistics Annuaries 2006-2015 and Statistical Yearbooks of the Republic of Croatia 2010-2015

From Figure 1 it is observed that the dependency ratio of the population aged over 65 to the population aged between 20 and 65 is higher in Croatia, compared to Romania, as follows:

- dependency rate in Romania increased from 21.81% in 2000 to 23.94% in 2005, then to 26.44% in 2014, reaching 27.37% in 2015;

- Dependency rate in Croatia increased from 25.46% in 2005 to 30.97% in 2014.

Worldwide, from 2010, it is expected the aging population to accelerate, reaching doubling a dependency rate in 2050 at 50%, which means there will be two workers for every retiree (Aegon Global Pensions, Ageing population in EU27 and OECD Countries).

To measure **the ratio of the number of employees and retired**, we extracted the following data:

- for Romania, the number of pensioners fell from 6192.4 thousand in 2001 to 5196.1 thousand in 2014 and 5146 thousand pensioners in 2015; number of employees decreased from 4623 thousand employees in 2001 to 4507.73 thousand employees in 2014;

- for Croatia, the number of pensioners increased from 1026.06 thousand in 2001 to 1213.26 thousands in 2014, while the number of employees registered an upward trend during 2001-2008, from 1348 thousands to 1555 thousands employees, then the trend was decreasing until 2014, reaching 1342 thousand employees in 2014.

Based on these data, we determined **the ratio of the number of employees and retirees** in the two countries, noting that it recorded a downward trend in both countries, from 1 retired to 1.31 employees in Croatia in 2001, to 1 retired to 1.16 employees in 2015. In Romania, the ratio being below par, 1 pensioner to 0.88 persons in 2015, the situation is more worrying (Figure 2). For the first time since 1990, the report has become and was kept below par so far, since 1997.
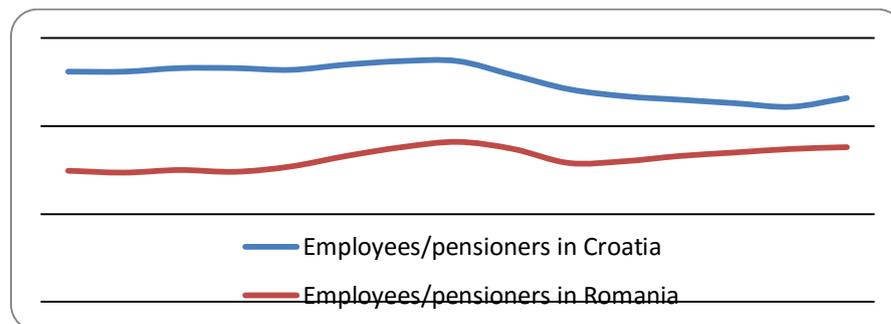
Figure 2. Evolution of the ratio of the number of employees and retirees in Croatia and Romania for the period 2001-2015
Source: data extracted by the authors from the Romanian Statistics Annuaries 2006-2015 and Statistical Yearbooks of the Republic of Croatia 2010-2015

Another indicator that we have used in the analysis of **the average pension replacement** represents the rate of medium pension replacement with the net salary (the ratio between the average pension and the average net wage).
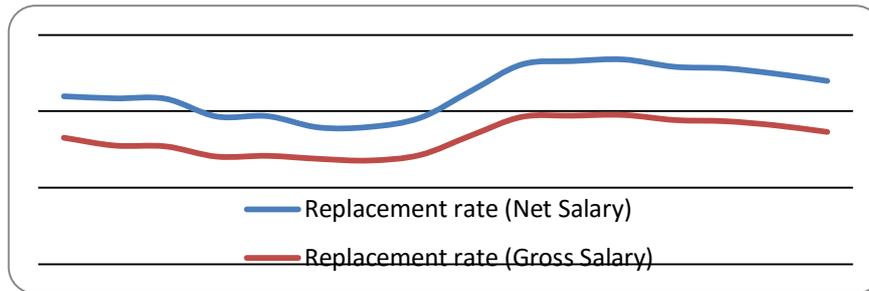
Figure 3. Evolution of the average pension replacement rate with average net wage,
respectively the average gross wage in Romania, during 2000-2015
Source: Data extracted and processed by the authors of the Romanian Statistical Yearbooks
2006-2015, Tempo online database - time series

We note that the rate of replacement in Romania registered a fluctuating trend during the period under review, so that in 2015 the average pension represents 47.94% of the net average wage and 34.61% of the average gross wage. Its highest level was recorded in 2011, to over 53.53% of net salary and 39.04% of the gross average salary, then registered a downward trend.

In Croatia, not all the data for the analysis of this indicator are available, so we cannot provide a comparative analysis on this indicator. Thus, Statistical Yearbooks information cannot found on the average pension and the Croatian Pension Insurance Institute reports are only available for 2015 and 2016 (http://www.mirovinsko.hr/default.aspx?id=10446). At the level of December 2015, the average pension was 2424.54 kuna and replacing it with the rate of average gross wage was 39.15% and the net average salary, 43.4% (Review of key information in the pension insurance system, Dec. 2015 http://www.mirovinsko.hr/ default.aspx?id=8406.

It notes that in regards to the pension replacement rate of the average salary in 2015, the situation is roughly similar in the two countries.

The evolution of the pension expenditure in the GDP in Romania and Croatia is shown in Figure 4. Thus, pension expenditure to GDP in Romania registered a decreasing trend during the period 2000-2006 from 6.11% to 5.09% after which an upward trend until 2010, reaching 7.78%, then again a downward trend, reaching 6.42% of GDP in 2015. In Croatia, the share of pension expenditure in GDP is higher than in Romania, registering a downward trend during 2001-2008, from 13.87% to 9.76%, then increasing to 11.21% in 2014.
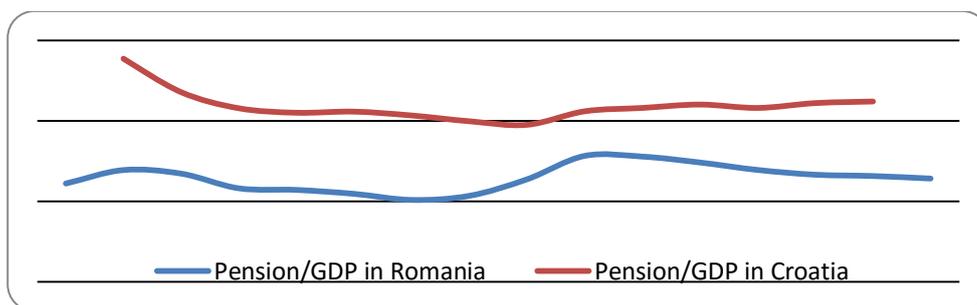
Figure 4. Evolution of pension expenditure in GDP in Romania and Croatia, period
2000-2015
Source: data extracted by the authors from the Romanian Statistics Annuaries 2006-2015 and
Tempo online-time series and Statistical Yearbooks of the Republic of Croatia 2010-2015

Based on the data presented above, we will make an econometric analysis using the E-Views program, considering the following variables:

- The share of pension expenditure in GDP: The indicator was calculated as a ratio of GDP - calculated by the method of production, current prices and the value of pension expenditure. During the analysis performed we will note it with *H_P;*

- Dependency ratio between the population over 65 and people between 20 and 65 years, which we noted in E-Views with *RAD*;

- Pension replacement rate with net salary (the indicator was calculated as the ratio between the average pension and average net salary), I noted in E-Views with: *RIF*;

- Pension replacement rate with gross salary, denoted with *RIB*;

- Coverage ratio (calculated as a ratio between the number of retirees and the population over 65 years), denoted by PAR.

The analysis was built on base of official data released by the National Statistical Institutes of the two countries.
For Romania, the analysis was conducted for the period 2000-2015 and for Croatia, the analysis was conducted during 2005-2014 as:

- official data dependency ratio between the population over 65 and people between 20 and 65 years are only available for the period 2005-2014;

- for pension replacement rate with net salary and gross salary, no official data is available with the value of the average pension;

- also, official data for the coverage rate of the retirees with the population over 65 are only available for the period 2005-2014.

The methodology used is the analysis of time series by linear regression, applying E-views. The purpose of this analysis is to determine how the influence of the dependency rate, pension replacement rate relative to net and gross average salary rate and coverage of retirees with the population over 65 years over the share of pension expenditure in GDP.

4. RESULTS AND DISCUSSIONS

To determine the model we tested whether the chosen indicators meet the following criteria: the variables are stationary (analysis that was conducted using Augmented Dickey-Fuller test), the errors are normally distributed (analysis that was performed using the test Jarque Berra) and uncorrelated.
Augmented Dickey-Fuller test, also called unit root test, is used to determine the nature of the series, whether stationary or non-stationary is.
Thus, the share of pension expenditure indicator in GDP in Romania (H_P), Augmented Dickey-Fuller test is shown in Table 1.

Table 1. Augmented Dickey-Fuller test for indicator pension expenditure to GDP in Romania

```
Null Hypothesis: H_P has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=3)
```

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.542184	0.1273
Test critical values:	1% level	-4.004425	
	5% level	-3.098896	
	10% level	-2.690439	

```
*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
    and may not be accurate for a sample size of 14
```

```
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(H_P)
Method: Least Squares
Date: 05/11/16   Time: 09:48
Sample (adjusted): 2002 2015
Included observations: 14 after adjustments
```

Variable	Coefficient	Std. Error	t-Statistic	Prob.
H_P(-1)	-0.402420	0.158297	-2.542184	0.0274
D(H_P(-1))	0.599361	0.216534	2.767977	0.0183
C	2.549418	1.030727	2.473418	0.0309

R-squared	0.486480	Mean dependent var	-0.037650
Adjusted R-squared	0.393112	S.D. dependent var	0.606730
S.E. of regression	0.472661	Akaike info criterion	1.526533
Sum squared resid	2.457493	Schwarz criterion	1.663474
Log likelihood	-7.685730	Hannan-Quinn criter.	1.513857
F-statistic	5.210384	Durbin-Watson stat	1.500708
Prob(F-statistic)	0.025590		

Source: authors processing in E-Views

As can be seen from Table 1, for the variable H_P, the test has a value of -2.542184, and the associated p-value (probability) is 0.0274. Since the test value is less than the critical value, we can reject the null hypothesis, which means the series hasn't got a unit root, so it is stationary. All series are stationary.

Multiple linear regression analysis

With the help of E-views we estimated a regression equation, choosing as dependent variable the share of pension expenditure in GDP. For Romania, the result is shown in Table 2.

Table 2. Multiple linear regression equation for variables considered for Romania

```
Dependent Variable: H_P
Method: Least Squares
Date: 05/11/16   Time: 11:58
Sample (adjusted): 2000 2015
Included observations: 16 after adjustments
```

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.34614	5.404166	-2.099516	0.0597
RIB	-0.020296	0.150546	-0.134819	0.8952
RAP	3.425450	1.224742	2.796876	0.0174
RAD	0.218672	0.130619	1.674119	0.1223
RIF	0.154993	0.102827	1.507324	0.1599

R-squared	0.909108	Mean dependent var	6.451777
Adjusted R-squared	0.876056	S.D. dependent var	0.830874
S.E. of regression	0.292515	Akaike info criterion	0.629705
Sum squared resid	0.941216	Schwarz criterion	0.871139
Log likelihood	-0.037642	Hannan-Quinn criter.	0.642069
F-statistic	27.50553	Durbin-Watson stat	1.778266
Prob(F-statistic)	0.000011		

Source: authors processing in E-Views

34

For each independent variable and constant, we determined the standard error coefficient, t-Statistical test and the probability associated with it. Choosing a significance level of 5%, we note that t-statistically test probabilities attached are different from one indicator to another and we can say that not all coefficients are considered significant in statistical terms.

Thus, the replacement rate indicator calculated on the basis of gross salary, RIB, is removed from the model, defining a fresh linear regression equation. We then will analyze the behaviour of each variable, as shown in Table 3.

Table 3. Calculation of the linear regression equation by eliminating a variable - Calculation for Romania

Dependent Variable: H_P
Method: Least Squares
Date: 04/19/16   Time: 18:59
Sample (adjusted): 2000 2015
Included observations: 16 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.62614	4.780672	-2.431906	0.0316
RAD	0.223403	0.120560	1.853045	0.0886
RAP	3.487120	1.088643	3.203180	0.0076
RIF	0.141279	0.014398	9.812709	0.0000

R-squared	0.908957	Mean dependent var		6.451777
Adjusted R-squared	0.886197	S.D. dependent var		0.830874
S.E. of regression	0.280293	Akaike info criterion		0.506356
Sum squared resid	0.942771	Schwarz criterion		0.699503
Log likelihood	-0.050850	Hannan-Quinn criter.		0.516247
F-statistic	39.93545	Durbin-Watson stat		1.820119
Prob(F-statistic)	0.000002			

Source: authors processing in E-Views

According to the analysis obtained in Table 3, all variables are statistically significant.

Another indicator which shows whether the regression model is well specified is R-squared. This Indicator shows what percentage of the total variance of the dependent variable is due to the independent variables.

As shown, in the equation presented, R-squared equals 0.908957, a value that is very close to 1, which shows that regression is well defined, 90.89% of the variation in pension expenditure in GDP is determined by rate dependence between people over 65 and people between 20 and 65 years (RAD), pension replacement rate of net salary (RIF) and coverage (RAP).

Estimation by linear regression equation for the variables considered is the following:

$$H\_P = C(1) + C(2) * RAD + C(3) * RAP + C(4) * RIF$$

Substituting the coefficients, we obtain the equation of the linear regression model, as follows:

$$H\_P = -11.626144396 + .223402884629 * RAD + 3.4871203759 * RAP + .141279177401 * RIF$$

It is also reported F-statistic and its associated probability. Since this probability Prob (F-statistic) = 0.000002 is lower than the level of relevance (F-statistic = 39.93545), it demonstrates that at least one of the regression coefficient is statistically significant.

Thus, according to the study for Romania, we can say that all indicators have a significant impact on the share of pension expenditure in GDP, as follows:

- Increasing the dependency ratio between the population over 65 and people between 20 and 65 thus determines an increase of the pension expenditure in GDP. Thus, population growth over 65 years at a rate higher than the population growth between 20 and 65 involves the application of measures of economic and social nature that discourage labour migration,

encourage the attraction inside the country of the population gone to work abroad, creating jobs to reduce unemployment, but also encouraging birth to ensure the future active population of the country;

- Increase of the coverage rate of the retired population over 65 determines default percentage increase in pension expenditure in GDP. Thus, increasing the number of pensioners at a rate exceeding the growth of population over 65 will have a negative impact on gross domestic product, increasing the share of pension expenditure in GDP. We note, however, that in the period studied, the rate of coverage is decreasing, which is assessed favourably;

- Increasing the replacement rate of the average pension to the average gross wage determines the default percentage increase in pension expenditure in GDP. In this respect, fully-average pension increase faster than average gross wage causes macro-economic problems, having a strong impact on the share of pension expenditure in GDP, raising them. For this, a solution to be adopted in Romania would be extension of public pensions with private pensions.

Distribution errors resulting from regression: to see if errors are normally distributed, I applied the Jarque Berra test. Jarque-Bera measures the difference between the asymmetry coefficient and the kurtotic of the analyzed distribution with the normal distribution. The test has the null hypothesis: the series is normally distributed. Thus, if the probability associated with the test is superior to the relevant level chosen (1, 5 or 10 percent), the null hypothesis is accepted. Since the kurtotic has a value of over 1, it means that this distribution is platikurtotic. Skewness approaches 0, having a value of 0.205371. For this analysis, the probability associated with the test is 0.887818%, which means that the null hypothesis is accepted, the series is normally distributed.

Autocorrelation errors of the regression equation: according to the results of this test, there isn't a serial correlation of the errors for 12 lags (autocorrelation coefficient value does not exceed the range rated in the chart). The existence of autocorrelation is confirmed also by Q-statistic test and its associated probability.

We also tested the autocorrelation of squared errors of the equation by the same principles as testing autocorrelation errors. If there is autocorrelation of the square errors, this is an indication of the existence of heteroskedasticity (ARCH terms). According to the results of econometric equation previously estimated, there is serial correlation of errors squared, so there may be terms ARCH.

For Croatia, due to the short period of time for which official data are available, namely 2005-2014, statistical correlations do not check for the variables studied.

5. CONCLUSION

The importance of the analysis of these indicators is given by the problems risen in all countries on aging and its effects on pension systems.

These problems manifest themselves in the countries studied, Romania and Croatia, too. According to Eurostat estimates, Romania's population will decrease by another 4.2 million inhabitants in the period 2010-2060, reaching 17.3 million. Romania will record four percentage decrease in the EU in this respect (-19.35%) after Bulgaria (-26.9%), Latvia (-25.6%) and Lithuania (-19.6%). Also, according to the old aged dependency rate, Romania will reach among the countries with the highest demographic pressure in Europe. In Croatia,

according to European Commission estimates, the share of pension expenditure in GDP will fall to 9.5% in 2030 and 6.9% in 2060 (European Commission, 2015, p. 329)

In response to these problems, most countries have adopted a series of pension reforms over the last 25 years. The measures included increasing contribution rates, restructuring pensions, increasing the retirement age, equalization of retirement ages for men and women, introducing private pension components in the structure of pension systems. In addition to these measures with direct impact on pensions, are necessary policies and measures of economic and social nature discouraging labour migration, encouragement of the attraction of the country population gone to work abroad, creating new jobs and encouraging birth to ensure the future working population of the country.

The question is which of these measures would be effective, considering that any economic and social policy must be adapted to the specificities of each country, starting from the premise that "each country has its own story" (Walter and Iglesias, 2010)?

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TRADE RECEIVABLE ANALYSIS

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ABSTRACT

Most frequent measure of company's performance is profitability. But profitability is only one important component used to analyze how successful companies are. Profits recorded in business books are irrelevant if they are not followed by cash flows. Chains of illiquidity are very important issue on microeconomic level which can also have repercussions on macroeconomic level if they get greater proportions so it pinpoints to the need of economic policy to strategically address it. Financial information and stock price movement data was obtained from financial statements publicly available on Zagreb Stock Exchange's official website. Main aim of this paper is to analyse how collecting trade receivables affects stock prices.
Keywords: *Receivables, Chains of liquidity, Listed companies, Zagreb Stock Exchange, Croatia*

1. INTRODUCTION

Trade receivables have lately become a very important topic since the problems of company illiquidity increased in recent years. Trade receivables have become one of the factors that are generally among the most important aspects to be addressed by the management of companies. Large companies for a long time have specific sectors that are engaged in debt collection and nowadays even small businesses are beginning to have a person in charge of collecting payments. The person in charge of collecting payments can not only earn their wages and justify their employment but can on many occasions ensure the survival of the company. Management of collection of receivables, its planning at the present time and its synchronization with the payment obligations of the company are basic requirements of each company in order to successfully operate. Reducing turnover days of account receivables to a minimum is certainly a primary goal of any successful management and thus affects the efficiency of the operation of enterprises. Trade receivables and its faster collection in any case affect the company's business, its profitability, liquidity and development. Surely, the enterprises that have greater problems with the collection of receivables are bound to reduce their investments or have other negative effects on the business activity of the company. Due to all the above mentioned, in this paper we will explore the impact of collection of receivables on the market value of the company. We'll concentrate on the impact of the collection of receivables on the price of stocks listed on the Zagreb Stock Exchange. Stocks that are listed on the stock exchange have been selected because the impact of changes of financial and business indicators in these companies can be seen the fastest.

2. RECEIVABLES DEFINITION – ACCOUNTING REGULATION

Definition of receivables can be found in International Accounting Standard (IAS) 39 Financial Instruments: Recognition and Measurement as well as in the Croatian Financial Reporting Standard (CFRS) 11: Receivables. IAS 39 defines receivables as financial assets with fixed or determinable payments that are not quoted in an active market. This excludes receivables held for trading or designated on initial recognition as assets at fair value through profit or loss or as

available-for-sale. And other than receivables for which the holder may not recover substantially all of its initial investment, other than because of credit deterioration, should be classified as available-for-sale. CFRS 11 also defines receivables as non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. This standard recognizes receivables as assets when they meet the definition of an asset and they are initially measured at fair value.

3. PREVIOUS STUDIES

Considering their impact on the company, it is not surprising that receivables were included in significant number of previous researches. Padachi (2006) examined the trends in working capital management and its impact on company performance. The results proved that a high investment in inventories and receivables are associated with lower profitability. Ramana, Ramakrishnaih and Chengalrayulu (2013) explored the impact of receivables on Current Assets Ratio, Receivables to Total Assets Ratio, Receivables to Sales Ratio, Receivables Turnover Ratio, Average Collection Period, Working Capital Ratio and Profitability Ratio (ROI). There are many different research papers on impact of receivables on profitability. Most studies have determined a negative relation between accounts receivable and company profitability. We can mention Deloof (2003), Laziridis and Tryfonidis (2006), Garcia-Jeruel and Martinez-Solano (2007), Samiloglu and Demrigunes (2008) and Mathura (2002) in Belgium, Greece, U.S.A., Spain, Turkey and Kenya respectively. On the other hand, Sharma and Kumar (2011) found a positive relation between Return on Assets (ROA) and accounts receivable.

4. DATA USED IN RESEARCH

Research sample comprises 75 companies which were listed on ZSE's regulated market in financial year 2013. It was composed using financial data publicly available on Zagreb Stock Exchange's (ZSE) official website.

Table 1. Companies divided in subsamples (activities)

No	Activities	% of companies in the sample
1	Agriculture, Forestry and Fishing	4,00%
2	Manufacturing	34,67%
3	Construction	5,33%
4	Retail and Wholesale Trade, Repair of Motor Vehicles and Motorcycles	5,33%
5	Transport and Storage	10,67%
6	Accommodation and Food Service	25,33%
7	Information and Communication	2,67%
8	Real Estate	1,33%
9	Professional, Scientific and Technical Activities	9,33%
10	Arts, Entertainment and Recreation	1,33%

Source: Author's calculation using data from the research sample

Sample is mostly comprised of companies which are classified in Manufacturing activity (34,67%), Accommodation and Food Service activity (25,33%) and Transport and Storage activity (10,67%).

5. FINANCIAL RATIOS AND RESEARCH HYPOTHESES

In order to present ability of a certain company to manage their receivables and liquid assets, receivables turnover ratio and net receivables to sales income ratio were used as measure of receivables management efficiency.

5.1. Receivables turnover ratio (RTR)

Receivables turnover ratio is calculated as ratio between sales income and trade receivables. Having in mind "ideal balance sheet", it is suggested that control measure for this ratio is 8 and also that higher ratio values are more desirable (Belak, 2014., p. 173.). Receivables turnover ratios is used to "measure the effectiveness of the firm's credit policies and indicate the level of investment in receivables needed to maintain the firm's sales level." (White et al., 2003., p. 120.) It is important to note that "firm's credit policies determine it's optimal level of trade receivables." (Palepu et. al, 2013., p. 194.)

5.2. Net receivables to sales income ratio (NR/SIR)

Net receivables to sales income ratio is calculated as ratio between net receivables and sales income. Net receivables are calculated as difference between trade receivables and trade payables. Higher or increasing net receivables are not necessarily desirable because they can indicate "slowdown in collection of receivables" (Belak, 2014., p. 175.).

Considering aforementioned facts, research hypotheses were established as follows:

Hypothesis 1 – there is statistically significant positive relationship between receivables turnover ratio and market valuation of a company.
Hypothesis 2 – there is statistically significant negative relationship between net receivables to sales income ratio and market valuation of a company.

6. RESEARCH RESULTS

In financial analysis, distinctive characteristics of certain activity must be taken into account. Financial ratios averages are provided for each activity in table 2. below:

Table following on the next page

Table 2. Analized financial ratios – descriptive statistics

		N	Mean	Std. Deviation
Receivables turnover ratio	**Agriculture, Forestry and Fishing**	3	10,91	7,87
	Manufacturing	25	5,41	3,69
	Construction	4	5,19	1,96
	Retail and Wholesale Trade*	4	6,93	4,94
	Transport and Storage	8	11,26	14,08
	Accommodation and Food Service	19	33,87	32,05
	Information and Communication	2	5,89	0,11
	Real Estate	1	43,56	
	Professional, Scientific and Technical Activities	7	10,68	16,60
	Arts, Entertainment and Recreation	1	54,76	
	Total	**74**	**15,34**	**21,78**
Net receivables to sales income ratio	**Agriculture, Forestry and Fishing**	3	-0,07	0,08
	Manufacturing	25	0,12	0,35
	Construction	4	-0,11	0,10
	Retail and Wholesale Trade*	4	-98,65	197,56
	Transport and Storage	8	-0,02	0,37
	Accommodation and Food Service	18	-0,05	0,14
	Information and Communication	2	-0,20	0,25
	Real Estate	1	0,01	
	Professional, Scientific and Technical Activities	7	-0,09	0,26
	Arts, Entertainment and Recreation	1	-0,02	
	Total	**73**	**-5,40**	**46,23**

*Full title of activity is Retail and Wholesale Trade, Repair of Motor Vehicles and Motorcycles
Source: Author's calculation using data from the research sample

Extremely negative mean values of net receivables to sales income ratio for "Retail and Wholesale Trade, Repair of Motor Vehicles and Motorcycles" activity are due to the fact that one of companies classified in that activity went through severe financial distress which had significant repercussions on average values.

Table following on the next page

Table 3. Correlations between receivables ratios and market valuation

		Delta_P	Receivables turnover ratio	Net receivables to sales income ratio
Delta_P	**Pearson Correlation**	1	0,473**	-0,475**
	Sig. (2-tailed)		0,0001	0,0001
	N	74	74	73
Receivables turnover ratio	**Pearson Correlation**	0,473**	1	0,081
	Sig. (2-tailed)	0,0001		0,391
	N	74	117	115
Net receivables to sales income ratio	**Pearson Correlation**	-0,475**	0,081	1
	Sig. (2-tailed)	0,0001	0,391	
	N	73	115	115

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

Source: Author's calculation using *IBM SPSS Statistics for Windows*, Version 22.0.

In table 3. correlation analysis is presented which shows that there is significant (at 0,01 percent), positive and moderately strong relationship between receivables turnover ratio and change of market value of a company. Also, there is significant, negative and moderately strong relationship between net receivables to sales income ratio and change of market value of a company.

Table 4. Linear regression models – summary

Predictors	R	R Square	Adjusted R Square	Std. Error of the Estimate
(Constant), RTR	0,473	0,224	0,213	0,433
(Constant), NR/SIR	0,475	0,226	0,215	0,433

Source: Author's calculation using *IBM SPSS Statistics for Windows*, Version 22.0.

Table 5. Linear regression models – ANOVA

Dependent Variable	Predictors		Sum of Squares	df	Mean Square	F	Sig.
Delta_P	**(Constant), RTR**	Regression	3,901	1	3,901	20,776	0,0001
		Residual	13,520	72	0,188		
		Total	17,421	73			
Delta_P	**(Constant), NR/SIR**	Regression	3,892	1	3,892	20,717	0,0001
		Residual	13,339	71	0,188		
		Total	17,231	72			

Source: Author's calculation using *IBM SPSS Statistics for Windows*, Version 22.0.

Table 6. Linear regression models – independent variables coefficients

Dependent Variable: Delta_P	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0,071	0,062		-1,145	0,256
RTR	0,011	0,002	0,473	4,558	0,0001
(Constant)	0,059	0,051		1,155	0,252
NR/SIR	-0,005	0,001	-0,475	-4,552	0,0001

Source: Author's calculation using *IBM SPSS Statistics for Windows*, Version 22.0.

Table 5. shows that both analized linear regression models are statistically significant. Table 6. shows that independent variables coefficients are statistically significant and positive for receivables turnover ratio and it implies that increase of this variable will be followed by an increase in the market price of share. Coefficients are statistically significant and negative for net receivables to sales income ratio, which leads to conclusion that increase of this variable will lead to decrease in market price of share.

7. CONCLUSION

Main aim of this research was to explore how investors react to company's efficiency in receivables management. By assessing receivables turnover ratio and net receivables to sales income ratio investors can determine company's credit policy, but also analyze the likelihood that financial distress will occur in near future. The results of statistical analysis provided fundaments for accepting established hypotheses. Consequently, it can be stated that there is statistically significant positive relationship between receivables turnover ratio and market valuation of a company and also that there is statistically significant negative relationship between net receivables to sales income ratio and market valuation of a company. These results imply that investors take into account how companies handle their receivables collection. Although it is not topic of this research, it is not negligible to highlight the fact that collection of receivables is not always controlable in it's entirety because it also depends on macroeconomic situation.

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ICT-BASED LEARNING ORGANIZATION SUPPORT SYSTEM: MANAGING CONTINOUS CHANGE

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ABSTRACT

Due to rapid changes in economy and business environment, change management has been the topmost issue for business leaders. Capacity and readiness for change are most highlighted issues in continuous change practices. This provoked for inbuilt quality and capacity in an organization to change. Many researchers and scholars tried to investigate that what features or qualities are required in an organization to cope with continuous change and an ideal organization named as "learning organization" concept emerged as a probable solution in this scenario. This paper attempts to summarize the discussion by identifying key features of a learning organization which has consensus. Secondly, this paper explains that how a learning organization behaves and interacts in a continuous change process. To explain this process a conceptual model is presented which is composed of four parts: learning organization, change capacity and readiness, transformation, and antecedents of change. Most of the literature on this topic discusses 'what to be' for learning organization but 'how to be' a learning organization there is a literature gap. The most important contribution of this paper is to address this gap. It is identified that Information and Communication Technologies (ICT) can play an important role. This paper proposes a system based on ICT which can help in development of a learning organization named as learning organization support system (LOSS). The system is based on a simple idea that feedback, discussion and flow of information about current scenario with the memory of past through ICT-based knowledge sharing processes, knowledge assessment and development system can develop an organization into a learning organization. A pilot test was conducted to test one of its parts (knowledge assessment and development system) by using STUDIO, an e-learning platform developed by Corvinno Technology Transfer Center. The test verified the effectiveness of ICT-based assessment and development system. Results positively encourage the idea of LOSS.
Keywords: Change Management, Change Readiness, Learning organization

1. INTRODUCTION - BACKGROUND

What is the only constant factor in all areas of life? Obviously, that is 'change'. Today, all the organizations with no exception are continually facing the challenges of change. To survive, and to be in the competition, organizations have to take an initiative to adjust and meet the challenges. In the era of accelerated business dynamics, changing personnel structure, and globally networked business processes, this phenomenon of change management has become mandatory (Klews & Langen, 2008).

The change management literature says that the need for continual, rapid and dramatic change whether it is planned or unplanned have been a matter of interest and necessity for business leaders. This resulted in special attention to the tension between problem-driven and vision led strategies of change (Branch, 2002).

The literature reveals that utmost problems faced by organizations are the issue of sustainability in dynamic environments which compels the organizations for continuous change to adjust new situations. Global competition and rapid changes in technology ensure frequent changes in a business environment. Now, it is compulsory for organizations to evolve for growth and success. It is not a one-time issue, therefore it is crucial to equip with the ability to adapt. Any

temporary or ad hoc approach does not work. It requires meticulous analysis, planning, and execution of change, otherwise, organizations should ready for disaster.

According to Worley and Lawler (2006), in the twenty-first century, sustainability has become a competitive advantage for organizations. This situation demands the capability to learn from individuals as well as groups. Instead of going for change efforts or change adaptation, organizations should build change. According to the above authors, many organizations and their design are actually creating hurdles in implementing changes. Organizations require building practices and developing a culture that encourages change rather create hurdles in it.

West (1994) says that market environments are changing rapidly and global interdependencies are increasing which are compelling for flexibilities in organizational designs and structures. Furthermore, the constantly changing nature of demands of customers and changing work patterns are creating the need for individuals and organizations to deal effectively and efficiently with ambiguity. This requires the organizational members who are responsible for sustaining and creating value, skills, knowledge bases and processes, and systems which generate effective responses for dealing with change. This requires and calls for responsive systems, cultures with high trust and capable knowledge workers to participate in problem solving and decision-making at discovery point rather than relying on command and control systems.

A decade ago, the business leaders were not prepared to give value to the concept of sustainability and considered this investment as an extra cost to their business but the situation has been changed radically. Now, business leaders started referring sustainability as a safeguard, source of opportunity and competitive advantage in a long term (Lubin and Esty, 2010).

The role of top leadership is very important to deal with sustainability. It demands a change in thinking, approach and attitude from leaders. If leaders want to change the outcomes, then they have to change existing business structures and for this, they need to understand new strategies and their implementation (Millar et al., 2012). The pace of change has been fast for many years within the industries and coping with this change is a key to competitive success. Once, CEO of Dell, Michael Dell said "The only constant thing about our business is that everything is changing. We have to take advantage of change. We have to ahead of the game".

1.1 Problem statement

As discussed above, the economic and business environment are very dynamic. This factor continually pressurizes the organizations to adapt and cope with challenges. One time effort, after a long time, can be manageable, but on a regular basis, it is very difficult to handle. The most important part and who suffer in this process is the human resource. During the change process, the organization faces two major types of challenges:

- Knowledge and competencies required for new task
- Change readiness

Managing change is basically to move from current state to the desired state. The desired state requires different or more knowledge and competencies. There are two options for management; new hiring or training and development. It is not possible to hire people repeatedly and especially in large numbers. So the pressure will be on training and development department. The second major challenge is readiness for change. It includes predictive capabilities and many other things like resources, technology and management support, etc., but research studies reveal that the most challenging issue in the change process is dealing with motivation and resistance to change.

The reasons are simple:
- Employees don't know why this change is important
- Insecurity
- Ambiguity about their future

An organization can deal these challenges when:
- It has proper communication and awareness system which can tell what the organization is doing, what are the challenges and what are the probable solutions?
- Awareness about what is happening in the industry and the economy.
- Knowledge about: what are dynamics and trends in the industry?
- Opportunities for improvement and development
- Flexibility in learning patterns.
- Supportive culture

In this scenario, traditional change interventions are problematic with respect to time, budget and change readiness. To deal with this issue, business leaders are moving towards a self-regulatory approach to change. This approach seeks for organizational ability to deal with rapid changes and sustainability problems. The concept of continuous organizational learning has also emerged in this context. In conclusion, the demand of time is that the organization should be capable of self-regulation and has the capacity to adapt change in a timely manner as a routine matter. The scholars named such kind of organization as "Learning Organization".

There are three main objectives of this study.

Objective 1: To identify features and characteristics of the learning organization (LO).

Objective 2: To develop a conceptual model which indicates how a learning organization supports in managing change?

Objective 3: To propose an ICT-based system which can support the development of a learning organization?

1.2 Rationale

This study will contribute as fresh insight to understand how learning organization can contribute in the change process. Change management is the topmost issue for business leaders in the dynamic environment. Sustainability and survival are major challenges for organizations. The most suggested option by researchers is the self-regulation approach. This study provides a foundation for the self-regulation concept which will be helpful further in sustainability and continuous development of organizations. Most of the studies just deal with "what should be" regarding learning organization, but this study also tries to deal with "how it can be" by proposing LO support system.

2. LITERATURE REVIEW

The term "Learning organization" is a mix of complex ideas and has been presented for a long time. This concept broadly tells that it is most likely possible to deal with change and uncertainty when appropriate and continuous learning takes place, all the time and throughout the organization. There are numerous interpretations and ways of thinking about learning organization, which are linked to the learning and development of all its members. Often, two terms are confusing and some people use these interchangeably, learning organization and organizational learning. But, there is a distinction between these two terms. According to Ortenblad (2001), organizational learning is the existing process, on the other hand, learning organization is a form of ideal organization.

2.1 Learning Organization

Where the concept of learning organization came from? What is its origin? Who are the founders of this concept? These are the questions which naturally come in the mind of a researcher. According to Cors (2003), the prominent contributors in learning organization concept are Chris Agyris, Margaret Wheatley, Donald, Schon and Peter Senge. Most of the people, consider Peter Senge the father of organizational learning concept. The term "Learning Organization" got recognition broadly, when the best-selling book of Senge 'The Fifth Discipline' was published in 1990. He says that learning organization derives and values competitive advantage by continuous learning at individual and collective level.

Learning architecture of a learning organization is based on principles of practical wisdom. Such kind of organization, deals with seven fundamental principles and pillars of wisdom which are developing personal wisdom competency, deliberating towards ethical models, understanding dynamic complexity, shared sustainable vision, group wisdom dynamics, embodied learning and deliberated praxis (Rowley & Paul, 2008). Primarily, the learning organization commits itself to get and use feedback for development. It seeks data constantly from all levels, whether it is individual or group, department or organization as a whole, to make it more productive, creative and successful in uncertain future in an uncertain environment.

Rowden (2001) says the learning organization engages itself in problem-solving to enable the organization for continuous experimentation, improve, change and enhancement of its capacity to learn, grow and achievement of its purpose. Jamali and Sidani (2008) mention that two important components of the learning organization are individual learning and organizational learning as a whole. An effective learning organization has five salient characteristics. Those features can be identified by the participation of employees, learning climate, continuous experimentation, systematic employee development, and reward system for learning.

Peddler (1995) defines the learning organization as the one, which facilitates to all of its members regarding learning to transform themselves continuously. Phillips (2003) emphasizes, that individuals learn when they get the meaning from information and integrate it with knowledge and consciousness, which affects the way organization reflects its environment.

According to Sudharatna and Li (2004), characteristics of learning organization can be categorized into performance upgrading, cultural values, leadership commitment, empowerment, communication and knowledge transfer.

Murdoch (1995) concluded the work of Senge about the learning organization. According to him, in learning organization people increases the capacity to attain their desired results, nurtures new thinking patterns, set free the collective aspiration and continuously learns how to learn. Organizations must have to be fit and meaningful in complex environments to survive. There are five main ingredients of learning organization, which include system thinking, personal mastery, shared vision, mental models and team learning.

Systems thinking: It basically sees the entities as a whole and it covers structures and development of a framework to see the relationship between entities in complex situations. It is more relevant to education because of its high degree of complexity and human involvement.

Personal mastery: Individuals actually contribute to organizational learning by creating a vision and it is mandatory to measuring the current state of reality. This spurs the creative tension. By doing this, there can be a problem because individuals' vision can be totally different from each other. This threat provokes for discipline the shared vision.

Shared vision: This is a glue to unite people in the same direction. It provides the purpose and moves towards values, but it should be linked with system thinking,

Mental models: The purpose here is, to seek for rich picture information. This leads to the development of vision because it calls for mental interpretation of a situation. It requires

recognition of long-term change patterns and factors causing those patterns and interrelationships.

Team learning: This is about the engagement of individuals in discussions and dialogs. It includes resolving conflicts and practicing discipline. Team learning is a sort of skill and individual must be trained and taught to be a team learner rather than independently working together. Wholeness is required to minimize the individuality and limiting the fragmentation.

The 4I model contributed by exploring the learning flow in the organization and provides four major steps to embark organizational learning. First 'I' is intuiting which is about individual experiences, tacit knowledge, and individual's expertise. Second 'I' is about interpreting the sources by discussion and communication. It is individuals' or groups' expression on people's ideas and actions. In this process, the individuals interpret things consciously and develop cognitive maps. Third 'I' is about the integration of abstract and practical, and communication about practices. Fourth 'I' is the institution in which soul of organizational learning is embedded in systems, strategies and structures (Huang & Shih, 2011).

As the term learning organization tells that it is all about learning. There are three types of learning; individual learning, collective learning, and deuteron collective learning. The principles of individual learning are not applicable to groups, but the source is individual learning because it is collaborating effort and effect of a group of individuals which creates organizational learning. The third type of learning is called Deuteron learning. This is an effort for learning that how to learn. The purpose is to make learning explicit and provide organization to leverage a continuous commitment to learning (Francis, 1997). Learning takes place in many ways and at different levels. Unconscious processes, hidden political agendas, and different perceptual models influence the organizational choices. The learning organization stimulates and activates the learning approaches which are congruent across levels in learning hierarchy. It is essential to be congruent with the vision and mission (Garavan, 1997).

2.2 Flexibility and Capacity for Change

Organizational readiness-to-change is defined as the ability of the organization to deal with change. According to Murdoch (1995), the meaning of a learning organization is a shift of mind in which the organization continually enhances and expands its capacity, which further creates its future. Such organization must possess both adaptive learning to survive and generative learning to get a competitive advantage. It is necessary for learning organization to learn faster than its competitors. To achieve this, it requires identifying, storing and utilizing capacity to learn and commitment by peoples at all levels. Due to complex and dynamic nature of business environments, it is a prerequisite for a successful organization to be more meaningful.

2.3 What is learning anyway?

There is no single definition of learning which is universally agreed. But, in a simple way it is about how we change. After learning the state becomes different than before learning. There are four kinds of learning which are important for learning organization, which includes learning about things (knowledge), learn to do things (skills, abilities), learn to become ourselves (potential, self-development) and learn to achieve collaborative things. As a result, people learn and become able to transform ideas into practice (Pedler, 1995).

The organizations use information to support decision making, sense-making and knowledge generation. In result, it helps in constructing shared meaning of its actions and applying new knowledge. The learning organization possesses knowledge and information which gives a special advantage which enables an organization to maneuver by intelligence and creativity.

The enhancement of skills and expertise enables and engages the employees in continues innovation and creativity. The spirit of a learning organization is the effective and efficient

management of information processes that supports knowledge in the course of knowledge creation, sense making and decision making (Choo, 2001).

Braham (1996) says that in the learning organizations, the individuals are important because they act to learn and then act to produce results. All knowledge should be generalized in an actionable pattern. Organizational learning is learning about learning. This results in a new connection between employees and their work which further spur an organization to create a future (Denton, 1998). Organizational learning is the capacity to adapt and use knowledge as a source of competitive advantage. Learning must produce a change in organization's action patterns and behaviors (Garratt, 1995). A learning organization is directly related to learning processes where energy and learning of people are released in daily works and business operations (Marquardt & Kearsley, 1999). There is a powerful capacity in learning organization to collect, store, and transfer knowledge by which transforms itself for success. Learning organization empowers its people to learn and most critical component is to use technology to optimize learning and productivity (Pedler, 1997). One of the aspects of a learning organization is to help groups to learn, analyze and change their culture to strengthen their system (Senge, 1990).

Hill (1996) suggests that the organization who wants to move toward total quality management (TQM) must deal with organizational learning. He argues that total quality management and organizational learning are inextricably linked. TQM is the compelling reason to go for learning organization and nominated it as the passport to continuous improvement which includes learning of new and better ways to do. It is not possible without learning. He alarms that learning will be the only way to survive and competitive advantage in the future.

Ahmad (1998) provided the evidence that contribution of learning organizations in innovations were 57% which was measured by learning dimensions. Soparnot (2011) identified three dimensions which enable the change. Those three dimensions are processes, context and learning dimensions. The context dimension is about resources which help in the process of change. The process dimension is about rules and principles of change implementation. And the third dimension deals with organization's introspective capacity.

2.4 Antecedents to change

For continuous improvement in an organization, it is mandatory to document the results in a careful and planned manner for future reference. This is a standard procedure of any well-documented quality management system. The organization improves its operations in light of its learning from previous efforts and moves (Hill, 1996).

According to Barnett and Shore (2008), there are three main antecedents to change. The first one is the environment of the organization which also includes climate and culture of an organization. The second one is resources, which is one of the important factors considered before any change intervention. The third one is the history of an organization, which can be considered as the memory of an organization. It covers past experiences about change occurred in the organization. This is also an important factor considered by planners before planning any sort of activity.

2.5 Conceptual Framework

There are four phases or steps of self-regulation based continuing change process: learning organization, capacity and flexibility for change, transformation and antecedents of change. The first part – learning organization is already addressed in details. The second part is the flexibility and capacity for change. If an organization has obtained a high level of learning organization characteristics, it should also hold a high level of organizational readiness-to-. The study of Sudharatna and Li (2004) verifies the relationship between learning organization characteristics and the company's readiness-to-change. Results indicated that there is a moderate relationship

between learning organization characteristics and readiness to change. According to literature, to deal with change there must be a certain level of flexibility in organization. Because change process requires changes in culture, attitudes, behaviors, values and structures. And this capacity can be developed by learning organization culture. The learning organization culture enables the innovative and creative capacity of knowledge workers at both individual and group level, which further contributes to the organizational knowledge base. Organizational learning is about changes in the organizational knowledge base, which indicates the competency and capacity to act and deal with problems (Massingham & Diment, 2009). According to Murdoch (1995), the basic meaning of a learning organization is a shift of mind in which the organization continually enhances and expands its capacity, which further creates its future. Therefore, to deal with change, the learning organization is one of apparatus to endure and grow in a changing business environment. The degree of success depends on how much an organization focuses on the development of specific characteristics of a learning organization. The third phase is transformation. Change management has been normally defined as a practice involving unfreezing, moving, and refreezing procedures, values, and practices within an organization. Unfreezing refers to the sense-making of a perceived discrepancy between the existing and model state of an organization that creates a need for change and lowers people's opposition to change. Moving refers to, the different processes such as training, education, and restructuring that guide to the development of new behaviors, approach, and thinking. Re-freezing is about, reestablishing a new state of equilibrium within the organization by maintaining the new patterns by a variety of mechanisms. It is the actual phase where the organization actually transforms itself into the desired state. The transformation of an organization becomes easy due to flexibility and enhanced capacity of individuals and the organization as a whole. In Lewin's model of change, the first stage is unfreezing. The people are now capable of changing themselves after two steps of the process. The fourth phase is antecedents of change. According to Barnchangeett and Shore (2008), there are three main antecedents to change which includes the environment, resources, and past experiences. When transformation takes place, the organization is in a new state now. Changes are occurring in people's behaviors, culture, structures, and processes. Now, it is in the minds of people why they changed and what was the desired state? Whether they achieved the purpose as they expected? What were the issues and hurdles in the previous change? These all information becomes the memory of an organization. These all memories, experience, expertise and structures become the foundation for future change efforts. The organization further utilizes these antecedents and this is how learning and change process goes on.
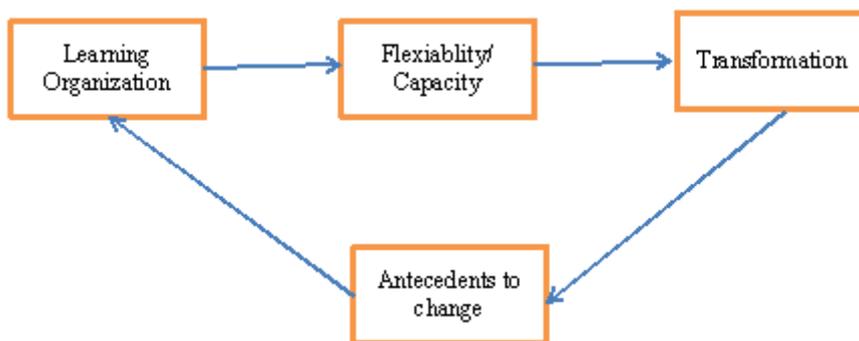
Fig. 1 Comceptual Framework Learning Organizationa and Change Process

3. LEARNING ORGANIZATION SUPPORT SYSTEM (LOSS)

There is a famous definition of 'reformer'. "A reformer is a person who knows the history and issues of the past, makes provision in current circumstances and leaves clues for future". Same

applies on reformation, at the organizational level as an entity. An organization must have a system that would help the organization in making readiness and capacity for change. According to Wenneker et. al (2002), when individuals share their knowledge by using ICT, the knowledge is changing from implicit to explicit and becomes the group knowledge. If the group knowledge is available (e.g. on the intranet) like reports, memorandum, then it is an explication of knowledge from group level to the organizational level. As the availability of knowledge increases by using knowledge sharing processes, then individual knowledge becomes common and collective within the organization. Over time, individual knowledge becomes the group or organizational knowledge. Turnaround, organizational knowledge is going to individual knowledge too. It is two-way traffic, internalization to externalization and externalization to internalization. ICT applications encourage and stimulate the sharing of explicit knowledge. Applications like multimedia, computer simulations, video-conferencing, that are supported by various ICT tools can facilitate in the dispersion of implicit knowledge.
Lal (2015) conducted a study on importance and development towards ICT-based systems from traditional systems. He found 18 organizations have already started cloud-based Learning Management System (LMS) and remaining are still estimating the benefits of these systems. He summarized the reasons and factors which caused this shift which are: cost flexibility, on-demand, accessibility, 24/7 monitoring and support scalability and integration.
The ICT systems based on this architecture (fig. 2 LOSS) can helpful in the development of a learning organization. Because, this facilitates in developing all the features a learning organization looks for. If all the information about the industry, organization and departments are available, then this will provide a holistic picture meaning 'systems thinking'. When an individual knows the larger picture and his demanding role, this stretches the person for his creative contribution meaning 'personal mastery'. When, all people have a clear picture of the situation, opportunities and threats, and the way outs, this provokes for a shared vision. When the situation is further analyzed and discussed among organizational members with different expertise and talents, helps in understanding and conceptualizing the issues means ' mental modeling'. At the end, the issue is how to deal with situation practically? This requires;

- What knowledge, skills and abilities (KSA's) are required?
- What KSA are available?
- How to fill discrepancy, if exists?

An organization can deal with the above questions only when it has proper assessment and development system. In conclusion, the proposed ICT-based system includes all important features required in a learning organization.

Figure following on the next page
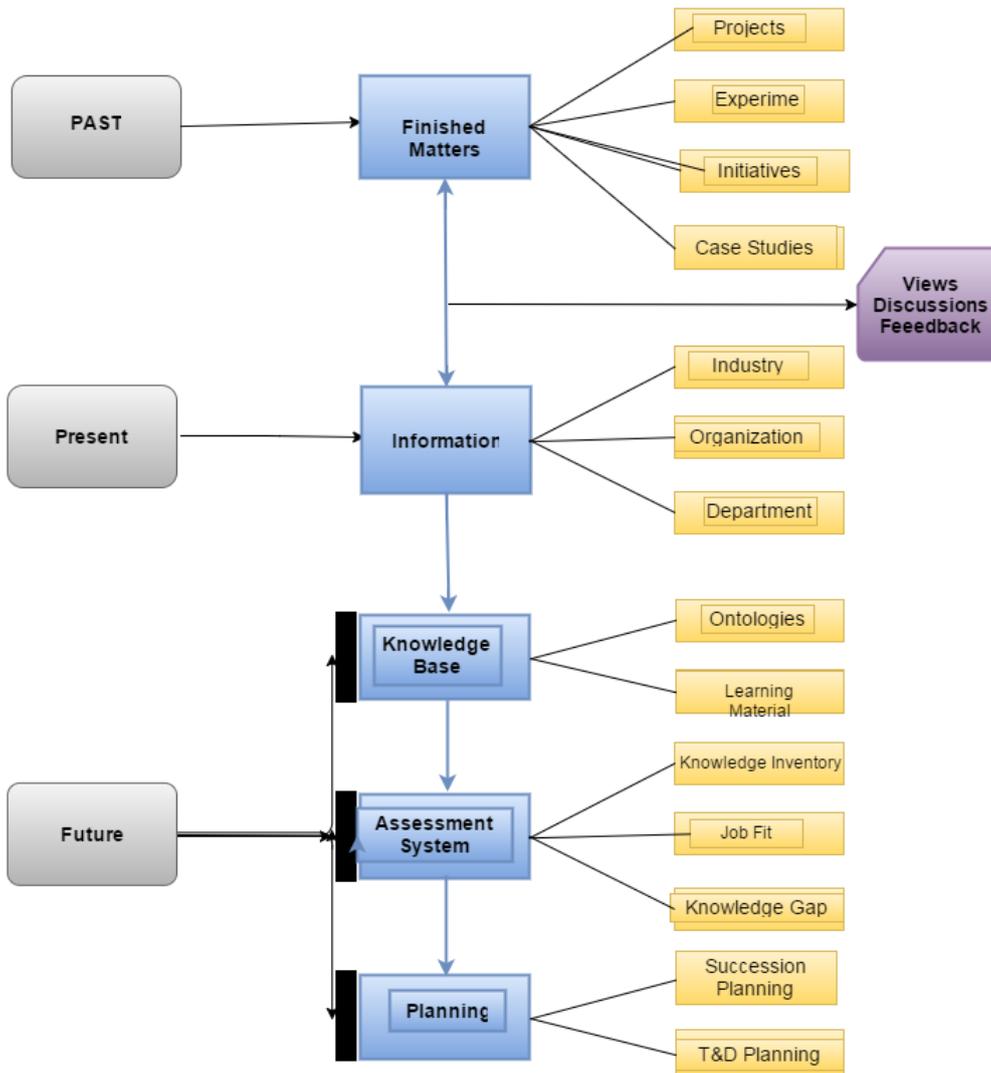
Fig. 2 LOSS

3.1 Partly Empirical Evidence

To test the effectiveness of ICT-based application in knowledge assessment and development, a test was conducted on HRM students of the Corvinus University of Budapest . First, HRM ontology was developed and ontology here means the classification of knowledge areas and their relationships. There were two objectives;

- Knowledge assessment and analysis
- Filling the knowledge gap

To achieve the first objective, involved variables provided the following information for detailed analysis.

	Information Type	Description
1	Nodes	Knowledge Categories (Concepts)
2	AskedPerAll	Tested Area from Whole Domain
3	AcceptedPerAsked	Success ratio from Tested area
4	AcceptedPerAll	Success ratio from Whole Domain
5	Results about each knowledge category	Individual/Collective Level
6	Comparative analysis	Learning progress
7	Knowledge Gap	Comparison between Desired and actual

To achieve the second objective, learning material was developed and uploaded in the system. The material was based on written materials, pictures and videos, by considering the different learning behaviors and priorities of learners. Both, assessment and learning were very flexible keeping in mind the routines and life patterns in this era. Access to the system was easy and platform independent, and could be accessible via mobile, tablet and PC. The system provided more than enough information for analysis and proof of the development of students by using its learning system. This experiment proved and provided evidence that carefully and effectively developed ICT-based system can be helpful for the development of a learning organization.

4. CONCLUSION

There is no doubt about the necessity of organizational capacity for continuous change. Scholars and researchers have done a lot of work on its importance and identification of characteristics of a learning organization. Now, it requires effort on how an organization can develop itself into a learning organization? The important ingredients for this process are: to develop, store, share and transfer of knowledge. There are clues in literature that ICT can play a role regarding above ingredients but it requires proactive, holistic and systematic approach. This study was an effort towards this approach. It provides a foundation for this concept. Though it provides partly evidence but it requires a lot of development and tests. So this study suggests academicians and practitioners, to develop systems based on this approach by using ICT. This will help in understanding for a more effective system and will provide empirical evidence for what is working and what is not working.

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INTERNATIONAL MIGRATION AND LABOUR MARKET OUTCOMES IN A GLOBALIZED WORLD

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ABSTRACT

The research conducted within the paper aims to identify and assess the interdependencies between international migration and labour market outcomes, focusing both on emigration and immigration effects for sending and destination countries, as well as on economic (labour force) and non-economic (humanitarian, refugees) migration. International migration, one of the most important frontiers of globalization, represents a major challenge globally, with significant economic consequences, especially for Europe, where large migrant flows have emerged in the context of European integration, and moreover recently due to increased waves of refugees and asylum seekers targeting Germany, Austria, Sweden or Turkey as main destination countries, through Eastern and Central Mediterranean or Western Balkans routes. The analysis is based on developing various double-log fixed and random effects models, as well as dynamic models, using a panel structure that covers five main EU destination countries (Germany, Austria, Sweden, Italy and Spain) and three New EU Member States since 2007 and 2013 (Romania, Bulgaria, Croatia) and a complex set of indicators (national accounts – GDP total, per capita, per person employed; labour market – employment, unemployment, wages, secondary and tertiary education; migration specific data – immigration flows and stocks, asylum seekers and refugees, emigrant stocks), compiled during 2000-2014. Moreover, we used a SEM model (Structural Equations Modelling) in order to better capture the labour market impacts of international migration for the selected EU countries. The models are processed through OLS, GLS and MLE methods, as well as by using panel corrected standard errors, and are completed by within and out-of-sample predictions. The results show that immigration flows have important economic consequences leading to significant changes in labour market performances (slight decrease in employment rates and wage levels), which largely vary from one country to another, so on the long-run, the negative effects of immigration tend to predominate. From the emigration perspective, the findings show positive effects of labour emigration on sending countries, by upgrading the living standards for those remaining, mainly through remittances.
Keywords: Economic Growth, European Integration, Globalization, International Migration, Labour Market

1. INTRODUCTION

International migration, one of the most important frontiers of globalization, represents a dynamic process that has significantly shaped the global economy. Nevertheless, both labour and humanitarian migration are key challenges especially for Europe, where the regional economic integration and the geopolitical context have generated increased immigration flows, with profound economic consequences for migrant sending and destination countries. Within the European Union, OEDC (2014) shows that the migration flows registered a shift in trend during latest years, most migrants from Eastern Europe choosing Germany or Austria as main

destination country compared to Italy and Spain that are still among the main host economies, but with a significant decrease compared to previous years (Noja *et al.*, p. 98).
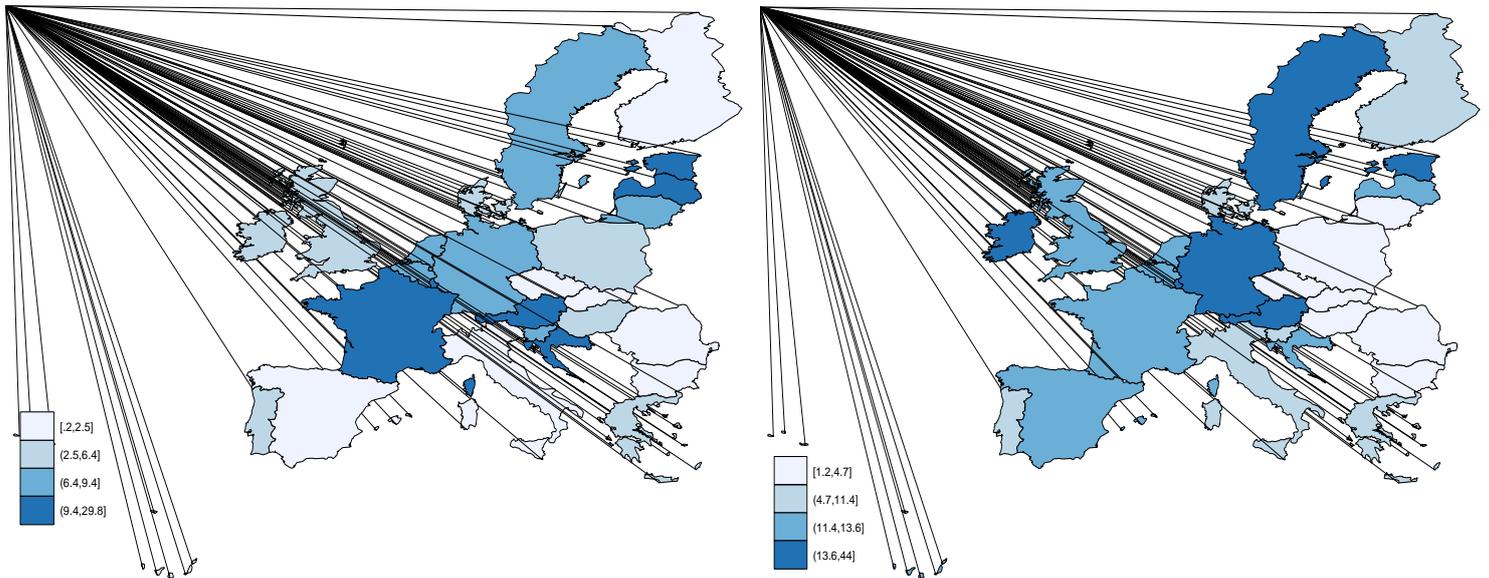
Figure 1: **International migrant stock as a percentage of the total population (both sexes), 1990 (left) and 2015 (right)**
Source: own process based on UNHCR data through Stata 13

Moreover, the anxiety towards emigrants from Central and Eastern Europe in the context of the latest enlargements, mainly 2007 (Romania and Bulgaria) and 2013 (Croatia), but as well towards asylum seekers and refugees coming from Syria and other Arab countries, highlights the importance of international migration policies, along with accurate and efficient immigrants integration strategies defined by the main European destination countries (Germany, Austria, Sweden).
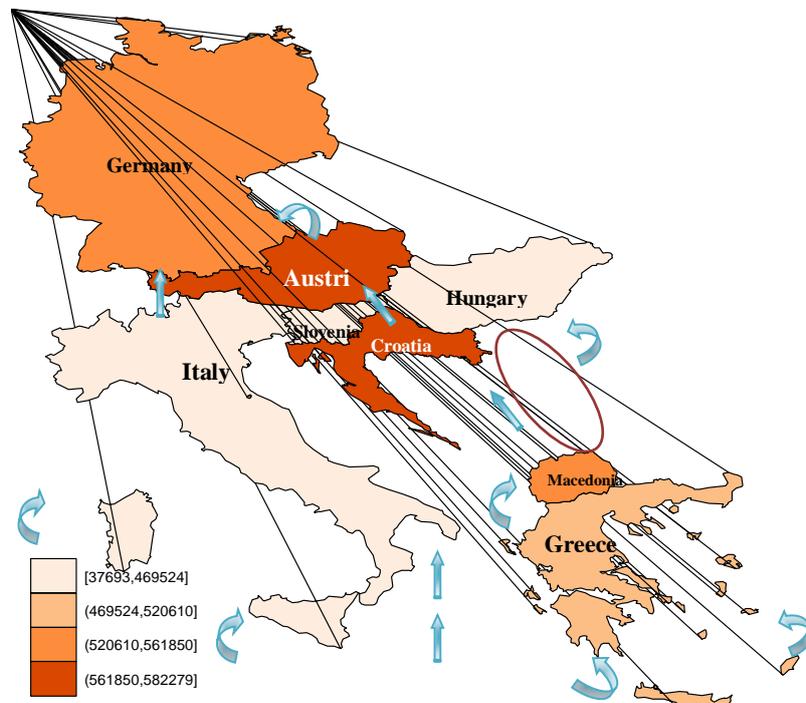
Figure 2: **Refugee arrivals through Western Balkans Route and Central Mediterranean (Total October 2015 – February 2016)**
Source: own process based on UNHCR data through Stata 13

57

The Eastern Mediterranean and Western Balkans migration route is mainly used by asylum seekers coming from Syria, Iraq and Afghanistan, being intensively over-passed including by Pakistani and other groups of African migrants, as well as by other persons that are leaving the Western Balkans territories from various reasons. Thus, in the first half of 2015, over 66000 persons have crossed the Mediterranean between Turkey and Greece and more than 137000 persons have been registered only in July and August.

The Central Mediterranean migration channel from Libya towards Italy is also intensively used, in 2015 being registered for about 116000 sea arrivals by the end of August, compared to 172000 total persons registered in 2014. Nevertheless, there is a swift in the nationalities of refugees. According to OECD (2015), until mid-2015, the main nationalities that have crossed this migration route were Eritreans (27%), Nigerians (11%), Somalians (9%), Gambians (5%) and Sudanese (5%).

The third main migration channel towards Western Mediterranean was traditionally used by sub-Saharan migrants, but due to increased border controls and high cooperation with the Moroccan authorities the route became less accessible.

As in the case of previous refugee crises in the early 1990, the migration impact is cumulated in a few countries. Thus, across OECD, Turkey is the most affected, hosting at present approximately 1.9 million Syrians, mostly with a temporarily protective status, as well as a significant number of persons coming from Iraq. Moreover, other 300000 persons, mainly from Afghanistan, Iraq and Pakistan have an illegal residence in Turkey, waiting to transit towards the European Union to seek asylum. At the same time, more than 1.1 million Syrians find themselves in Lebanon, where the situation is increasingly uncertain, while a large number of refugees are in Jordan (about 630000) and Egypt (130000).
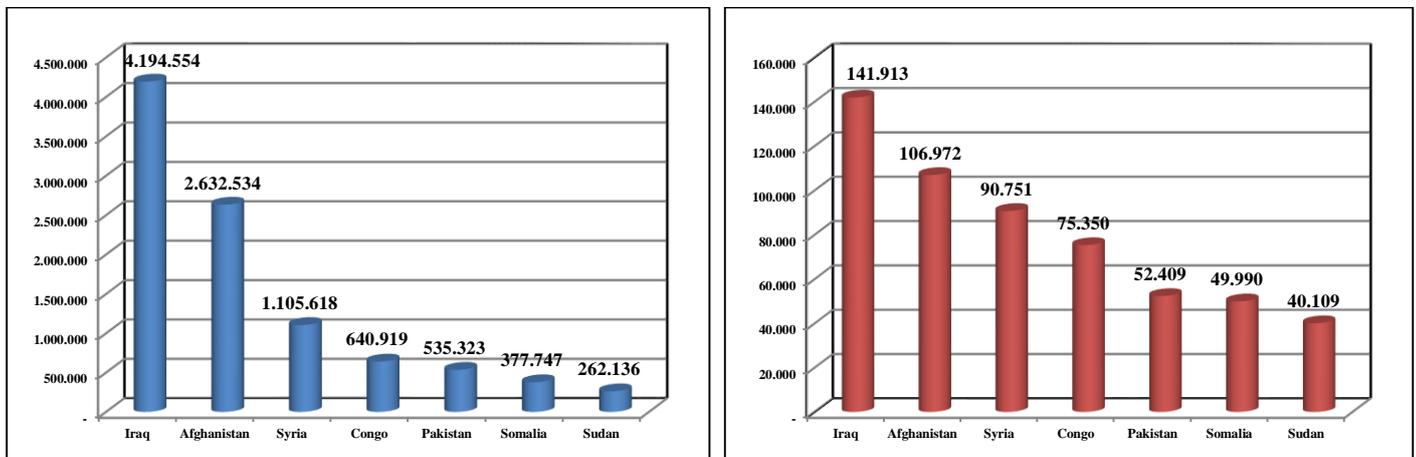
Figure 3: **Refugees (left) and asylum seekers (right) by country of origin
mid-2015 or latest available estimates**
Source: own calculations based on UNHCR data

The large variety of migration corridors, migrant sending countries and migration motives shape this refugee crisis into one extremely difficult to approach and coordinate. Moreover, not only the fact that migrants came from various countries and territories of origin, but at the same time the main destination and asylum countries vary significantly across the EU. Thus, according to the OECD (2015) in Germany, during the first six months of 2015, Kosovo and Syria have each accounted 20% of the total asylum seekers, followed by Albania (15%). In Sweden, Syrians have represented 27% of total migrants, followed by Eritreans and Afghanis with few over 10%, while in Italy, Gambia was the first migrant sending country, followed by Senegal and Nigeria.

2. LITERATURE REVIEW ON INTERNATIONAL MIGRATION AND LABOUR MARKET INTERDEPENDENCIES

The economic literature on various sides of the migration process is extremely large, starting with Ravenstein (1885, 1889) who has generalized the conclusions on internal migration in the United Kingdom in order to highlight that the intensity of the migration process is influenced by a complex set of factors, such as migrant personal characteristics (age, gender), the size of the population in sending and receiving countries, distance and the destination absorption capacity. Later on, Hicks (1939) and Sjaastad (1962) made an assessment of international labour migration through an investment approach, considering it a human capital development which implies an increase in migration flows, associated with lower costs and high incomes generated by the migration process. Their approach focuses on individual migration decisions and has shaped the main coordinates of the microeconomic neoclassic theory. Moreover, Todaro (1969) suggests that potential migrants select those destination countries which maximize the present net value of future expected incomes gained from migration, out of which they extract direct and indirect costs associated with the process (cost-benefit analysis). Thus, the migrants estimate the costs and benefits associated with moving into another country and decide to emigrate when net incomes are higher during a certain period of time (Borjas, 1989). At the same time, Harris and Todaro (1970) have considered the impact generated upon the economic equilibrium by different policy instruments, like the minimum wage and restrictive migration legislation. Thus, Harris and Todaro (1970) developed a model which highlights that individuals are rationally responding to wage differentials between countries, and especially to income security, and to a smaller extent to real opportunities derived through migration, workers deciding to emigrate even is the possibility to earn a higher wage at destination is limited.

As considering the both sides on international migration and the main research questions regarding the emigration impact on sending countries and immigration effects on native workers and host economies, there are various theories trying to solve these questions.

From the immigration perspective, Dustmann et al. (2008) have analyzed the labour market impact of immigration. The results of their study reveal that the way in which immigration influences the outcomes essentially depends on the skills structure of immigrants compared to the one hold by native workers, education thus playing a decisive role. At the same time, the outcomes also depend on the assumptions on the elasticity of capital supply. Within this perspective, if the capital has a perfect elasticity, than the immigration won't influence the labour market performance for native workers since the immigrants share the same skills structure as them. Thus, the economy will incorporate the additional labour through its simple expansion. Still, on the other hand, if immigrants have different skills than natives and if there are no other adjustment mechanisms, than the absorption will imply various wage effects. Therefore, the benefits of negative effects generated by immigration largely depend on the educational level of migrants and their skills structure compared to natives, immigration thus leading to a general redistribution in benefit of some and harm of others.

Krause et al. (2016) considered the labour market integration of migrants, focusing on the Single European Labour Market, its performances, risks and opportunities, as well as the importance and usefulness of European labour mobility. Thus, they performed an online study among labour market exerts in Europe and concluded that most experts confirm the importance of a Single European Labour Market for improving the economic conditions, thus leading to welfare. Still, they seem to be uncertain about achieving these benefits. Moreover, in the case of EU labour mobility, the experts questioned by Krause et al. (2016) consider that the recognition of professional diplomas and qualifications, an optimization of the social security systems and over-passing the language barriers are some of the most important drivers to enhance labour mobility.

The emigration approach focuses more on migration effects on labour market outcomes, unemployment and economic growth generated through remittances and household impacts on those left behind.

The large economic literature on the impact of labour emigration on migrant sending economies highlights that it significantly depends on the way the capital-labour ratio is affected related to the persons remaining in the origin country. Moreover, the emigration effects are extremely different from one socio-economic group to another. Thus, overall, emigration tends to have a positive impact on those remaining, by increasing the economic welfare and reducing income inequalities in migrant sending countries (Clemens, 2011; de Haas, 2010; Taylor *et al.*, 1996). At the same time, international labour migration ensures a temporary relaxation of the labour market pressures generated by high unemployment and, on the long run, the improvement of internal savings rate, as well as the profitable use of brain gain (return migration and migrant skills), lead to an increase in productive capital investments and new employment opportunities (job creation) (Goss and Lindquist, 1995). Nevertheless, Kwok and Leland (1982) synthesised the theories explaining the brain drain concept by revealing the relevance of asymmetric knowledge concerning the skills acquired by migrants, respectively the fact that the host country has more information on migrants' abilities than the migrant sending economy.

In Europe, Fertig and Kahanec (2015) have analysed the potential migration flows in the context of EU constant enlargement. Their results suggest that migration flows are largely shaped by policy variables and to a smaller extent by those economic and demographic. Thus, within the perspective of adopted and implemented migration policies, granting labour market free access to migrants by the hosting countries (Germany, Italy and Austria, in absolute terms and relative to their population) significantly increases the migration waves, especially on the short run.

3. METHODOLOGY AND DATA: DEVELOPED MODELS, ECUATIONS, LIMITS AND TESTING

3.1 General form of developed models

Our models follow the specific linear representation of the regression models with panel data, described by Baum (2001, p. 219) in order to proper analyse the emigration and immigration effects upon sending and receiving economies, configuration that was also used in previous researches (Son and Noja, 2012):

$$y_{it} = \sum_{k=1}^{k} x_{kit} \beta_{kit} + \varepsilon_{it}$$
$$i = 1,\dots,N \qquad (1)$$
$$t = 1,\dots,T$$

where: N is the number of panel units (countries), while T represents the number of periods (time).

The *fixed effects model* or the *Least Squares Dummy Variable (LSDV) model* has the following representation (Baum, 2001, p. 220):

$$y_{it} = x_{it}\beta_k + z_i\delta + u_i + \varepsilon_{it} \qquad (2)$$

where x_{it} is a *1 x k* vector of variables varying between countries and in time, β represents a *1 x k* vector *of x* coefficients, z_i is a *1 x p* vector of the variables that are constant in time, but vary between countries (as elements of the panel), δ represents a *p x 1* vector of z coefficients, u_i is the individual effects, for every element of the panel, and ε_{it} is the disturbance term.

The *random effects model* or the *Error Component Model (ECM)* has the following representation (Baum, 2001, p. 227):

$$y_{it} = x_{it}\beta + z_i\delta + (u_i + \varepsilon_{it}) \qquad (3)$$

where: $u_i + \varepsilon_{it}$ represents the compounded disturbance term, and u_i reflects the individual effects.

The models developed in order to assess the immigration effects upon native workers and host country's labour market, including humanitarian migration, as well to evaluate the emigration impacts on sending economies, follow the specification of double-log simple and multiple regression models with panel data. These models were processed through OLS and GLS methods of estimation in the case of fixed and random effects, respectively through the panel corrected standard errors method (PCSE) and maximum likelihood (MLE) in the case of SEM modelling of emigration effects.

3.2 Variables and indicators used for the empirical analysis

In the analysis we focused on the international migration effects on economic growth and labour market fundamentals (unemployment, employment, wages, earnings), respectively on the educational background (upper secondary and/or tertiary) within the context of the globalization process and increased interdependencies between the economies globally.

We thus selected a large scale of indicators as proxy for the variables of developed models, ranging from the economic activity, labour market outcomes and education to various sides of the international migration process (immigration vs. emigration, labour vs. humanitarian migration), thus comprising:

i) international migration specific indicators: immigration flows and stocks, flows of refugees and asylum seekers, the stock of emigrants, remittances (mil. USD);

ii) economic activity and labour market indicators: total (mil. Euro) and per capita (Euro) GDP and the GDP per person employed (USD); employment and unemployment rates (%); earnings by two-earner married couple with two children (Euro) and earnings dispersion among employees (Decile 9/ Decile 5), average annual wages (USD); the educational attainment (both general and vocational) through secondary and tertiary education levels (the highest ISCED - International Standard Classification of Education level successfully completed) and the participation rate in education covering participation in formal and non-formal education and training;

iii) the globalization process: KOF Index of Economic Globalization and the value added by foreign controlled enterprises as a share of total value added (foreign affiliate statistics).

The panel structure covers five main EU destination countries (Germany, Austria, Sweden, Italy and Spain) and three New EU Member States since 2007 (Romania and Bulgaria) and 2013 (Croatia). Within the performed analysis we covered the 2000-2014 period of time and used as main data sources the statistical database of the European Commission - Eurostat, the international migration database of OECD, World Bank – World Development Indicators and United Nations Database – UNHCR, ETH Swiss Federal Institute of Technology Zurich, UNU WIDER World Income Inequality Database.

4. RESULTS AND DISCUSSIONS

The empirical analysis conducted within this paper has a *double objective*: *(i) first*, to identify and analyse the immigration effects on native workers and receiving countries, including labour immigration flows/ stocks and asylum seekers and *(ii) second*, to evaluate the emigration impacts on migrant sending economies. The main research limit for the performed empirical analysis is the lack of proper data detailed on long time series for international migration (especially official data on emigration). Thus, in order to complete the database and provide

accurate results for our developed models, we proceeded to interpolation and extrapolation in the early phase of the research for some of the indicators used as variables in designed models.

Our first set of double log simple regression models focus on the immigration impact on GDP per capita for the five main EU destination countries.

Table 1 Results of the models developed for the analysis of immigration economic consequences

```
-------------------------------------------------------------------------------------
Fixed Effects - FE
-------------------------------------------------------------------------------------
                     Model 1                 Model 2                 Modelul 3
                     b/se       p      t     b/se       p      t     b/se       p      t
-------------------------------------------------------------------------------------
log_imig_stock_nou   0.205***   0.000  7.000
                     (0.03)
log_imig_infl_nou                              0.197***   0.000  4.762
                                               (0.04)
log_asylum_infl                                                       -0.080**   0.009  -2.675
                                                                      (0.03)
Constanta            8.661***   0.000  38.822  9.160***   0.000  40.462  11.005***  0.000  37.486
                     (0.22)                     (0.23)                   (0.29)
-------------------------------------------------------------------------------------
R-squared            0.434                     0.268                     0.101
F                    48.995                    22.674                    7.157
N observations       70.000                    68.000                    70.000
-------------------------------------------------------------------------------------
Random Effects - RE
-------------------------------------------------------------------------------------
                     Model 1                 Model 2                 Model 3
                     b/se       p      t     b/se       p      t     b/se       p      t
-------------------------------------------------------------------------------------
log_imig_stock_nou   0.167***   0.000  5.528
                     (0.03)
log_imig_infl_nou                              0.103**    0.010  2.592
                                               (0.04)
log_asylum_infl                                                       -0.044     0.144  -1.463
                                                                      (0.03)
Constanta            8.950***   0.000  36.486  9.667***   0.000  42.440  10.650***  0.000  35.478
                     (0.25)                     (0.23)                   (0.30)
-------------------------------------------------------------------------------------
R-squared            0.4460                    0.6011                    0.6869
Wald                 30.56                     6.72                      2.14
N observations       70.000                    68.000                    70.000
-------------------------------------------------------------------------------------
```
* p<0.05, ** p<0.01, *** p<0.001
Source: own process of panel data through Stata 13 econometric package

Moreover, we expanded our immigration analysis using the same three dimensions and associated indicators (stock of immigrants, immigration flows and asylum seekers) by developing another set of seven models that capture the immigration effects on GDP per person employed (*model 1*), wage levels (*model 2*), overall earnings of a couple with two children (*model 3*), earnings dispersion (*model 4*), employment rate (*model 5*), secondary education background (*model 6*) and participation rate in education (*model 7*).

Table following on the next page

Table 2 Results of the seven models developed for the extended analysis of immigration economic consequences

	Model 1 b/se	Model 2 b/se	Model 3 b/se	Model 4 b/se	Model 5 b/se	Model 6 b/se	Model 7 b/se
log_imig_stock_nou	-0.066*** (0.00)	-0.075*** (0.01)	-0.030 (0.02)	0.029*** (0.00)	-0.044*** (0.01)	-0.095*** (0.02)	-0.316*** (0.04)
Constanta	11.204*** (0.04)	11.256*** (0.08)	11.047*** (0.15)	0.362*** (0.03)	4.512*** (0.05)	4.475*** (0.15)	5.242*** (0.29)
R-squared	0.533	0.254	0.032	0.065	0.180	0.073	0.393
Wald	203.90	60.53	2.75	61.30	41.69	21.89	63.99
N observations	75.000	75.000	70.000	75.000	75.000	75.000	73.000

	Model 1 b/se	Model 2 b/se	Model 3 b/se	Model 4 b/se	Model 5 b/se	Model 6 b/se	Model 7 b/se
log_imig_infl_nou	-0.068*** (0.01)	-0.089*** (0.01)	-0.032 (0.02)	0.027*** (0.01)	-0.051*** (0.01)	-0.133*** (0.02)	-0.341*** (0.04)
Constanta	11.071*** (0.04)	11.182*** (0.06)	10.994*** (0.12)	0.427*** (0.03)	4.459*** (0.03)	4.499*** (0.11)	4.692*** (0.20)
R-squared	0.514	0.339	0.032	0.054	0.220	0.141	0.401
Wald	125.85	74.17	2.41	18.16	65.65	43.40	74.20
N observations	73.000	73.000	69.000	73.000	73.000	73.000	73.000

	Model 1 b/se	Model 2 b/se	Model 3 b/se	Model 4 b/se	Model 5 b/se	Model 6 b/se	Model 7 b/se
log_asylum_infl	0.025*** (0.01)	0.100*** (0.01)	0.121*** (0.01)	-0.078*** (0.01)	0.060*** (0.01)	0.292*** (0.03)	0.174** (0.06)
Constanta	10.450*** (0.07)	9.701*** (0.12)	9.619*** (0.12)	1.353*** (0.10)	3.581*** (0.08)	0.867** (0.32)	1.096 (0.59)
R-squared	0.062	0.371	0.430	0.389	0.281	0.565	0.095
Wald	12.96	67.41	89.62	61.13	57.51	79.29	9.25
N observations	75.000	75.000	70.000	75.000	75.000	75.000	73.000

* $p<0.05$, ** $p<0.01$, *** $p<0.001$
Source: own process of panel data through Stata 13 econometric package

The results show that there is evidence to confirm the concerns regarding a general negative impact of immigration on the five destination economies analysed within the panel and their native workers. Thus, even though in the first set of models processed through fixed and random effects only the increase in asylum seekers inflows lead to a decrease in GDP per capita, while the immigration stocks and inflows generate a slight increase in the overall economic welfare, the second set of seven models processed through PCSE confirms the negative impact of immigration, especially in terms of labour market outcomes.

Within this context, an increase in both immigration stocks and flows induces a decrease in GDP per person employed, wage levels and of the overall earnings obtained by a couple with two children, with an associated increase in earnings dispersion. Moreover, the negative impact is shown in the case of employment levels, with a slight decrease of the employment rate, as well as in the educational background by reducing the educational attainment for upper secondary level and the participation rate in education. Moreover, the models show a tight interdependence between the variations in immigration flows/ stocks and the degree of participation in education, GDP per person employed and wage levels, as shown by the r-squared.

From the emigration perspective, we analysed the impact generated by the stock of emigrants (job seekers) upon the sending country's GDP per capita, both through loosing a large part of its labour force and by remittances, in the present context of a globalised world economy. Thus, we developed a SEM model for the three sending economies, EU New Member States since 2007 and 2013, focusing on the shaping factors of emigration stocks and their aggregate impact on the economy.
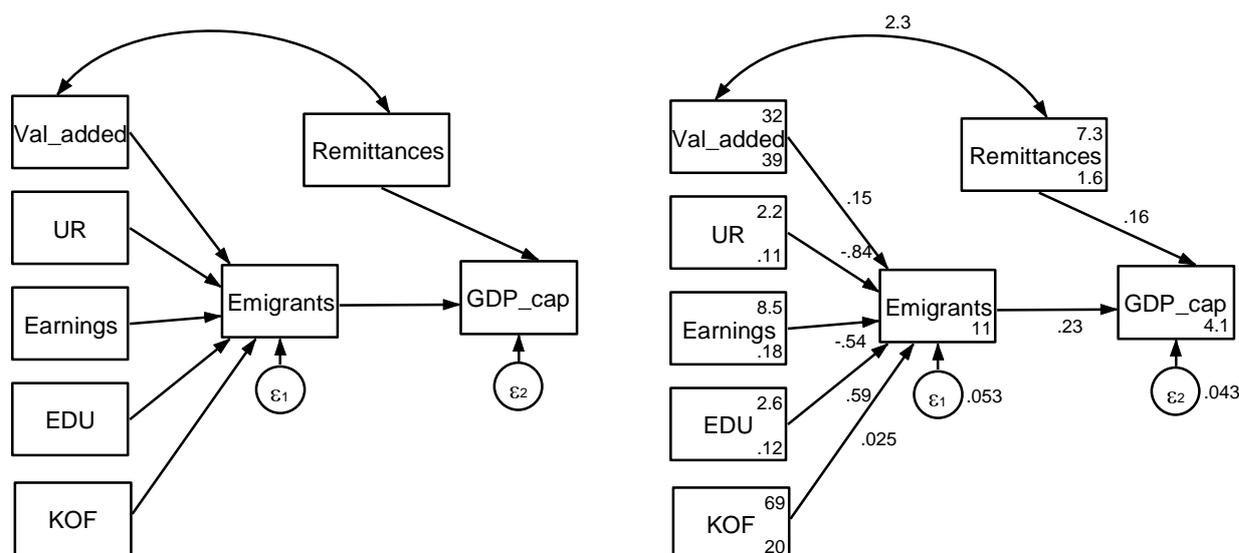
Figure 4: **General form of the SEM model developed for the emigration analysis**

Source: own process of panel data through Stata 13 econometric package

The results highlight that an improvement in the educational level generates an increase in the emigrant stocks, thus confirming the selection of migrants at destination according to their educational background and the brain drain theories. Moreover, an increase in the overall earnings of a household tends to discourage emigration, as well as the labour market performances like increases in employment rates.

Table 3 Results of the SEM models developed for the assessment of emigration impacts on sending economies

	Model 1 b/se	p	t	Model 2 b/se	p	t	Model 3 b/se	p	t
log_emigr_stock									
value_add_foreign	0.154*** (0.04)	0.000	3.966	0.059 (0.04)	0.147	1.452	0.158*** (0.02)	0.000	7.566
log_unempl_rate	-0.840* (0.37)	0.023	-2.269				-0.897*** (0.16)	0.000	-5.613
log_earnings_couple	-0.535 (0.53)	0.316	-1.003	1.216* (0.58)	0.038	2.080			
log_edu_tert	0.593 (0.66)	0.372	0.893	-0.901 (0.50)	0.073	-1.795			
Overall_KOF	0.025 (0.03)	0.347	0.940						
log_empl_rate				-2.080 (1.64)	0.205	-1.268			
Econ_KOF				0.007 (0.02)	0.631	0.480	-0.004 (0.01)	0.690	-0.399
log_earnings_sin							0.388 (0.26)	0.140	1.475
log_edu_sec							-6.637*** (1.40)	0.000	-4.740
Constanta	11.274*** (2.85)	0.000	3.960	11.235* (5.32)	0.035	2.113	33.949*** (5.54)	0.000	6.123
log_gdp_cap									
log_emigr_stock	0.226*** (0.05)	0.000	4.398	0.226*** (0.05)	0.000	4.398	0.226*** (0.05)	0.000	4.398
log_remittances	0.162*** (0.04)	0.000	4.296	0.162*** (0.04)	0.000	4.296	0.162*** (0.04)	0.000	4.296
Constanta	4.099*** (0.60)	0.000	6.842	4.099*** (0.60)	0.000	6.842	4.099*** (0.60)	0.000	6.842

* p<0.05, ** p<0.01, *** p<0.001

Source: own process of panel data through Stata 13 econometric package

Nevertheless, an increase in interdependencies between countries and the free movement reassuring within the context of economic globalization tends to encourage international migration, by increasing the stock of emigrants for the three considered sending economies (by 0.025% according to our results).

The overall impact of emigration on the three considered countries tends to be a positive one, attested by an increase in GDP per capita both through remittances and emigration stocks (some possible explanations could refer to various incentives for those remaining, including additional investments, productivity increases or the relaxation of high unemployment pressures).

5. CONCLUSION

International migration is an extremely complex process with significant effects both for migrant sending and receiving economies, labour markets and for individuals and their families (labour and humanitarian migration).

Our results show that international migration generates significant effects and different labor market outcomes, very controversial for some of the analyzed countries, both positive and negative.

The main negative impact is generated by immigration within the main destination countries, especially when we consider the labour migration and less in the case of asylum seekers, mainly because of the temporary and transitional character of the humanitarian flows. Thus, migrant host economies need to consider several specific labour market policies in order to cope with large inflows of immigrants and refugees. Active labour market policies (ALMPs) centre on unemployed persons, their implementation providing assistance in finding a job, training for professional development and skills acquirement, wage incentives and direct job creation in the public sector, all of these being extremely necessary for the inclusion of immigrants. The flexicurity policies combine the two perspectives on flexibility and security as main components of European employment strategies. Thus, the overall focus should be on new employment guidelines and job creation for a better coordination of the compatibility between labour demand and supply, together with an improvement in the educational level of the labour force, better working conditions and wage increases.

The main emigration effects derived from the performed analysis are generally positive in terms of economic growth through remittances, thus leading to an improvement in living standards for those remaining. Moreover, the educational level of migrants and the globalization process mainly reflected here by increased interdependencies between national economies through the international flows of goods, services and capital (respectively international trade and investments as share of the GDP) represent the main shaping factors of the emigration stocks, by inducing their increase.

In terms of labour market outcomes, the emigration process tend to temporary ease the pressures generated by high unemployment rates, thus leading to a slight employment increase. Still, there is a negative impact generated on the size and structure of internal labour force, and on the long run this is proving to be extremely negative (slow GDP per capita growth rates).

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MOTIVATION OF SALES STAFF IN THE BANKING SECTOR

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ABSTRACT
In all companies the employees are the key to success in business, and especially so in the professions of service and sales. Motivation in an employee is the main reason for a good or bad performance and thus motivation directly influences the success of the entire company. In this paper, various theories of motivation and the importance of material and non-material factors of motivation are explained in greater depth. The purpose of this paper is to present the results of investigation and identify the key elements in motivation and de-motivation of the sales staff in the banks. Results of the survey confirm that there is a difference in the importance of motivation factors in employees of different age and education level.
Keywords: motivation, motivation factors, sales staff, banking sector, survey

1. INTRODUCTION
To maintain profitability, banks have to develop new products and that requires additional staff training. This includes not only teaching about the features of new products but also developing specific sales skills because clients are often unaware of non-bank products and do not ask for them on their own. Successful provision of bank services and sales of bank and non-bank products depend largely on the abilities, skills and motivation of the sales staff. Employee satisfaction and motivation have become increasingly important in human resource management because the only way for organizations to increase their competitive advantage and value is by enhancing employee satisfaction and motivation. This paper seeks to explore and interpret the results of the survey on motivational factors affecting sales staff in the banking sector. This topic was chosen because of an increasing need to identify factors that increase motivation in employees in order to improve organizational effectiveness in the accomplishment of its goals.

2. MOTIVATIONAL FACTORS
An individual's motivation is affected by a number of factors that can be categorized as follows:
- **Personality characteristics** are the needs, values, attitudes and interests of an individual. They vary from one person to another and consequently people are driven by different motivations. Some are motivated by money, others by job security, yet others by challenging work, etc.
- **Job characteristics** are the specific characteristics of a job, such as its complexity, autonomy, etc.
- **Organizational characteristics** are rules and procedures, company policy, a system of rewards that improve the efficiency of a company. All of these characteristics must be designed in a way that will attract new and retain existing employees.
- **Broader social environment** is an important general framework, the level of socio-economic development, the overall standard of living, value system and the like. They

affect individual preferences with regard to desirable awards and performance recognition (Buble, 2011, p. 119 Bahtijarević–Šiber, 1999, p. 559).

3. MOTIVATION STRATEGIES

The main purpose of a motivation system is to increase the level of an individual's performance by rewarding desirable behaviours in line with the strategy and objectives of an organization. For this reason, a motivation system must include a variety of motivational strategies (Bahtijarević–Šiber, 1999, p. 603).

3.1 Financial reward strategies

The first group includes direct compensation for labour, while indirect financial compensation is provided as a result of being employed and it does not depend on productivity or performance. The latter includes health and retirement plans, other types of insurance plans, free meals, vacation time, days off, etc. (Buntak, K., Drožđek, I., Kovačić, 2013, pp. 56-63).

Table 1: Categories of financial compensation of employees (Bahtijarević–Šiber 1999, p. 614)

		DIRECT FINANCIAL COMPENSATION	INDIRECT FINANCIAL COMPENSATION
LEVEL	individual	- salary - bonuses and incentives - innovation and development compensation - compensation for knowledge dissemination and flexibility - other bonuses	- scholarships and tuitions - study trips - specialisation - days off - use of company car - manager's benefits
	company	-performance and profit-based bonuses - profit sharing - equity-based compensation	- retirement plan - health plan - life and other types of insurance plans - training and development - vacation time - Christmas bonus - child care

3.2 Non-financial reward strategies

Non-financial reward strategies are an essential component of human resource management and they supplement financial reward strategies. The system has been developed in order to satisfy higher-order needs of employees that require motivation (Hunjet, A., Kozina, 2014, p. 77). People work to satisfy not only their basic material needs, but also other, increasingly diverse needs, in particular the so-called needs of higher order which include the need for development and recognition of their abilities, gaining respect and status, etc. (Bahtijarević–Šiber, 1999, p. 667).

Job design is a process by which the content, functions and social relations of a particular job are specified in order to achieve organizational objectives and meet the individual needs of employees. It is a process of organizing work, planning and specifying tasks, i.e. identifying the job content and job-related functions (Vidaković, 2012, pp.161-177).

Flextime (flexible working hours) means a flexible work schedule that allows employees to choose the start and finish time of the working day, as well as the time for a break. Such a working day consists of core hours (typically 5-6) and flexible hours (Buble, 2011, p. 141).

Participation of employees in decision making encompasses being open to employees' ideas and their involvement in the decision-making process. Two objectives are achieved by

relegating decision-making to employees most knowledgeable about the issue to be decided upon thus involving them in the decision-making process: the quality of the decisions increases as do the immediacy and the speed of decision-making (Buntak, Drožđek, Kovačić, 2013, pp. 213-219).

Performance recognition is a simple and effective employee motivation technique. The aim of recognition is to acknowledge employees and their contributions and to show them that their work is being monitored and appreciated. There are several types of performance recognition: monetary rewards and non-monetary rewards such as praise, encouragement, etc. Successful organizations develop and apply various types of employee performance recognition. They include formal recognition programmes according to the established criteria for earning a reward, acknowledgement or recognition for attainment of set goals and objectives. They also include non-formal programmes that are less focused on rewards and more focused on changing the behaviour of employees. They may include public recognition or praise, a written commendation, various gifts, free lunches or small monetary rewards (Vidaković, 2012, pp.161-177).

Performance appraisal involves providing employees with feedback on the performance of their tasks. Feedback is a necessary condition for the successful achievement of objectives. It provides information to employees about the consequences of their work and behaviour. Performance appraisal has multiple functions; it increases motivation, boosts confidence, facilitates professional development, clarifies expectations and performance standards, reinforces desired behaviours, develops honest and open relationships and mutual trust, provides support and help to colleagues, teaches how to work, and informs employees that their work is being monitored and appreciated (Bahtijarević–Šiber, 1999, p. 705).

4. MODERN BANKING PRACTICE AND THE ROLE OF BANK EMPLOYEES

In traditional banking, customers used to seek out the bank products and had to adapt to the requirements of the bank. In modern banking practice:
- the focus is on market research,
- employees undergo extensive training to develop their client service skills, and
- the focus is on generating income from fees (commissions), and not from interest (Rončević, 2006, pp.753-777).

Currently, all 27 banks operating on the Croatian market offer more or less similar products and services at slightly different prices. Therefore, in today's highly competitive environment the sales staff should be the focus of attention. Despite being of excellent quality, a product or service may not bring about the desired effect unless it is well presented and the quality of the presentation depends on the employee. In addition to formal education which is a prerequisite for performing their job, bank employees are required to have specific physical and psychological skills and personality traits to be able to perform their tasks efficiently and achieve the set goals (Peruško, 2006). The role of management at all levels is to maintain a high level of employee motivation. Motivation increases employee productivity and performance. Motivation cannot be measured; however, a variety of factors can be used to influence it (Peruško, 2006).

5. MOTIVATION SURVEY OF SALES STAFF IN THE BANKING INDUSTRY

For the purpose of this paper, a survey was conducted with an aim to explore the motivation of sales staff in the banking sector.

5.1 Research methods

The research method applied was a survey method. The target population included banking sector employees in Varaždin and Medjimurje County. The survey was administered in the

period from 14 to 24 February 2016 on a sample of 73 front office employees. A link to the questionnaire, developed by using Google Forms tool, was sent by e-mail to the sales staff at Zagrebačka banka, Banka Kovanica, Sber banka, Hypo banka and Splitska banka.

The questionnaire contains 17 questions divided into three sections. The first section includes closed questions aimed at collecting the demographic characteristics of the respondents and assessing their overall job satisfaction. In the second section, the respondents are asked to rate their level of agreement or disagreement with a number of statements using the Likert scale in order to assess the level of their satisfaction with individual motivational factors as well as the importance of individual motivational factors. The third section contains questions about the current and expected level of motivation.

The following hypotheses were developed for the purpose of this research:

1. Employees are primarily motivated by money.
2. Challenging work affects employee motivation.
3. Job security is an important motivational factor.
4. There is a difference in the importance of motivational factors between employees depending on their age.
5. There is a difference in the importance of motivational factors between employees depending on their education levels.

5.2 Analysis of survey results

The survey results show that three quarters of the respondents are women and a quarter of them are men. This was expected because women make up the majority of employees in the banking industry.

The majority of respondents falls into the age range 31-40, which means that sales staff in banks is mostly made up of young people.

The distribution of respondents by level of education reveals that the share of employees with two-year postsecondary qualifications and the share of those with a university degree are roughly the same while the share of employees with secondary education is only slightly higher. None of the employees has a master's or a doctoral degree. This was expected because post-secondary education level is not a job requirement for front-office sales staff. Staff working with legal entities mostly hold a university degree as it is a job requirement.

The distribution of employees by years of service is reflective of their age. They mainly fall into the group with more than 20 years of service which includes those above 51 years of age as well as the majority of respondents from the age group 41-50.

The purpose of this survey was to collect and analyze data on the motivation of sales staff in the banking industry in order to identify the factors affecting the motivation and satisfaction of that particular segment of employees. The results suggest that they are mainly extrinsically motivated, whereas intrinsic factors are less important.

Table following on the next page

Table 2: Motivational factor rankings - current situation (K. Pintarić)

	Motivations	1	2	3	4	5	average	ranking
1.	good relations with colleagues	-	1	11	38	22	4.125	1
2.	good relations with supervisors	1	3	22	28	18	3.819	5
3.	income security	-	4	8	36	24	4.111	2
4.	advancement opportunities	7	11	15	28	11	3.347	8
5.	training and development opportunities	2	5	20	24	21	3.791	6
6.	job autonomy	1	4	11	36	20	3.972	3
7.	working conditions	1	9	9	30	23	3.902	4
8.	pay level and other bonuses	2	16	21	24	10	3.375	7
9.	performance recognition	6	9	25	23	10	3.347	8

Hypothesis 1: *Employees are primarily motivated by money.*
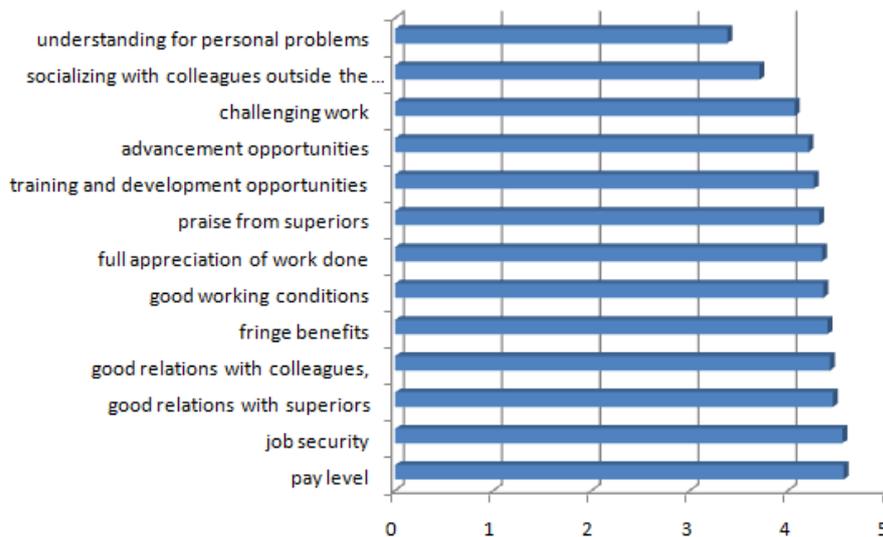
Figure 1: The ranked importance of motivational factors (K. Pintarić)

This hypothesis is accepted because employees both cited salary as their primary motivation and rated it as the most important motivational factor. Interestingly, they also reported that pay level was not the primary de-motivating factor. This can be explained by the fact that the pay level in the banking sector is above the average pay level and therefore it does not de-motivate employees as much as would be expected.

Since most banks do not offer fixed salaries for specific posts, managers can use this to increase the level of employee motivation. Due to different perceptions of the fairness of rewarding, employees may be dissatisfied which is why more transparent criteria for recognition should be established. Any employee will be happy to make an extra effort if he or she believes that the effort will be adequately rewarded.

Hypothesis 2: *Challenging work affects employee motivation.*
This hypothesis is rejected because challenging work and more responsibility were rated as the least important motivations. In rating motivational factors as currently perceived, the respondents gave the lowest rating to advancement opportunities. This can partly be explained

by the fact that the survey included sales staff working at offices in Varaždin and Medjimurje Counties and most of them have central offices in Zagreb which makes opportunities for advancement or for moving on to a more challenging workplace scarce. Regardless of that, setting high goals for employees and giving them challenging tasks means that supervisors believe in their employees' abilities and recognize their efforts.

Hypothesis 3: *Job security is an important motivational factor.*
This hypothesis is accepted as the survey results show that job security is ranked second, right after salary. Uncertainty about the future is ranked first among the main de-motivating factors, which confirms that safety and regular income are important motivational factors. In an environment where due to the global economic crisis and high national unemployment rate they can be quickly replaced by someone else, employees find job security to be a very important motivational factor.

Hypothesis 4: *There is a difference in the importance of motivational factors between employees depending on their age.*
This hypothesis is confirmed based on the analysis of the importance of motivational factors by different age groups. The respondents in the age group 31-40 ranked the motivation factors in the following order of importance to them: pay level, job security, good working conditions, good relations with colleagues, fringe benefits, good relations with superiors, full appreciation of work done, training and development opportunities, advancement opportunities, praise from superiors, challenging work, socializing with colleagues outside the workplace and understanding for personal problems.
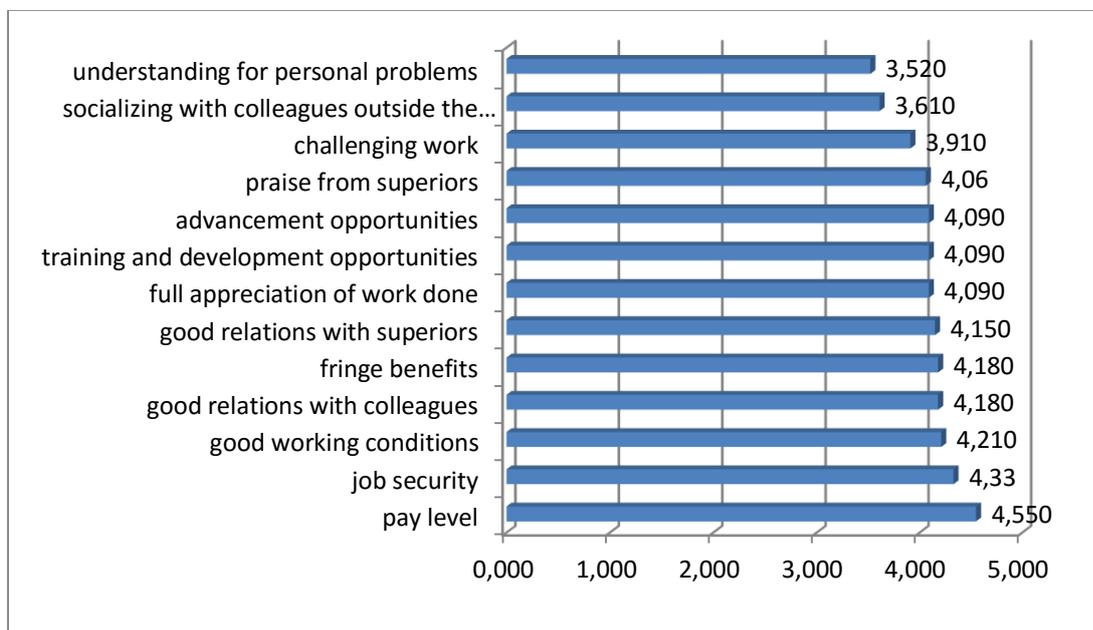
Figure 2: The ranked importance of motivational factors in the age group 31-40 (K. Pintarić)

In the age group 41-50, the motivational factors were ranked as follows: pay level, job security, good relations with superiors, full appreciation of work done, good relations with colleagues, praise from superiors, good working conditions, fringe benefits, training and development opportunities, advancement opportunities, challenging work, understanding for personal problems, socializing with colleagues outside the workplace.
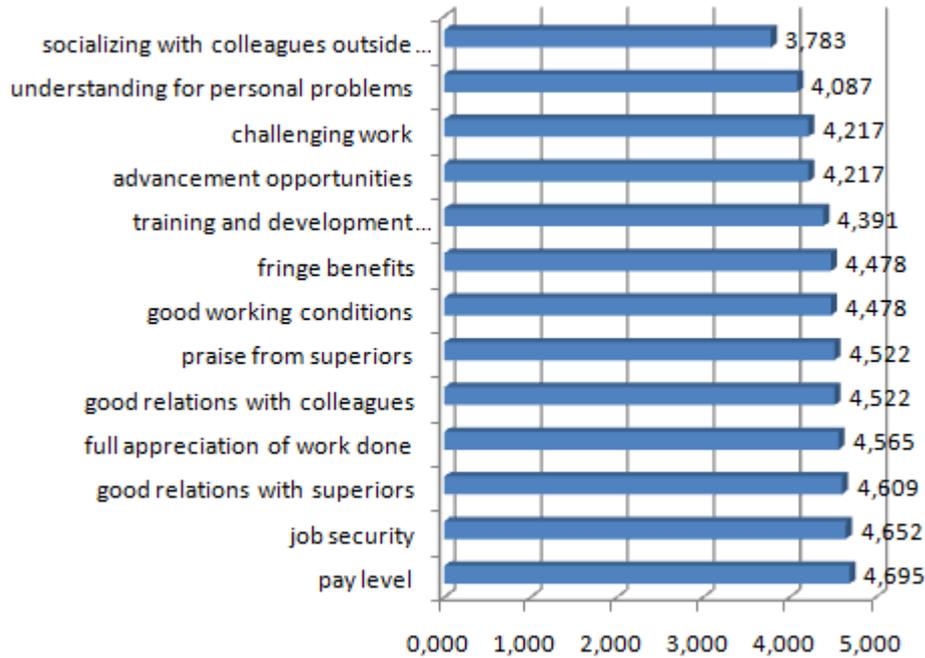
Figure 3: The ranked importance of motivational factors in the age group 41-50 (K. Pintarić)

The respondents in the age group 51+ ranked the motivational factors as follows: full appreciation of work done, good relations with superiors, job security, fringe benefits, praise from superiors, good relations with colleagues, training and development opportunities, good working conditions, pay level, understanding for personal problems, advancement opportunities, challenging work, socializing with colleagues outside the workplace.
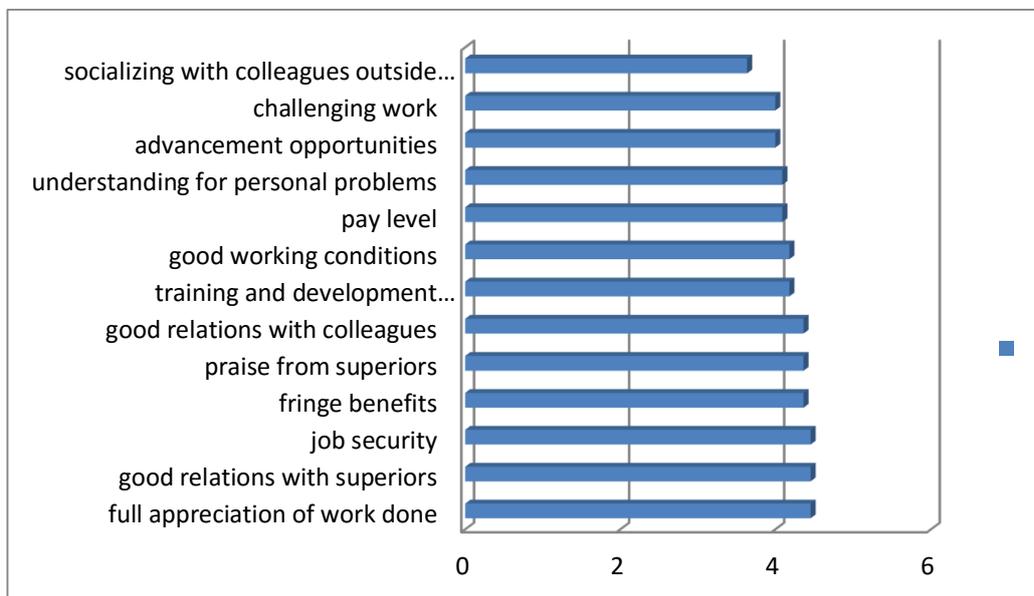
Figure 4: The ranked importance of motivational factors in the age group 51+ (K. Pintarić)

Pay level was ranked first as the most important motivating factor in the age groups 31-40 and 41-50. In the age group 50+, good relations with colleagues ranked first, while pay level ranked only fifth. Job security as the second most important factor ranked fourth in the age group 50+,

while in the age groups 31-40 and 41-50 it ranked second, as expected. In the age group 50+, good relationships with colleagues and superiors ranked first and second, respectively, while in the remaining age groups they ranked fourth and fifth, i.e. fifth and sixth, respectively. This suggests that employees of different ages have different needs and ways of satisfying them. Thus, it is important to know the characteristics of employees in order to be able to adequately motivate them.

Hypothesis 5: *There is a difference in the importance of motivational factors between employees depending on their education.*
This hypothesis is confirmed based on the analysis of the results concerning the importance of motivational factors ranked in order of their importance and broken down by the respondents' level of education.
Respondents with secondary education ranked the importance of motivational factors as follows: good relations with colleagues, good relations with superiors, fringe benefits, job security, pay level, good working conditions, full appreciation of work done, praise from superiors, training and development opportunities, advancement opportunities, challenging work, understanding for personal problems, socializing with colleagues outside the workplace.
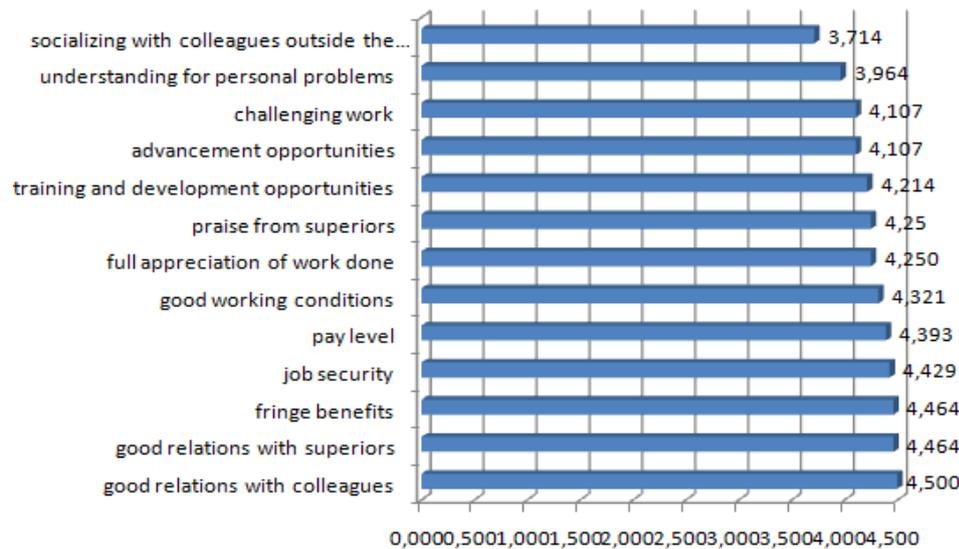
Figure 5: The ranked importance of motivational factors for employees with secondary education (K. Pintarić)

Respondents with two-year postsecondary qualifications ranked the importance of motivational factors as follows: job security, good relations with superiors, good relationships with colleagues, pay level, , full appreciation of work done, advancement opportunities, praise from superiors, fringe benefits, good working conditions, training and development opportunities, challenging tasks, understanding for personal problems, socialize with colleagues outside the workplace.

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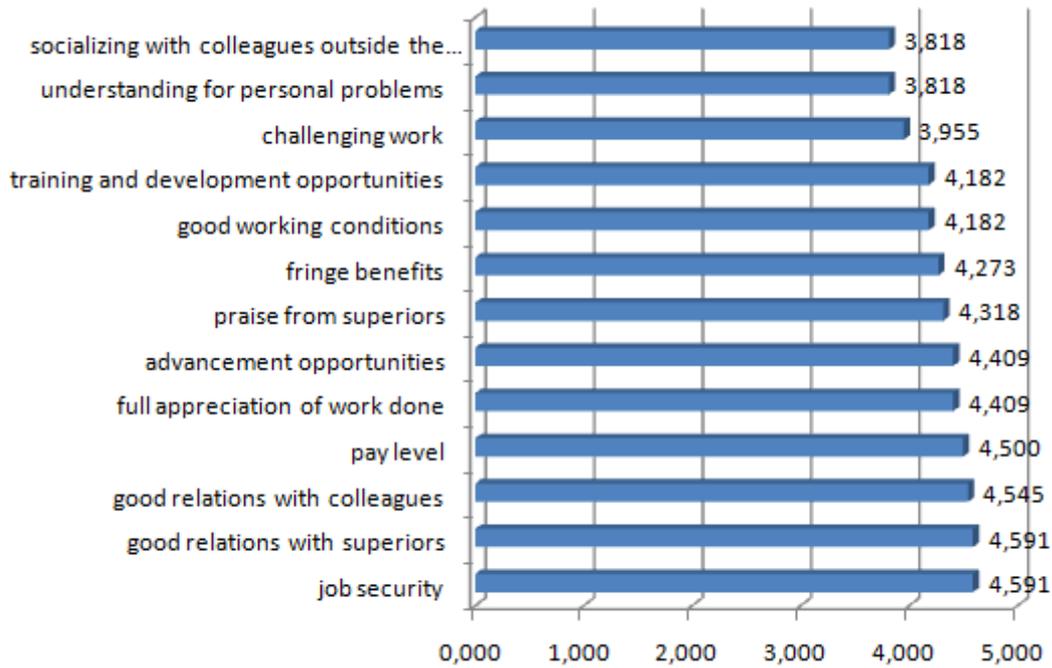
Figure 6: The ranked importance of motivational factors for employees with two-year postsecondary qualifications (K. Pintarić)

Respondents with a university degree ranked the importance of motivation factors as follows: job security, pay level, good working conditions, fringe benefits, full appreciation of work done, praise from superiors, training and development opportunities, good relationships with colleagues, good relations with superiors, advancement opportunities, challenging work, understanding for personal problems, socializing with colleagues outside the workplace.
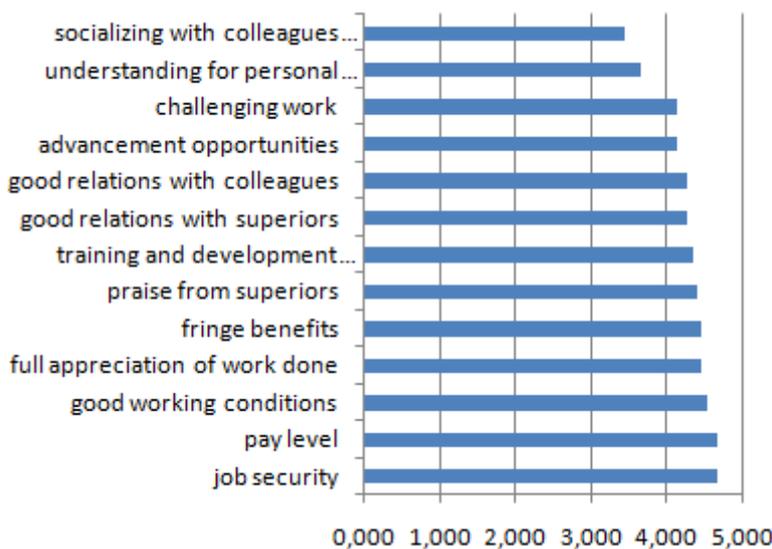
Figure 7: The ranked importance of motivational factors for employees with a university degree (K. Pintarić)

Rankings of the importance of motivating factors vary by education levels. Pay level was not ranked first by any of the groups. It is quite interesting that pay level was found to be of highest importance in the group with two-year postsecondary qualifications were it ranked second.

Contrary to expectations, challenging work was given a low rating by respondents from the same group. Good relationships with colleagues and superiors were given a relatively high rating by respondents with secondary education and two-year postsecondary qualifications, and a very low rating by those with a university degree.

The survey results suggest that the employees' needs and ways of satisfying them vary. The superiors should therefore familiarize themselves with the preferences of each employee to be able to use appropriate motivating factors. It is important for managers to continuously motivate their employees taking into account individual differences, i.e. personality traits, needs, expectations and desires. Immediate supervisors should use their organizational skills and the knowledge of psychology to familiarize themselves with different needs of each employee and use that in selecting motivational strategies.

Employees perform better if the organization they work for appreciates their contribution and provides satisfactory conditions.

6. CONCLUSION

The paper analyses the motivation of sales staff in the banking sector. The bank is a specific organization whose main activity is selling services. The success of selling services depends mainly on the skills and motivation of employees because top-quality services can be provided only by motivated employees. Highly-motivated employees are more creative and inventive, and thus generate new ideas and develop solutions in performing their activities. It is common knowledge that banks take care of their employees and their satisfaction, and continuously invest in employee development and training as well as in the improvement of their working conditions. This is evidenced by the fact that banks are among the most desirable employers according to a research conducted by *Moj posao* portal. The results of this survey indicate that 80% of employees are generally satisfied with their jobs. The paper analysed the importance of various factors motivating bank employees in general as well as by different age groups and different levels of education. Based on the survey results, it can be concluded that the employees' needs and ways of satisfying them vary and therefore it is important for superiors to familiarize themselves with the individual needs of employees and develop motivational strategies to meet those needs.

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BEHAVIOURAL, EMOTIONAL AND PHYSICAL CHANGES ARISING FROM WORKPLACE STRESS IN REGULARLY EMPLOYED INSURANCE AGENTS OF TWO INSURANCE COMPANIES IN SLOVENIA

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ABSTRACT
In this article we focused on regularly employed insurance agents of two insurance companies – on their behavioural, emotional and physical changes related to work – the changes that are a result of workplace stress. Research results indicate particular behavioural (irregular diet and neglect of physical activity due to work), emotional (fear of losing employment, losing their will to work), and physical (fatigue and exhaustion, increased heart rate, high blood pressure, difficulty sleeping, headache, stomach pain and muscle pain) changes in regularly employed insurance agents in both insurance companies. There are certain differences between the behavioural and physical changes of representatives of both insurance companies.
***Keywords:** Behavioural Changes, Emotional Changes, Insurance Company, Physical changes, Workplace Stress*

1. INTRODUCTION

Common European market and rapid development of information technology have greatly enhanced the competitive struggle on the market of insurance services – insurance companies are competing against each other and also against banks and other financial companies that are dealing with insurance activities (Bešter, 2009; Moretti, Biloslavo, 2011). We should also mention the economic and financial crisis, as the IMAD data (2015, p. 49) shows a significantly worsened situation on the market, which is reflected in decreased level of employment of all age groups and specifically of young people. In 2014, partial economic recovery in Slovenia caused an increase in the number of employed persons (mainly in the private sector), but it remained substantially lower than in 2008 (idem). All of this has an impact on the market of insurance services. In addition to the above, the rehabilitation and restructuring of the banking sector also reduced the number of employees in the insurance activities (IMAD, 2015, p. 49), wages in insurance activities have even decreased (IMAD, 2015, p. 74), while the workload of an individual is increasing (Fengler, 2007, p. 9-17). All of this has an impact on their work. A reaction to these loads can be manifested as stress that occurs as the difference between the requirements of work and of working environment and the capacity of an employee (Maslach, Leiter, 2002, p. 23-37). Insurance agents are no exception to this. As a result of mainly negative stress, an individual may experience some behavioural, emotional and physical changes (Dernovšek, Gorenc, Jeriček Klanšček, 2012; Britt, Jex, 2015). In this article, we shall present the part of findings from a wider research, focused on regularly employed insurance agents of two insurance companies – on their behavioural, emotional and physical changes related to work, which are a result of the above factors and mainly of workplace stress. The article is divided into four parts. The introductory part is followed by an overview of literature on workplace stress and its consequences: behavioural, emotional and physical changes related to

work. The third part describes the methodology of research – purpose, method of data collection, sample, and methods of data analysis. The fourth part presents the results of research. This is followed by conclusion and recommendations for further work.

2. WORKPLACE STRESS AND ITS SYMPTOMS (SIGNS) - BEHAVIOURAL, EMOTIONAL AND PHYSICAL CHANGES RELATED TO WORK

Workplace stress is understood as emotional, behavioural and psycho-physical reaction to the aspect of work, organization of work or the working environment, accompanied by a feeling of inability to cope (EASHW, 2000; Bamber, 2011; Britt, Jex, 2015) – stress is a reaction to the source (stressor) that caused the stress. It should be noted that a certain amount of stress has a positive effect on an individual, as it contributes to success (positive stress), but if the amount of stress increases and operates for a long time, it can only have negative effect (the so-called negative stress – distress) (Moretti, Postružnik, 2012; Bamber, 2011) – Figure 1.
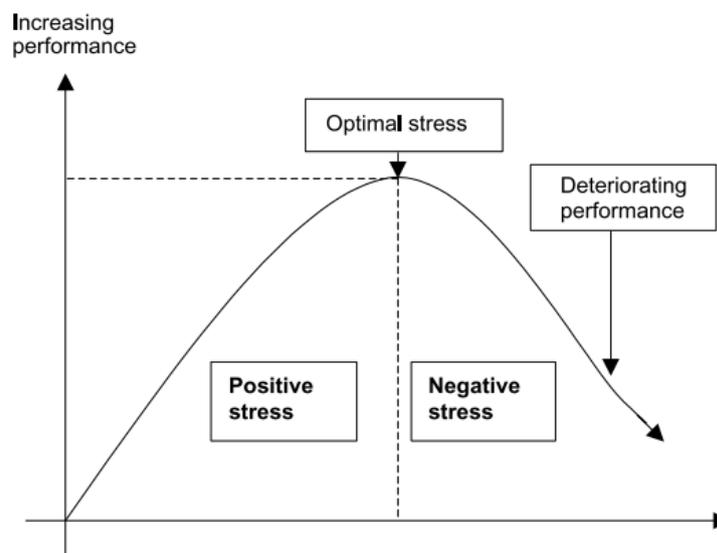
Figure 1: The stress – performance curve (Bamber, 2011, p. 4)

Experiencing stress in the workplace can be caused by individual characteristics (personal characteristics of an individual, his or her strengths and weaknesses, sensing the source of control, capability to cope with situations that pose a threat), technological working conditions (introduction of new technologies without adequate adaptation and training) or conditions in the company (working hours, distribution of work content, inadequate competences, responsibilities or channels of communication) (Rollinson, Broadfield, Edwards 1998, p. 267-269). Occupational stress often occurs due to monotonous and boring work, but even more often it is caused by excessive workload, unrealistic deadlines, vague definition of powers, poor organizational climate, being unable to get a promotion, dissatisfaction with work, increased responsibilities, competition and poor interpersonal relations (Stranks, 2005; Choudhury, 2013; Britt, Jex, 2015). The symptoms (signs) of stress are the following (Losyk, 2005; Starc, 2008; Tušak, et al., 2008; Dernovšek, Gorenc, Jeriček Klanšček, 2012; Britt, Jex, 2015):

- behavioural symptoms such as: irregular diet, neglect of physical activity, modified style of communication (self-conscious communication), inability to complete tasks and/or postponing of work, criticism towards everything, excessive smoking, consuming large quantities of coffee and/or alcohol, excessive use of medicines (antidepressants), etc.;

- emotional symptoms such as: increased fear of losing the employment, loss of will to work (reduced ability to work), irritability, lack of concentration, difficulties in making decisions, absent-mindedness, sense of inferiority etc.;
- physical symptoms such as: permanent fatigue and exhaustion, increased heart rate, difficulty sleeping, common headaches, stomach pain, muscle pain, nausea, dizziness, altered bowel movement, increased appetite,
- lack of energy, permanent fatigue and exhaustion, difficulty sleeping, increased heart rate, chest pain or heart pain, common headaches, stomach pain, muscle pain, nausea, redness of skin and skin tightening feeling, altered bowel movement and appetite, etc.

Companies can assist their employees in managing stress by controlling the stress-causing factors and with programs that sustain the well-being of employees, where the activities have to be directed in particular towards the causes and not only towards remedying the consequences of stressful situations (Losyk, 2005; Bamber, 2011; Britt, Jex, 2015). All these measures have a common denominator: coping with stress in such a way that there will be no economic consequences for the company: costs of administrative procedures (e.g. accounting and payment of personal income in the first 30 days of sick leave, termination of employment, replacing of an employee with other employees, payment of unused leave), possible customer dissatisfaction, potential loss of customers, drop in the quality of services and worse climate in the organization (Schermerhorn, et al., 2010; Božič, 2011).

3. METHODOLOGY

The purpose and objective of the empirical research that is partly introduced in this article was to analyse the behavioural, emotional and physical changes related to work and to determine if there are any differences in these changes between the insurance agents of both insurance companies. To this end, we have set the following hypothesis: "There are differences between regular insurance agents (of first and second insurance company) in certain behavioural, emotional and physical changes related to work." As a base, we used a part of a closed-ended questionnaire containing 39 claims from the field of behavioural, emotional and physical changes related to work. The respondents marked their degree of consent on a scale from 1 (strongly disagree) to 5 (strongly agree). Two demographic questions were also added, namely the respondents stated the insurance agency in which they were employed and their level of acquired education. 230 regularly employed representatives of two Slovenian insurance agencies were included in the survey. We used a technique of survey by e-mail and the questionnaire was sent to all the regularly employed representatives by the human resources departments in these two insurance companies. The survey was carried out in March 2016. Collected data was processed with program SPSS 23. Reliability of measurements of the questionnaire was checked by Cronbach's alpha coefficient ($0,887 > 0,800$), which has shown that the results of the research are reliable (Field, 2013). We used descriptive statistics (Mean, Std. Deviation), Principal component analysis (PCA) and t-test.

4 RESULTS OF EMPIRICAL RESEARCH

4.1 Demographics of the respondents

We received 109 fully completed questionnaires (47.39 % responsiveness). Most respondents (82.4 %) were employed in the Insurance Company 1 – Table 1.

Table 1: Frequency distribution according to insurance company

	Number of respondents	Percentage of respondents
Insurance Company 1	88	80.7
Insurance Company 2	21	19.3
Total	109	100.0

Most respondents (75.2 %) have completed secondary education – Table 2.

Table 2: Frequency distribution according to education

	Number of respondents	Percentage of respondents
Secondary education	80	73.4
Post-secondary education	15	13.8
Higher education	12	11.0
University degree	1	0.9
Master, Doctorate	1	0.9
Total	109	100.0

4.2. Behavioural changes related to work

4.2.1. Basic statistical analysis - behavioural changes related to work

On average, the most respondents agreed that they are eating irregularly because of work (M=3.05), and the most disagreed with the claim that they are using antidepressant agents because of work (M=1.33) - Table 3.

Table 3: Behavioural changes related to work

	Mean	Std. Deviation
My eating schedule is irregular because of my work.	3.05	1.436
I neglect physical activity because of work.	2.93	1.345
I drink a lot of coffee or stimulants because of work.	2.67	1.436
I tend to criticize and be critical towards everything because of work.	2.28	1.161
I can't communicate with co-workers in a relaxed manner because of work.	2.27	1.328
I smoke more because of work.	2.20	1.437
I am becoming more self-contained because of work.	1.83	1.127
I am not able to complete the started tasks and I postpone them because of work.	1.80	1.114
I use alcohol to soothe the daily load because of work.	1.56	1.011
I use antidepressant agents because of work.	1.33	0.859

4.2.2 Principal component analysis – behavioural changes related to work

The suitability of data for the analysis was checked with Kaiser-Meyer-Olkin test (0,748) and Bartlett test (sig = 0.000). All variables had communalities greater than 0.400.

Table 4 shows the three new main components of behavioural changes related to work. The first component V1, called "Smoking, criticism towards everything and neglect of physical activities", contains five variables and explains 36.5 % of the total variance of behavioural changes related to work. The second component V2, called "Inability to complete tasks", contains three variables and explains 22.5 % of the total variance of behavioural changes related to work. The third component V3 contains two variables and explains 9.25 % of the total variance of behavioural changes related to work – it is called "Irregular eating schedule, coffee and stimulants".

Table 4: New variables of behavioural changes related to work and factor weights of individual variables

	Factor weights V1*	Factor weights V2*	Factor weights V3*
I smoke more because of work.	0.771		
I tend to criticize and be critical towards everything because of work.	0.656		
I can't communicate with co-workers in a relaxed manner because of work.	0.620		
I neglect physical activity because of work.	0.522		
I use alcohol to soothe the daily load because of work.	0.500		
I am not able to complete the started tasks because of work.		0.819	
I am becoming more self-contained because of work.		0.641	
I use antidepressant agents because of work.		0.526	
My eating schedule is irregular because of my work.			0.842
I drink a lot of coffee or stimulants because of work.			0.768
% of explained variance: 67.985	36.220	22.520	9.245

*V1: Smoking, criticism towards everything and neglect of physical activities; V2: Inability to complete tasks; V3: Irregular eating schedule, coffee and stimulants.

4.3. Emotional changes related to work

4.3.1. Basic statistical analysis – emotional changes related to work

On average, the most respondents agreed that they are afraid they would lose their employment because of work (M=3.26), and the most disagreed with the claim that they feel inferior because of work (M=2,26) - Table 5.

Table following on the next page

Table 5: Emotional changes related to work

	Mean	Std. Deviation
I am often afraid I would lose my employment because of work.	3.26	1.539
I often lose the will to work because of work.	3.15	1.356
I often quickly lose my temper because of work.	2.76	1.346
I often have trouble concentrating because of work.	2.63	1.311
I am often distant towards friends and society because of work.	2.62	1.435
I am often absent-minded because of work.	2.59	1.333
I often have nightmares because of work.	2.35	1.321
I often have a hard time making working decisions because of work.	2.27	1.194
I often have a feeling of inferiority because of work.	2.26	1.301

4.3.2 Principal component analysis – emotional changes related to work

The suitability of data for the analysis was checked with Kaiser-Meyer-Olkin test (0,788) and Bartlett test (sig = 0.000). All variables had communalities greater than 0.400.

Table 6 shows two new main components of emotional changes related to work. The first component Č1, called "Losing the will to work", contains five variables and explains 42.28 % of the total variance of emotional changes related to work. The second component Č2, called "Absent-mindedness and irritability", contains four variables and explains 21.65 % of the total variance of emotional changes related to work.

Table 6: New variables of emotional changes related to work and factor weights of individual variables

	Factor weights Č1*	Factor weights Č2*
I often lose the will to work because of work.	0.824	
I am often afraid I would lose my employment because of work.	0.791	
I often have nightmares because of work.	0.776	
I often have a feeling of inferiority in front of my co-workers because of work.	0.759	
I am often distant towards friends and society because of work.	0.656	
I am often absent-minded because of work.		0.840
I often quickly lose my temper because of work.		0.828
I often have trouble concentrating because of work.		0.800
I often have a hard time making working decisions because of work.		0.680
% of explained variance: 63.925	42.280	21.645

*Č1: Losing the will to work; Č2: Absent-mindedness and irritability.

4.4. Physical changes related to work

4.4.1. Basic statistical analysis - physical changes related to work

On average, the most respondents agreed that they are afraid they would lose their employment because of work (M=3.26), and the most disagreed with the claim that they feel inferior because of work (M=2.26) - Table 7.

Table 7: Physical changes related to work

	Mean	Std. Deviation
I am often tired and exhausted because of work.	4.01	1.139
My heart rate is often increased because of work.	3.61	1.391
My blood pressure is often increased because of work.	3.32	1.495
I often have trouble sleeping because of work.	3.32	1.354
I often experience headaches because of work.	3.22	1.367
I often have stomach pain and muscle pain because of work.	3.10	1.394
I often experience nausea or dizziness because of work.	2.75	1.407
I often experience skin redness and tightening of skin because of work.	2.37	1.335
My appetite is often increased because of work.	2.32	1.342
I often experience indigestion because of work.	2.28	1.311

4.4.2 Principal component analysis - physical changes related to work

The suitability of data for the analysis was checked with Kaiser-Meyer-Olkin test (0,725) and Bartlett test (sig = 0.000). All variables had communalities greater than 0.400.

Table 8 shows two new main components of physical changes related to work. The first component T1, called "Increased heart rate, fatigue and exhaustion", contains six variables and explains 46.28 % of the total variance of physical changes related to work. The second component T2, called "Increased appetite and indigestion", contains three variables and explains 25.18 % of the total variance of physical changes related to work.

Table following on the next page

Table 8: New variables of physical changes related to work and factor weights of individual variables

	Factor weights T1*	Factor weights T2*
My heart rate is often increased because of work.	0.813	
I am often tired and exhausted because of work.	0.790	
I often experience headaches because of work.	0.741	
I often have trouble sleeping because of work.	0.693	
I often experience skin redness and tightening of skin because of work.	0.691	
I often experience nausea or dizziness because of work.	0.655	
My appetite is often increased because of work.		0.837
I often experience indigestion because of work.		0.831
I often have stomach pain and muscle pain because of work.		0.727
% of explained variance: 71.458	46.280	25.178

*T1: Increased heart rate, fatigue and exhaustion; T2: Increased appetite and indigestion.

4.5. Hypothesis: There are differences between regular insurance agents (of first and second insurance company) in certain behavioural, emotional and physical changes related to work.

The hypothesis was checked with t-test. Table 9 shows that there are statistically significant differences (sig<0.05) between the regular insurance agents of the two insurance companies in behavioural changes, namely in V1: "Smoking, criticism towards everything and neglect of physical activities", and in physical changes related to work, namely in T1: "Increased heart rate, fatigue and exhaustion". The average values of both new variables were higher for Insurance Company 2.

We note that on average the respondent regular insurance agents from Insurance Company 2 smoke more cigarettes because of work, are more critical towards everything and neglect physical activity more than the respondent insurance agents from Insurance Company 1.

We also note that on average the regular insurance agents from Insurance Company 2 more often have increased heart rate, are more exhausted and tired because of work, more often experience work-related headaches and trouble sleeping than the insurance agents from Insurance Company 1.

Table following on the next page

Table 9: Statistically significant differences in the behavioural (V), emotional (Č) and physical (T) changes related to work between regular insurance agents (of Insurance Company 1 and 2).

		N	Mean	Std. Deviation	Sig
V1: Smoking, criticism towards everything and neglect of physical activities	Insurance Company 1	88	2.22	0.908	0.007
	Insurance Company 2	21	2.69	0.627	
V2: Inability to complete tasks	Insurance Company 1	88	1.75	0.849	0.183
	Insurance Company 2	21	1.52	0.629	
V3: Irregular eating schedule, coffee and stimulants	Insurance Company 1	88	2.95	1.264	0.594
	Insurance Company 2	21	2.79	1.230	
Č1: Losing the will to work	Insurance Company 1	88	2.75	1.093	0.246
	Insurance Company 2	21	3.05	0.974	
Č2: Absent-mindedness and irritability	Insurance Company 1	88	2.66	1.096	0.641
	Insurance Company 2	21	2.54	0.945	
T1: Increased heart rate, fatigue and exhaustion	Insurance Company 1	88	3.23	1.013	0.000
	Insurance Company 2	21	3.93	0.487	
T2: Increased appetite and indigestion	Insurance Company 1	88	2.64	1.080	0.964
	Insurance Company 2	21	2.65	1.112	

5. CONCLUSION

In this article we focused on regularly employed insurance agents of two insurance companies – on their behavioural, emotional and physical changes related to work, that are mostly the consequence of workplace stress.

The findings indicate particular behavioural (irregular diet and neglect of physical activity due to work), emotional (fear of losing employment, losing their will to work), and physical (fatigue and exhaustion, increased heart rate, high blood pressure, difficulty sleeping, headache, stomach pain and muscle pain) changes related to work in regularly employed insurance agents in both insurance companies.

The following hypothesis was formed as a guideline for research: There are differences between regular insurance agents (of first and second insurance company) in certain behavioural, emotional and physical changes related to work. Testing of the hypothesis showed that there are differences between regular insurance agents of insurance companies 1 and 2 in certain

behavioural and physical changes related to work. We noted that on average the respondent regular insurance agents from Insurance Company 2 smoke more cigarettes because of work, are more critical towards everything and neglect physical activity more than the respondent insurance agents from Insurance Company 1. We also noted that on average the regular insurance agents from Insurance Company 2 more often have increased heart rate, are more exhausted and tired because of work, more often experience headaches and trouble sleeping than the insurance agents from Insurance Company 1. There are no differences in the emotional changes related to work between regular insurance agents of insurance companies 1 and 2. The conclusion is that the hypothesis is partially confirmed.

On the basis of the results of the research, we suggest the following guidelines and recommendations for practice:

- We recommend for insurance companies to control the factors causing stress to regularly employed insurance agents and to organise individual programs for maintaining the health and well-being – this would reduce or completely eliminate the source of workplace stress.
- We recommend creating better working conditions and improvement of the current ones.
- We recommend for the regularly employed insurance agents to have a more active part in the making of decisions that regard their work.
- We recommend an improvement in communication between managers and regularly employed insurance agents.
- We recommend systematic development of managers that are in charge of regularly employed insurance agents.

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HIGH SCHOOL STUDENT FINANCIAL LITERACY ACCORDING TO SCHOOL TYPE

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ABSTRACT

Financial literacy is a concept that contains knowledge and skills to be acquired by people, enables the accurate use, accumulation, increase, and management of incomes, and directly affects both national and international economies. Knowledge of individuals regarding financial concepts and their applications are of vital importance regarding financial decisions that would be made in every moment of life. This study examined the financial literacy levels of high school students, who contain the young population of society. A one-way ANOVA was conducted to determine differences between school types. The result shows that Science High Schools had the highest financial literacy level.
Keywords: *Financial Literacy, High School, Spending, Saving*

1. INTRODUCTION

Financial literacy, which has increased efficiency especially in recent years, remains on the agenda of financiers, economists, trainers, and politicians. There are the different and explicit definitions of the financial literacy. Nevertheless, financial literacy could be defined as making final decisions for accurately managing and using financial tools, which have many types in today's global economy. Vital properties of financial literacy involve the necessity of radically knowing credit cards, consumer loans, insurances, individual retirements, retirement plans, vehicle, and mortgage loans and the effects of inflation on income. In today's world, where we need to make complex and important decisions almost every day, it is considered a vital skill to implicitly learn and apply financial concepts (Taylor &Wagland, 2013). Considering from this point of view, individuals are required to know financial concepts even at least the basic level, and many economic decisions require basic knowledge of financial concepts. The aim of increasing the financial literacy level is to decrease mistakes while making financial decisions (Temizel & Bayram, 2011). Even though financial innovations that intimately affect all individuals in society give new opportunities for consumers. It places higher burdens on consumers that have a difficulty in understanding financial products. As a result of a study, it was determined that lack of financial education caused 59.4% increase of consumer loan debts (DeLaune, Rakow, & Rakow, 2010). Financial literacy programs are developed and applied in many countries as they have undeniably significant contributions to every citizen. These programs mainly aim to update develop perfect understanding of financial knowledge of individuals. The reason for the low-level financial literacy is associated with the fact that individuals are not sufficiently trained in finance throughout their education (Crain, 2013). Examining course catalogs of 435 universities; Crain (2013) determined that 308 universities involved at least one course regarding financial literacy; however, only 37 universities provided an elective financial literacy course for their students. It is critical to face complex financial decisions at a young age in today's compelling financial environment. Financial mistakes that are made in the early age of life especially without educators giving feedbacks about their mistakes may affect their financial decisions in the future. At this point, studies aimed at helping young consumers are of vital importance regarding raising well-informed young adults

(Lusardi, Mitchell, & Oberholzer, 2011). Lührmann (2013) examines the importance of financial literacy for young adults in three main topics: Firstly, young adults are cognitively more prepared regarding learning efficiency. Secondly, early learning of financial information is more effective in preventing possible shortage of financial knowledge in the old age. Finally, if financial literacy is involved in high school curriculums, there will increase the opportunity to reach all population groups. Recent economic crises, population growth, fluctuations in markets, economic and administrative changes all signify the importance of financial literacy. In many developed countries, particularly in the United States of America, a considerable number of people never practice economic saving skills (Turkish Economy Bank, 2013). Lusardi (2008) separates financial literacy into two parts as basic financial literacy and advanced financial literacy. Basic financial literacy is related to simple banking processes, interpretations about interest, interpretations about inflation and interpretations about financial risks. On the other hand, advanced financial literacy is related to the function of the stock market, having information about investment funds and the relationship between interest and bills of exchange (Ergün, Sahin, & Ergin, 2014).

2. METHOD

This purpose of this study was to assess the financial literacy levels of high school students. The online questionnaire was administered to high schools students in the 2015-2016 academic years. The sample of this present study was 519 high school students (approximately 100 from 5 different high schools), and the non-random sampling method was used. Before applying the scale to the students, they were informed about the study and were asked to give their best answers to the questions. The original instrument of this study was created by Louw, Fouche, and Oberholzer (2013), and it was modified by Kılıç, Ata, and Seyrek (2015). The permission to use this instrument was obtained from its developer. Answers of the first part of questionnaire involved "Yes", or "No." Before applying the questionnaire to the sample group, a pilot study was performed on a student group of 40. The questionnaire consisted of two sections to assess the financial literacy level. The first part included twelve questions to measured necessary financial information like general economy and finance, banking processes, retirement, investment, tax, and legislation. The second part of the questionnaire included demographic questions, including gender and school type. A one-way analysis of variance (ANOVA) was used to determine differences between school types and follow-up tests were conducted to evaluate pairwise differences among the means.

3. FINDINGS

The demographic data included gender and school type. The demographic characteristics of the high school students who completed the survey are shown in the Table 1.

Table following on the next page

Table 1. Descriptive Statistics

		X	SD	Min.	Max.	N
Gender	Female	1.48	.16	1.00	1.92	279
	Male	1.54	.17	1.00	1.92	240
School Type	Science High School	1.58	.17	1.17	1.92	132
	Anatolian High School	1.52	.19	1.00	1.92	145
	Religion-based High School	1.44	.14	1.08	1.83	28
	Vocational and Technical Anatolian High School	1.47	.18	1.17	1.83	95
	Anatolian Medical High School	1.46	.15	1.17	1.92	116

Table 2 summarizes the average success scores of students according to school type. The results show that high school students have a general success level of 50.6% regarding financial literacy. On the other hand, they have a general average of 49.4% incorrect answer regarding financial literacy.

Table 2. Percentage of answer

	Incorrect	**Correct**
Science High School	41.9%	58.1%
Anatolian High School	47.5%	52.5%
Religion-based High School	56.0%	44.0%
Vocational and Technical Anatolian High School	52.1%	47.9%
Anatolian Medical High School	53.4%	46.6%
Other	61.1%	38.9%

Comparing by school type, the highest success scores belonging to students are respectively in Science High Schools (58.1%), Anatolian High Schools (52.5%) and Vocational and Technical Anatolian High Schools (47.9%). On the other hand, the lowest scores belonging to students are respectively in Religion-based High Schools (44%) and Other High Schools (38.9%). Table 3 shows the ANOVA scores by school type.

Table 3. ANOVA results by School Type

Variance Resource	Sum of Squares	SD	Average of Squares	F	p
Intergroup	1.507	5	.301	9.78	.000
Intragroup	15.813	513	.031		
Total	17.320	518			

A one-way ANOVA results show that there is a significant difference between school types regarding the high school students' financial literature knowledge. In other words, there is a difference between the school types and students attitudes toward financial literacy, $F(5,513)=$ 9.78, $p < .01$. Results of the Tukey test, which was conducted for determining the groups that had a difference between units, show that attitudes of students receiving education in Science High Schools (X=1,58) toward financial resources are significantly different from the attitudes of students receiving education in Religion-based High Schools (X=1.44) and Anatolian Medical High Schools (X=1.46). In addition to this, there is a significant difference between the attitudes of students receiving education in Anatolian High Schools (X=1.52) and Religion-based High Schools (X=1.44).

4. CONCLUSION

Citizens gradually become more obliged to improve their literacy level to take strong financial steps in issues primarily like money and assets management. Thus, starting from the primary school age, students need to sufficiently train themselves regarding financial concepts in order of make correct decisions at secondary school, high school, and university. At this point, it is also frequently emphasized by society to necessarily increase the financial literacy level of citizens to minimize the effects of the idea of spending money, which is the most important financial literacy expected by countries for their citizens. This study was conducted to determine the financial literacy level of high school students in Turkey. The findings show that high school students had moderate levels of financial literacy (50%), which was expected by their age. The difference was determined between the financial literacy levels according to high school type. While Science High Schools had the highest financial literacy level, and Religion-based High Schools and high schools classified as "others" had the lowest financial literacy level. This condition is associated with the positive effect of courses that are received by Science High School students regarding finance on the financial literacy level. The results of this study shows a similarity with other financial literacy studies that have been conducted for college students such as Kılıç et al., (2015); Temizel and Bayram (2011), and Bayram (2015). Additionally, Özgen and Bindak (2011) found that Anatolian High School students were placed on the top regarding financial literacy level; General High School students became the second, and Vocational High School students the third. According to the national report of PISA-2012, Science High Schools were determined to have the highest Math performance. Also in Turkey, Science High Schools also had the highest general success in the university entrance exam (national exam) (LYS or YGS) in 2015. Recent years, financial literacy level has been assessed by ministry of education and governments of economically developed or developing countries.

Based on the results of this study, it is recommended that governments and ministry of education plans a training for financial literacy that are required for better understanding of financial literacy understanding. Financial literacy does not concern only high school students. Literacy is a field that affects the entire life of individuals, including their retirement, tax return, saving, mortgage, leasing car, and so on. In this respect, it could be recommended that adding financial literacy courses as an elective course in the school curricula, organizing seminars and workshops, and providing online training will increase the knowledge of individuals' financial literacy level.

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ORGANIZATIONAL CHANGES AND THE IMPACT OF STRESS ON EMPLOYEES OF LOCAL GOVERNMENT

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ABSTRACT
Organizational changes can be defined as a process that changes and adapts existing organizations. In order to successfully implement organizational changes within the organization, it is necessary to define what needs to be changed, examine which changes employees are willing to accept and can commit to. It is important to implement changes gradually and inform all employees because they make the organization what it is. There are three basic organizational changes. These are personnel changes, changes in the organizational structure and technological changes. The most important are personnel changes because they cause employee resistance. In order for changes to be successfully implemented, it is necessary to motivate employees to accept them, convince them that they are necessary and that they provide benefits. Each and every organizational change causes some kind of stress among employees. Stress is a state of tension reflected in the way an individual copes with unusual requirements, constraints and opportunities. Sometimes it can be positive, but in most cases it has physical, psychological or behavioural effects on employees.
Keywords: *organizational changes, personnel changes, resistance, stress*

1. INTRODUCTION
Organization is a social entity deliberately structured to achieve specific goals. The term organization is used here to include not just the entity, but all of the organizational processes taking place within the organization as well. This paper looks at organizational changes implemented in a local self-government unit, the timing of their implementation and the way in which they affect employees. The focus is on personnel changes and their impact on employees. It is common knowledge that any change is stressful and there is usually resistance to it. Since personnel changes have the strongest impact, this study looks into the positive and negative effects of organisational changes as well as the causes of work stress.

2. ORGANIZATIONAL CHANGES
Organizational changes can be defined as the process of changing, that is adapting the existing organization, or accepting new ideas. They can be useful and facilitate organisational growth, but they can also increase uncertainty and the risk of setbacks. The most common causes of change in an organization are social or political, economic, and technology-related. A well-planned change should produce desirable effects. The most important effects of well-planned changes are (Schermerhorn, J.R.jr., Hunt, J.G., Osborn, R.N. (2000), Organizational Behavior, John Wiley and Sons, New York, 397): the fulfilment of organisational purpose, achievement of organisational goals, implementation of strategy, introduction of a new technology, structural

change, task performance, people change, and cultural change. An organizational change is considered to be successfully implemented (Robbins, S.P., Judge, T.A., 2007) when the organization has changed from the current state into the desired future state; when the operation of the organization in the future state has fulfilled the expectations; when the transition from the current to the future state has not had any major consequences for the organization or caused considerable damage to individuals, i.e. the employees of the organization. There are various classifications of the types of change; however, it is considered that the following four types identified by R. L. Daft, best sum up the meaning of change:

- ➢ **Technology changes** (Daft, R.L. (2004), op.cit.403) – changes in the production process; more efficient production; production of greater volume; new technologies of production of goods and services and new work methods; new equipment and work flow.
- ➢ **Products and service changes** – innovation and improvement of existing products and services.
- ➢ **Structural changes** (Robbins, S.P., Coutler, M., (2005)) – work specialisation, the chain of command, range of control, the level of centralization and formalization in the organization, redesigning of jobs, and redesigning of the entire organization
- ➢ **People changes** – changes in the values, skills, standards, expectations, beliefs, behaviour, and attitudes of employees.

2.1 RESISTANCE

Since organisations are made up of people, they are the main and only source of resistance to change. The main task of the management is to get people on board with change. To reduce resistance, the change agent must first analyse the current situation in the organization in terms of structure, processes, people and culture, i.e. the values and beliefs of employees. The results should be shared with employees who will be most affected by the change. This will help them understand why things have to change. They will be able to see the possible consequences of keeping things as they are and the reasons why the present situation cannot be left unchanged. Changing the way people have worked for a long time is not easy. If someone explains to them what the problem is and how serious it is, it will be easier for them to make a decision on whether to support or resist the proposed change (Potts, R., LaMarsh, J., 2005).

2.2 CHANGES AND STRESS

Work stress is one of the main concerns of the organizational management. It significantly affects people's behaviour and life in general because for thirty-five to forty years of their lives they spend half their waking hours at work. In addition, it is difficult to completely separate one's private life from professional life which means that things that happen at work affect life outside of work, and vice versa. Stress in general, including work stress, is a complex phenomenon with multiple causes that affects individual and organizational behaviour in a number of ways. Stress has a wide variety of symptoms that indicate to people in the organization who deal with this issue, as well as those who experience it that there is a problem (Bahtijarević – Šiber, 1999).

The sources of stress can be categorised into the following three groups (Robbins, S.P., Judge, T.A., 2007) (Figure 1.):
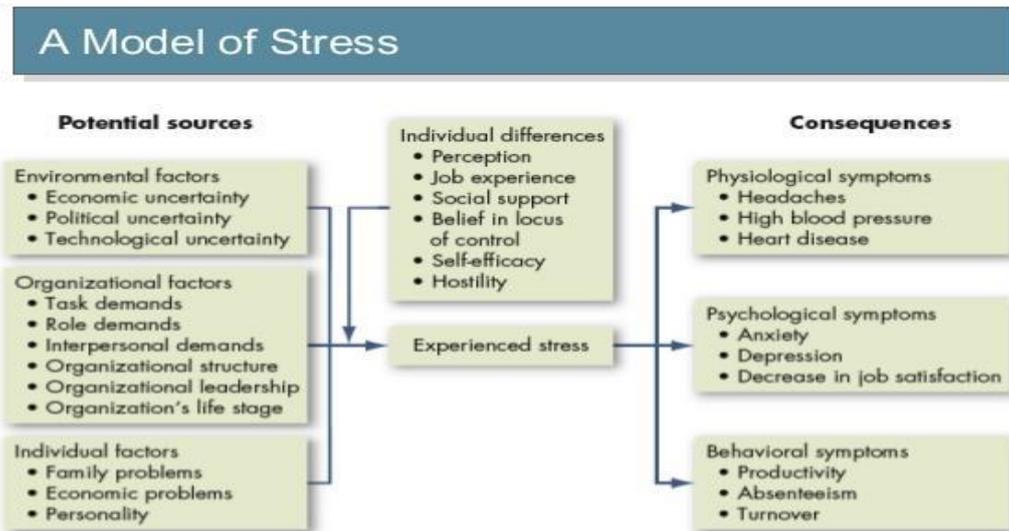
Figure 1. A model of stress (based on: Robbins, Judge, 2009, p. 667)

The consequences of stress fall into the following three general categories: physiological, psychological and behavioural symptoms. According to S. P. Robbins and M. Coulter, the symptoms of stress are as follows (Robbins, S.P., Coulter, M. (2005), op.cit. 324):

Physiological symptoms of stress include metabolic changes, high heart rate, rapid breathing, increased blood pressure, headaches, and an increased risk of heart attack.

Psychological symptoms of stress include job dissatisfaction, tension, anxiety, irritability, boredom and procrastination.

Behavioural symptoms of stress include changes in productivity, absenteeism, change of workplace, changes in eating habits, increased smoking, increased alcohol use, rapid speech, restlessness and sleep disorders.

3. RESEARCH AIM, RESPONDENTS AND RESEARCH METHODS

The aim of this research is to obtain information by means of a survey in order to accept or reject the proposed hypotheses and come to a conclusion based on the results of the analysis. The results of this research could help with the implementation of personnel changes in an organization. The survey included employees of Varaždin City local self-government unit. Varaždin City government has 102 employees, aged 20-65, working in clerical and management positions. Their educational levels range from secondary education to a doctoral degree. The survey questionnaire was administered to participants by e-mail. Respondents were informed that the survey was anonymous and would be used for the purpose of writing a thesis. The survey consists of 18 questions.

The first section of the survey elicits general information about the respondents such as their gender, age, education, and length of service in the organization.

The second section relates to the organizational and personnel changes. The respondents were asked to rate the positive and negative factors of organizational changes on the Likert scale. The list of positive factors of organizational changes includes better organization of work, professional training opportunities, advancement opportunities, better communication with superiors, consideration of the opinions of employees, accepting suggestions of employees, rewarding, and positive working environment. The list of negative factors of organizational changes includes poor organization of work, lack of advancement opportunities, work overload,

poor communication, lack of availability of relevant information, job cuts, management personnel lacking expertise, employment based on political affiliation and political connections.

The third section of the questionnaire relates to stress, stress factors and the consequences of stress. The listed stress factors include excessive workload, inappropriate behaviour of superiors, problems with other employees, the fear of job loss, inadequate working conditions, hectic work environment, accountability, lack of communication with superiors, inability to perform duties due to other factors, and inappropriate public criticism. The listed consequences of stress include headaches, increased blood pressure, increased heart rate and breathing, tension, anxiety, irritability, changes in eating habits, increased smoking, and restlessness.

5. HYPOTHESES

Five hypotheses were developed for the purpose of this research. The research results will be analysed to conclude whether or not they support the following hypotheses:

1. Personnel changes in the local self-government unit are necessary following local elections and the change of government.
2. Management positions are held by persons who lack expertise.
3. Political affiliation is a decisive factor in implementing personnel changes.
4. Most employees experience stress in the workplace.
5. Most employees have experienced the fear of job loss.

6. RESEARCH RESULTS

Table 1. Research results (author's contribution)

53 RESPONDENTS			
GENDER	MALE	21	39.60%
	FEMALE	32	60.40%
AGE RANGE	20-30 years of age	6	11.50%
	31-40 years of age	14	26.90%
	41-50 years of age	19	36.50%
	51-60 years of age	12	23.10%
	61-65 years of age	1	1.90%
EDUCATION LEVEL	secondary education/ high school diploma	18	34%
	two-year postsecondary education (bachelor's degree)	13	24.50%
	university degree (master's, engineer)	20	37.70%
	master's degree	1	1.90%
	doctoral degree	1	1.90%
YEARS OF SERVICE	1-5 years	13	24.50%
	6-10 years	10	18.90%
	11-15 years	6	11.30%
	16-20 years	5	9.40%
	20+ years	19	35.80%

HYPOTHESIS 1. *Personnel changes in the local self-government unit are necessary following local elections and the change of government.*

The results of research and the respondents' answers do not support this hypothesis. To the question as to whether personnel changes are necessary after local elections and the change of government, of the 53 respondents, 19 (35.8%) said YES, 26 (49.1%) said NO, and 8 (15.10%) said they did not know.
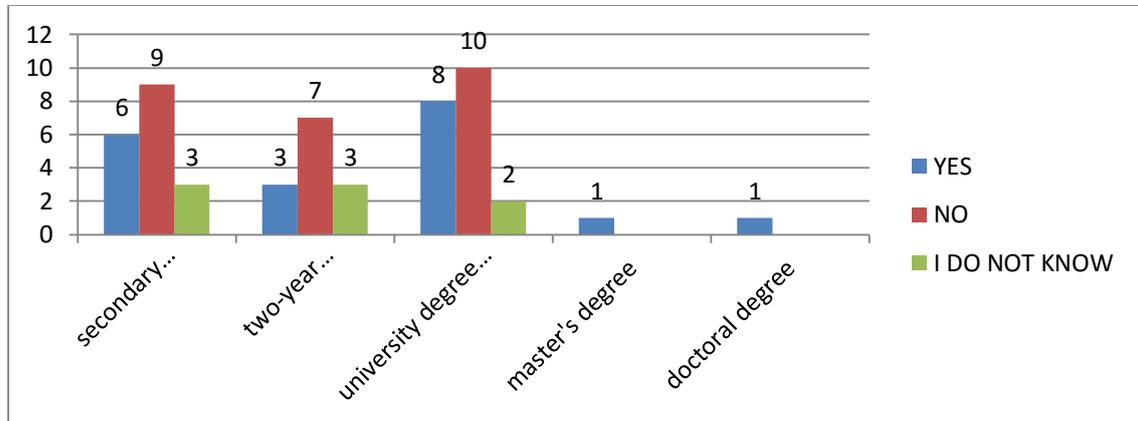
Figure 1. 1. Results by education level – hypothesis 1. (Stolnik, V., 2016)

By analysing the results it was established that most of the respondents with two-year postsecondary education believe that personnel changes are not necessary. 53.84% of them said they were not necessary. 50% of the respondents with a high school diploma and a university degree found these changes to be unnecessary. Respondents with a master's degree and those with a doctoral degree were in favour of the changes. 40% of the respondents with a university degree were of the opinion that personnel changes were necessary. Based on these results, it can be concluded that employees with higher educational attainment advocate personnel changes, most likely hoping that they would help them advance their careers.

HYPOTHESIS 2. *Management positions are held by persons who lack expertise.*
The survey results show that 53.5% of the respondents believe that management positions are held by persons who lack expertise. Therefore this hypothesis is confirmed. A more detailed analysis shows that most of the respondents with a high school diploma and a university degree support this view. Survey sample composition by workplace shows that seven respondents hold management positions, of which one has a high school diploma and one a bachelor's degree, while five have a university degree. Respondents with a master's or a doctoral degree hold administrative or clerical positions and they too find that management positions are occupied by persons who lack expertise.
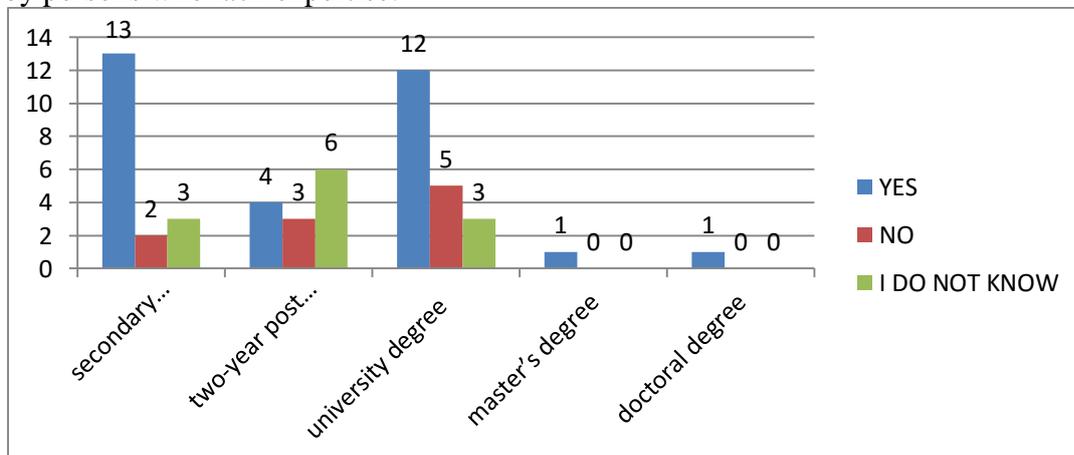
Figure 1. 2. Results by education level – hypothesis 2. (Stolnik, V., 2016)

The respondents who support this view are mostly those with a high school diploma and a university degree. Considering that two management positions are held by persons with secondary and two-year postsecondary education, while those with a master's and doctoral degree work as administrative or clerical staff, this hypothesis is rejected.

HYPOTHESIS 3. *Political affiliation is a decisive factor in implementing personnel changes*
73.6% of the respondents believe that political affiliation is a decisive factor in making personnel changes; 17% were of the opposite opinion, and 9.4% of the respondents said they did not know. These results confirm the hypothesis.
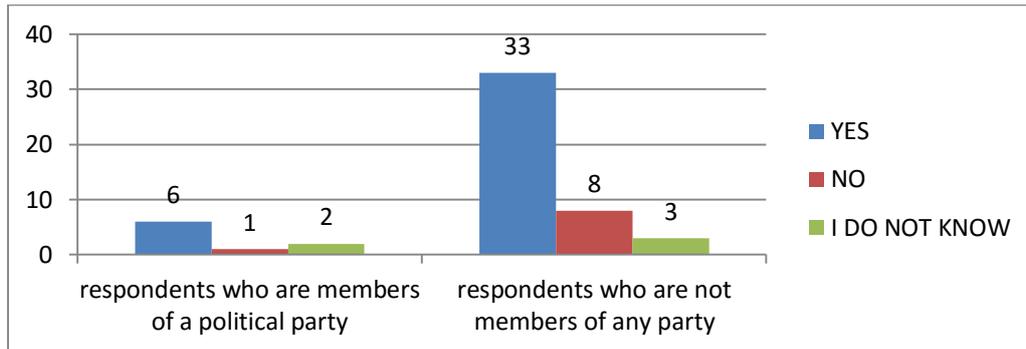
Figure 1. 3. Results by political affiliation – hypothesis 3. (Stolnik, V., 2016)

Of the 53 respondents, nine are members of a political party, while the remaining 44 are not politically affiliated. Of the nine political party members, six (66.67%) consider that political affiliation is a decisive factor in personnel changes, as does 75% of the respondents who are not members of any political party. Regardless of whether they are members of a political party or not, their opinion is that political affiliation is an important factor in making personnel changes.

HYPOTHESIS 4. *Most employees experience stress in the workplace.*
The results of the survey show that all respondents have experienced stress in the workplace. This confirms the hypothesis. Of the 53 respondents, 66.70% experience stress all the time, while 33.30% experience it only occasionally.
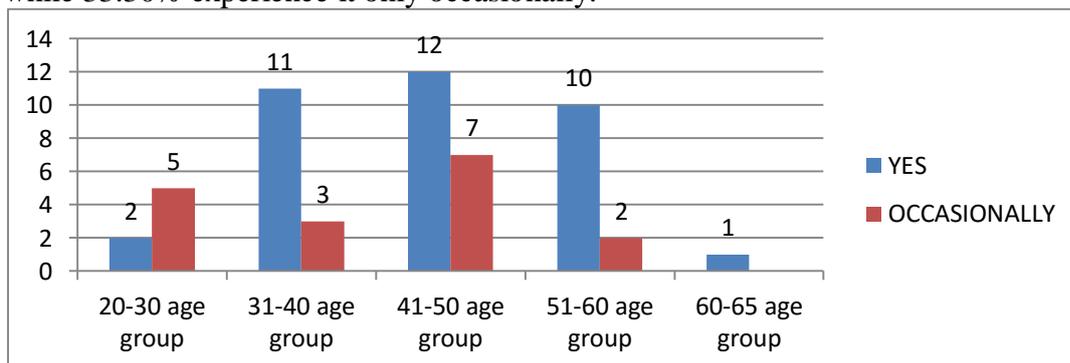
Figure 1. 4. Stress occurrence by age group – hypothesis 4. (Stolnik, V., 2016)

Responses by age group show that stress is experienced mostly by respondents in the 51-60 age group. As much as 83.33 percent of the respondents in this age group experience stress at work on a daily basis. The 31-40 age group ranked second with 78.57% of the respondents reporting they experience stress on a daily basis, while 21.73% experience it only occasionally. In the age group 41-50, 63.16% of the respondents experience stress daily, while 36.84% of them experience it only occasionally.

HYPOTHESIS 5. *Most employees have experienced the fear of job loss.*
This hypothesis is rejected based on the analysis of the importance of stress factors shown in the survey results. Of the ten stress factors, the fear of job loss ranked tenth.

Table 2. The rankings of stress factors (Stolnik, V., 2016)

Stress factors occasionally experienced by the respondents at work	
1. Problems with other employees	23
2. Inappropriate public criticism	23
3. Inability to perform duties due to other factors	21
4. Poor communication with superiors	21
5. Hectic work environment	20
6. Inappropriate behaviour of superiors	18
7. Accountability	17
8. The fear of job loss	16
9. Inadequate conditions in the workplace	15
10. Excessive workload	13

It is the perception of the public that government jobs are high-paying secure jobs performed in comfortable offices, within the prescribed working hours, with Saturdays and Sundays off. However, working conditions, salaries, job security and working hours depend on the specific job description. Because of this misconception, the stress factor "inappropriate public criticism" was ranked second by the respondents. Problems with other employees were ranked first, followed by the inability to perform one's duties due to other factors, lack of communication with superiors, hectic work environment, inappropriate behaviour of superiors, accountability, and the fear of job loss. Inadequate conditions in the workplace and excessive workload were ranked second-last and last, respectively.

6. CONCLUSION
Organisational changes are essential for an organisation to gain a competitive advantage in the market. Organizational changes are necessary; however, they do not guarantee success in the future. The assumptions that changes can happen only if initiated by top management or that they will not be implemented unless supported by the management are false. Regardless of whether they affect technology, structure or personnel, changes must engage all employees, and their success depends on whether or not employees accept them, as well as employee efforts, commitment to and readiness for change. This can be achieved only if employees are well-informed about the planned changes. Any change, be it in private or professional life, causes some resistance. Resistance to change can be reduced or even eliminated if the change benefits employees. Personnel changes cause greatest resistance. There are very few employees who do not feel threatened when personnel changes occur. This paper analyses the results of the questionnaire administered to the employees of the local self-government unit of the City of Varaždin. City government is not a typical organization, but it operates like most organizations. It has its mission, vision, goals and employees. The biggest changes in the city government are implemented following local elections and they usually include personnel changes. They are most prominent. Most employees believe that personnel changes are not necessary after the change of top management. However, the fact that hardly anyone fears for their job is interesting. In spite of feeling safe from job loss, there are other factors that cause resistance to personnel changes. The majority believes that politics has a major impact on personnel changes and that people in management positions lack expertise. Working in such an environment,

where there is a lack of agreement with superiors and colleagues, as well as a lack of communication with their superiors, combined with excessive workload and other factors, causes a certain amount of stress in all employees. Consequently, stress can affect the mental and physical health of employees, which certainly is not a solid foundation for successful performance of any organization.

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THE GREENHOUSE GAS EMISSION IN THE EU: A VAR ANALYSIS OF THE RELEVANT VARIABLES

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ABSTRACT

This paper considers the relevance of a nexus of variables relevant to achieving the Sustainable Development Goals (SDGs) of the United Nations, as well as accomplishing the goals of the Paris Agreement. It empirically considers the 28 European Union (EU) member states, dividing them into three panels based upon the time of their accession to full EU membership. The empirical analysis consists of unit root tests, a Vector Autoregressive (VAR) framework, Granger causality test, and diagnostic tests. Based upon the empirical results, there are significant differences between the post-transitional and original EU member states. This difference is most notable in the fact that only in the panel of countries that have acceded to the EU after 2004 there is a statistically significant link between energy consumption and the greenhouse gas emission. We therefore conclude that while not all EU member states exhibit signs of environmental imbalances, there still are significant differences between the EU 15 and the states that have acceded to full membership after 2004.
Keywords: Granger causality, VAR analysis, Sustainable Development Goals (SDGs), greenhouse gas emission, the European Union (the EU), economic growth

1. INTRODUCTION

With the signing of the Paris Agreement and its probable ratification during 2016, the focus of the international debate once again slowly shifts back towards sustainable development. The goals set forth in Paris are in no way significantly ambitious towards ensuring long-term sustainable development, yet they seem to be a step in the right direction. Combating climate change in the several past decades has seen several setbacks. The Kyoto Protocol never lived up to its expectations and will probably only ever be mentioned as one of many failed treaties that have tried and failed to address climate change issues. There have been numerous other attempts, although noticeably less in the public eye, such as the Copenhagen Summit of 2009, but perhaps far more notably the United Nations (UN) have tried and utterly failed to achieve goals targeted by the Millennium Declaration.

The UN seems to have become a significant figure in attempting to combat climate change and achieve goals necessary to ensure long-term sustainable development. Unfortunately, largely these goals never been implemented into legislation and strategies of the various UN member-states. The format of a General Assembly resolution for the majority of issues regarding climate change is perhaps acceptable to many UN member-states, because these resolutions are not

legally binding. It is possible to emphasize moral and political responsibility, yet these concepts seem to have a diminished significance in present-day international relations. Perhaps the most ambitious concept so far devised by the UN are the Sustainable Development Goals (SDGs) (United Nations, 2015). The concept in itself is ambitious, comprehensive and *sui generis* in its approach. While the Millennium Declaration had a comprehensive approach and attempted to deal with issues besides climate change, it did not have such a comprehensive framework that it attempted to deal with all of the relevant issues of the 21st century (Kumar, Kuman, and Vivekadhish, 2016). Members of the scientific community and politicians alike agree that the SDGs have approached the issue from a human-cantered paradigm, were the product of discussion by millions of people and many, including Erna Solberg, the Prime Minister of Norway, emphasize the role of civil society in their development (Solberg, 2015; Kumar, Kuman, and Vivekadhish, 2016).

Many critics question the SDGs implementation (Pogge and Sengputa, 2015). Even the most basic approach to decreasing CO_2 and other greenhouse gas emission, as required by the Paris Agreement, will require a substantial change. This paper empirically approaches the issue of relevant factors that cause the increase of greenhouse gas emission. It especially examines the relationship between greenhouse gas emission and environmental taxes, although it also examines a wide range of indicators relevant to sustainable development. The empirical analysis is focused on the European Union (the EU), as a developed region that would be expected to easily conform to both the Paris Agreement and have a long-term role in achieving the SDGs.

A significant amount of studies explores the influence of economic growth and other economic indicators on the emissions of CO_2. We conduct this literature review by listing the empirical works that have considered a panel setting first, while also taking note of several studies that have only examined one particular country. Wagner et al. (2016) conducted a simple ordinary least squares (OLS) regression, using data from 1950–2010 on a global scale, for all countries where data was available, with the following empirical approach:

$$dLn\big(Energy(t)\big) = \alpha * dln\big(GDP(t)\big) + \beta * dln\big(pop(t-2)\big) + \gamma * dln\big(pop(t-4)\big) + \varepsilon * \ln\big(energy(t-1)\big) + \varphi * \ln\big(GDP(t-1)\big) + \rho * \ln(pop(t-1)) \tag{1}$$

Energy	proportional change in energy use over time
GDP	Gross Domestic product
Pop	population
$\alpha, \beta, \gamma, \varepsilon, \varphi, \rho$	coefficients

Based upon their approach, Wagner et al. (2016) concluded that there is a need to switch to renewable energy and that this change should be made as soon as possible. They further conclude that this change will actually be economically profitable, due to the fact that at some point there will be a drastic rise in fossil fuel prices, especially in developing countries. Lutz and Meyer (2010) believe that there would be a positive effect of increasing taxes on resource use or emission in Europe. Lee and Brahmasrene (2013) conducted several tests on the EU countries, including panel cointegration and conclude that there is a long-term positive relationship between CO_2 emission and GDP. Han and Lee (2013) conducted a General Method of Movement (GMM) analysis on a panel of 19 OECD countries that have ratified the Kyoto protocol, and concluded that the effect of CO_2 emission on economic growth is declining at a statistically significant trend. Blanco, Gonzalez, and Ruiz (2013) conducted panel Granger causality tests on a sample of 18 Latin American countries and concluded that there was

empirical evidence of causality going from FDI in pollution-intensive industries towards CO_2 emission per capita.

Srinivasan (2014) used several quantitative analysis methods, including a Vector Error Correction Model (VECM), impulse response functions and cointegration tests on the available data for India and concluded that there is a short-run relationship from CO_2 emissions to economic growth. He further concludes that there is a long-term relationship between GDP and energy consumption (Srinivasan, 2014: 329). Shaari, Hussain, and Rashid (2014) made a VECM for Malaysia and emphasize that increasing energy consumption in order to increase economic growth may also result in increased CO_2 emission. Based upon the conducted literature review it seems that there is a statistically significant relationship between CO_2 emission and several macroeconomic variables. This paper also acknowledges the divide that was especially noted by Wagner et al. (2016), that there is a division in the economic field regarding the direction of the causal relationship between economic growth and CO_2 emission.

2. METHODOLOGY
In the empirical analysis here, we primarily consider the total environment tax revenue (ENVTax), measured in millions of euros and greenhouse gas emission (GGEmis), as CO_2 equivalent, in thousands of tones. As additional explanatory variables, employment (Empl), in thousands of persons, total gross inland consumption of all energy (ENCons) in thousands of tonnes of oil equivalent, primary production of renewable energy (Renew) in thousands of tonnes of oil equivalent and GDP in millions of euros are considered. All of the data is extracted from the Eurostat database for the 1995–2013 period. All of the variables are transformed into the form of their natural logarithm. The panels for which we conduct the statistical tests are as specified: Panel A are the original EU member states at the time of the forming of the European Community for Coal and Steel; Panel B consists of countries that have acceded to full membership in the EU from the first enlargement of the EU until the enlargement of 2004, while Panel C consists of countries that have acceded to full membership from 2004. A full list of countries, as well as summary statistics for each of the panels, are available in the Appendix.

The first step in the analysis is performing unit root tests; this paper employs the tests originally suggested by Levin, Lin and Chu (2002) and by Im, Peseran and Schin (2003). Both tests have a null hypothesis of non-stationarity, meaning that rejection of the null hypothesis is necessary to confirm the absence of a unit root. Following the unit root tests, we perform Vector Auto Regression (VAR) models for each of the panels. Once specifying the correct lag length of the VAR models, diagnostic tests are conducted on the VAR models to ensure that they do not exhibit autocorrelation, homoscedasticity or parameter instability. We conduct Granger causality tests, initially introduced by Granger (1969) in order to establish the significant causal relationships between the variables. When the results of the Granger causality test are significant at the 10% significance level, further Cholesky impulse response functions are conducted to inspect the short-term and long-term effect of an inclusion of one standard deviation of the independent variable on the dependent variable. Based upon the conducted test, it will be possible to conclude whether there is any statistically significant relationship between the considered variables.

3. RESULTS AND DISCUSSION
The unit root tests are conducted with constant, and with the number of lags determined automatically based upon the Schwarz information criterion. In order to confirm the absence of a unit root, both tests had to reject the null hypothesis of a unit root presence at the 5% significance level.

Table 1: Unit root tests

	Panel A		Panel B		Panel C	
	Levin, Lin and Chu t	Im, Peseran and Schin W-stat	Levil, Lin and Chu t	Im, Peseran and Schin W-stat	Levil, Lin and Chu t	Im, Peseran and Schin W-stat
ENVTax	-4.002**	-0.365	-4.31597**	-1.5974	-5.6522**	-2.2735*
	(0.0000)	(0.3576)	(0.0000)	(0.0551)	(0.0000)	(0.0115)
In first difference	-5.6623**	-5.0611**	-10.002**	-7.1326**	/	/
	(0.0000)	(0.0000)	(0.0000)	(0.0000)		
GGEmis	2.8196	4.3053	1.3777	2.1227	-0.8697	-0.2552
	(0.9976)	(1.000)	(0.9158)	(0.9831)	(0.1922)	(0.3993)
In first difference	-10.0789**	-10.2057**	-8.6056**	-8.9611**	-8.3501**	-7.6192**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Empl	-3.200**	-1.0264	-4.311**	-1.8091*	-4.4454**	-3.2715**
	(0.0007)	(0.1523)	(0.0000)	(0.0352)	(0.0000)	(0.0000)
In first difference	1.484	-1.4824	/	/	/	/
	(0.0689)	(0.0691)				
In second difference	-5.064**	-5.6051**	/	/	/	/
	(0.0000)	(0.0000)				
GDP	-5.034**	-1.5763	-6.401**	-3.519**	-3.6434**	0.8916
	(0.0000)	(0.0575)	(0.0000)	(0.0002)	(0.0001)	(0.8137)
In first difference	-5.7224**	-4.012	/	/	-6.4687**	-4.2146**
	(0.0000)	(0.0000)			(0.0000)	(0.0000)
ENCons	-1.2198	-0.8914	-3.7418**	-2.5179**	-0.9154	-0.2669
	(0.1113)	(0.1864)	(0.0001)	(0.0059)	(0.18)	(0.3948)
In first difference	-7.6515**	-6.3993**	/	/	-12.559**	-10.206**
	(0.0000)	(0.0000)			(0.0000)	(0.0000)
Renew	1.331	4.3053	2.2495	4.7046	1.5228	3.855
	(0.9084)	(4.3053)	(0.9878)	(1.0000)	(0.9361)	(0.9999)
In first difference	-7.5778**	-6.7513**	-11.127**	-9.1365**	-10.852**	-10.188**
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Source: Authors' calculations and E-Views 9.5 output

Note: values in the parenthesis represent the p value. * and ** indicate statistical significance at the respected 0.05 and 0.01 levels of significance.

As can be seen from the results in Table 1, for Panel A all variables are stationary in their first difference, with the exception of employment that is I(2). For Panel B, three variables are stationary in level, while three are I(1). In Panel C, two variables are stationary in level, while four are I(1). The very fact that these variables are not integrated in the same level suggests that not all of these variables may have a statistically significant impact, but such conclusions with far greater precision based upon the results of the VAR model.

Regarding the specification of the VAR models, for Panel A, the Schwarz information criterion suggested one lag, while the Akaike information criterion suggested six lags. At both lag lengths, there is evidence of parameter instability or autocorrelation. At four lags, the model is both structurally stable and does not exhibit signs of autocorrelation nor homoscedasticity. For Panel B the majority of the criterions suggest two lags, yet at that lag length, the stability condition is not satisfied. Therefore, the model is specified using three lags and at that lag length, the model satisfies the stability condition, as well as all of the other diagnostic tests that are shown in the Appendix. We therefore detect the following statistically significant relations at the 10% level of relevance and test the impulse response function. For Panel C the Schwarz information criterion suggested one lag, while the Akaike information criterion suggested eight lags. After conducting tests on both models at one lag, the model rejects the null of heteroscedasticity and rejects the null of no autocorrelation, while at eight lags the model has a higher explanatory value and based upon the results of the diagnostic tests is stable and absent of the errors present with the one lag length specification. In Table 2, we display the explanatory value of each model, with the models identified by the dependent variable.

Table 2: Key statistics regarding VAR models

	GGEmis	Renew	ENVTax	Empl	ENCons	GDP
	Panel A					
R-squared	0.3849	0.3916	0.5168	0.5802	0.5181	0.6148
Adjusted R-squared	0.077	0.096	0.1854	0.2924	0.1877	0.3507
F-statistic	1.13	0.925	1.5597	2.016	1.687	2.238
AIC	-3.432	-1.663	-3.487	-6.15	-3.927	-4.697
	Panel B					
R-squared	0.2477	0.237	0.1528	0.99967	0.9982	0.9991
Adjusted R-squared	0.1289	0.1165	0.019	0.99961	0.9979	0.999
F-statistic	2.085	1.967	1.142	19005.6	3572.77	7409.048
AIC	-1.546	-2.02	-2.59	-5.171	-3.585	-4.395
	Panel C					
R-squared	0.6357	0.6249	0.9971	0.9996	0.6335	0.662
Adjusted R-squared	0.3668	0.3479	0.9947	0.9994	0.3628	0.412
F-statistic	2.3635	2.256	466.593	3726.248	2.341	2.652
AIC	-1.592	-2.238	-2.196	-4.0022	-3.206	-2.184

Source: Authors' calculations and E-Views 9.5 output

The key statistic clearly displays that especially in Panel A some of the results, based upon the value of the F-statistic, are not statistically significant. Clearly, other factors rather than those selected by the methodology of this paper are crucial for determining greenhouse gas emission. The explanatory value of that model comes close to being adequate only in Panel C. Regarding the environmental tax revenue, clearly the chosen variables have a significant impact in Panel C, while in Panels A and B variables that are not considered by this paper have a more statistically significant impact on determining environmental tax revenue. Perhaps surprisingly, the chosen variables have a moderate to high ability to explain two purely macroeconomic variables – GDP and the number of employees. It should be noted that the examined studies either examine the Granger causality or employ panel OLS between usually GDP or GDP per capita and CO2 emission, such as Lee and Brahmasrene (2013), while other studies that have included a larger number of variables face difficulties as this paper (Srinivasan, 2014; Wagner et al., 2016).

Table following on the next page

Table 3: Granger causality test

Excluded	Dependent variable	Panel A Chi-sq	Panel B Chi-sq	Panel C Chi-sq
Renew		4.38	4.132	4.779
		(0.357)	(0.2475)	(0.7809)
ENVTax		1.125	0.842	6.462
		(0.8903)	(0.8393)	(0.5956)
Empl	GGemis	1.947	3.364	6.376
		(0.7455)	(0.3389)	(0.6052)
EnConcs		6.829	3.879	27.74***
		(0.1452)	(0.5045)	(0.0005)
GDP		3.202	1.782	10.322
		(0.5245)	(0.6189)	(0.2431)
GGemis		4.2802	3.065	14.68*
		(0.3694)	(0.3817)	(0.0656)
ENVTax		1.672	0.842	6.136
		(0.7959)	(0.8393)	(0.632)
Empl	Renew	0.359	3.364	9.624
		(0.9857)	(0.3389)	(0.2924)
EnConcs		6.337	3.879	11.075
		(0.1754)	(0.5045)	(0.1975)
GDP		1.369	5.533	15.146*
		(0.8495)	(0.1367)	(0.0564)
GGemis		1.324	1.313	14.15*
		(0.8573)	(0.726)	(0.0779)
Renew		7.747	5.787	10.788
		(0.1013)	(0.141)	(0.2140)
Empl	ENVTax	8.14*	3.652	20.314***
		(0.0659)	(0.3016)	(0.0092)
EnConcs		4.277	0.689	17.314**
		(0.3698)	(0.8759)	(0.027)
GDP		6.086	4.176	13.059
		(0.1928)	(0.2431)	(0.1098)
GGemis		5.238	2.3002	4.96
		(0.2638)	(0.5125)	(0.7618)
Renew		5.389	8.343**	3.75
		(0.2497)	(0.0394)	(0.8789)
ENVTax	Empl	3.581	4.2205	9.657
		(0.4657)	(0.2386)	(0.2899)
EnConcs		4.658	1.312	8.153
		(0.3242)	(0.7263)	(0.4187)
GDP		3.809	16.878**	11.814
		(0.4324)	(0.0007)	(0.1597)
GGemis		4.63	0.4857	8.08
		(0.3274)	(0.9220)	(0.4257)
Renew		7.733	5.089	13.038
		(0.1019)	(0.1654)	(0.1106)
ENVTax	EnConcs	1.052	0.575	14.554*
		(0.9018)	(0.9021)	(0.0684)
Empl		2.11	6.953*	24.244***
		(0.7155)	(0.0734)	(0.0021)
GDP		6.79	0.07	16.3**
		(0.1474)	(0.9951)	(0.0383)
GGemis		7.56	3.893	5.76
		(0.1091)	(0.2733)	(0.6741)
Renew		4.061	5.113	2.198
		(0.3979)	(0.1637)	(0.9743)
ENVTax	GDP	5.116	3.211	11.997
		(0.2756)	(0.3602)	(0.1513)
Empl		2.991	6.813*	7.164
		(0.5594)	(0.0781)	(0.519)
EnCons		11.537**	3.2662	20.94***
		(0.0211)	(0.3524)	(0.0073)

Source: Authors' calculations and E-Views 9.5 output

Note: values in the parenthesis represent the p value. *, ** and *** indicate statistical significance at the respected 0.1, 0.05 and 0.01 levels of significance.

Based upon the results of the Granger causality test we conduct the impulse response functions where we found evidence that there is a statistically significant relationship between the variables. For Panel A this paper finds there is causality going from energy consumption towards GDP. Based upon the results of the impulse response function we find that the initial short-term relationship is positive, but it starts fluctuating after two periods, meaning that the relationship is statistically significant and positive in the short term, but we find no evidence of a long-term relationship. This paper also finds that there is a relationship going from employment towards environmental tax revenue. This may be considered intuitively logical as in periods where there is a stable macroeconomic environment, other factors such as sustainable development indicators become increasingly significant. Thus with the rise of employment there may be a rise in environmental tax revenue, although this intuitive hypothesis is not confirmed by the impulse response function that suggests that the long term effects are not statistically significant.
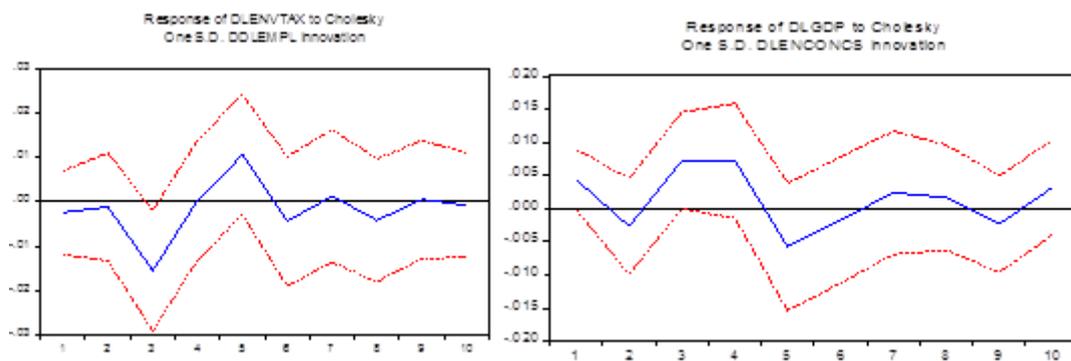
Figure 1: Impulse response functions for Panel A
Source: Authors' calculations and E-Views 9.5 output

For Panel B there are more statistically significant relationships detected. There is a statistically significant relationship between renewable energy source production and employment. It initially has a positive response, although it seems to be negative in the long-term. Several sets of relationships concern traditionally macroeconomic variables, such as that there is a logically long-term relationship from the number of employees towards GDP growth. The relationship seems to be bidirectional, as there is a long-term positive relationship going from economic growth towards the number of employees. This is confirmed by the impulse response function, as for Panel B there seems to be both a rise in economic growth when the number of employees increases, as well as an increase in the number of employees when there is a period of economic growth. Lastly, there seems to be an increase in energy consumption that follows the rise of employment. This conclusion is also intuitive as several others have noted that an increase of population or employed may lead to increased energy consumption (Wagner et al., 2016).
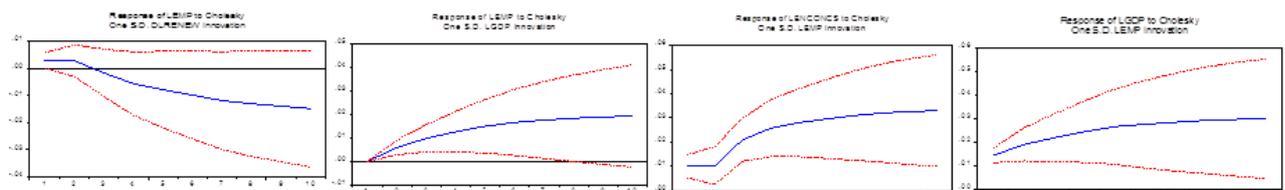
Figure 2: Impulse response functions for Panel B
Source: Authors' calculations and E-Views 9.5 output

For Panel C a higher number of statistically significant relationships are detected. Notably, there seems to be a short-term significant impact of energy consumption on greenhouse gas emission. Such a relationship is not detected in Panel A or B where we find no statistically significant link going from any of the chosen variables towards greenhouse gas emission. This is perhaps possible to explain by the fact that several of these mostly post-transitional economies still do not have the equal standards to their western counterparts. There is a significant relationship going from GDP towards renewable energy consumption, although based upon the results of the impulse results function it mostly seems to fluctuate without definitive patterns. Similarly, without a definitive pattern this paper finds a significant relationship going from greenhouse gas emission towards renewable energy production. This relationship also seems to have no distinct pattern. The relationship going from greenhouse gas emission towards environmental tax revenue seems initially neutral, but is positive in the long-term. Therefore, only with a more significant increase of greenhouse gas emission is there any chance of an increase in environmental taxes to curb the excessive emission.
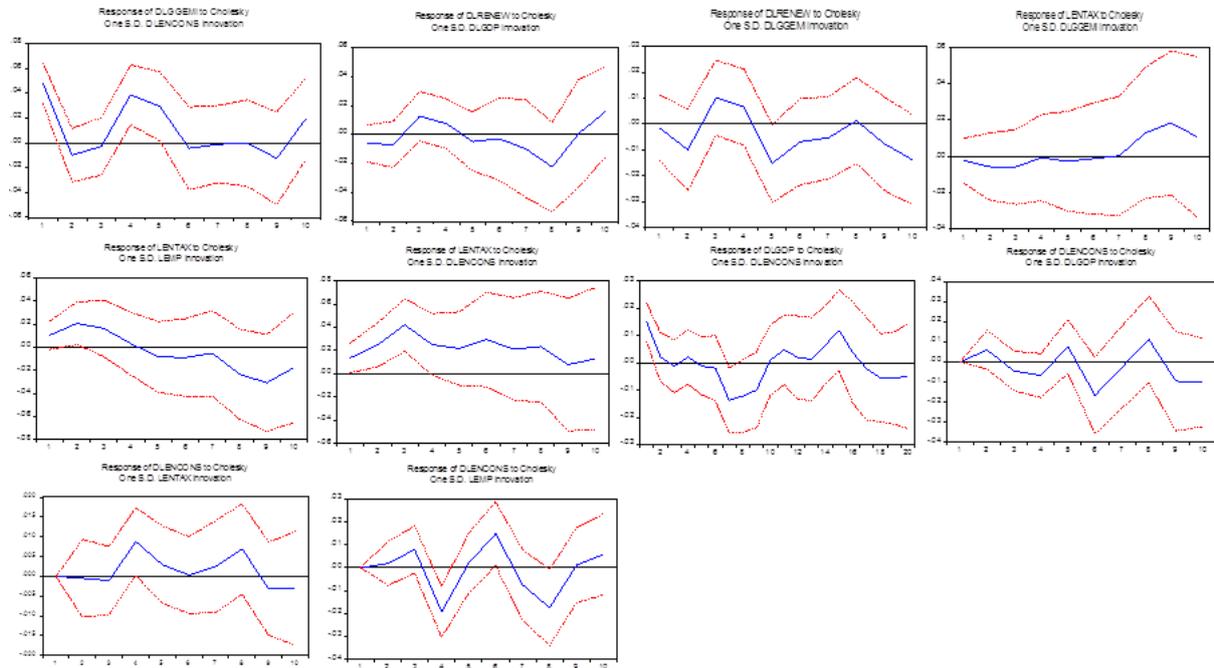
Figure 3: Impulse response functions for Panel B
Source: Authors' calculations and E-Views 9.5 output

Based upon the Granger causality test, there is a bidirectional relationship going from GDP towards energy consumptions and from energy consumption towards GDP. Both of these relationships seem positive in the short term based upon the results of the impulse response function, while they seem to fluctuate without a definitive pattern in the long-term. There seems to be a bidirectional relationship between energy consumption and environmental tax revenue as well. As the results of the Granger causality test imply, the relationship is more significant going from energy consumption towards environmental tax revenue. This finding is conclusive and may be given similar argumentation as with the relevance of greenhouse gas emission on environmental tax revenue. This paper also notes that with the rising number of employees there is a rise in the energy consumption, comparative to Panel B.

There is also a significant relationship going from the number of employees towards the environmental tax revenue. A possible argument why there are such a number of statistically significant relationships in Panel C is that in these post-transitional countries, the economic growth and stability are a necessary condition for advancing sustainable development goals.

4. CONCLUSION

The paper employs a VAR framework on three different panels of EU countries. Before conducting the VAR analysis, the stationarity of the variables was tested using standard panel unit root tests. The VAR analysis results signify a rather simple conclusion, for the majority of the EU moving towards the SDGs in regards to greenhouse gas emission and similar goals is already a reality. This paper finds slight differences in the relevance of political stability or economic growth on greenhouse gas emission. Primarily this is because Panel C seems to exhibit signs of relevance of energy consumption on greenhouse gas emission. There is no such relationship detected in Panels A and B, as the chosen variables mostly do not have a statistically significant impact upon the determination of greenhouse gas emission.

This clearly displays that a further research should be focused on different regions of the world where there may be a long-term significant relationship between greenhouse gas emission and economic growth. In this regard, this paper manages to determine that there are significant differences between the countries that have acceded to the EU prior to 2004 and the newly acceded countries. This paper still concludes that none of the EU member states has any statistically significant markers that would imply the existence of a significant relationship between further economic growth and greenhouse gas emission. Therefore, the EU, while still not implementing the level of environmental tax revenue necessary to have a statistically significant impact on greenhouse gas emission, is on the right path to achieving the Paris Agreement goals.

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APPENDIX

The specification for each of the panels is listed in Table A1.

Table A1: Panel specifications

Panel A	Panel B	Panel C	Panel C – continued
Belgium	Denmark	Bulgaria	Romania
Germany	Ireland	Czech Republic	Poland
France	Greece	Estonia	Slovenia
Italy	Spain	Croatia	Slovakia
Luxembourg	Austria	Cyprus	
Netherlands	Portugal	Latvia	
	Finland	Lithuania	
	Sweden	Hungary	
	United Kingdom	Malta	

Full summary statistics for each of the panels are provided in Table A2.

Table A2: Summary statistics

	GGEMIS	GDP	ENVTax	ENCons	Empl	Renew
			Panel A			
Mean	39451.8	1182934	25830.75	167588.7	15185.47	8534.044
Median	32438.2	1453378	26224.5	174219.2	15524	5175.1
Maximum	1103855	2693325	58691	352857	37810	33679.5
Minimum	8466.9	30248.2	468.77	3268.9	167.3	29.8
Std. Deviation	325323	869652.8	19209.15	125055.6	12337.83	8729.405
Skewness	0.708511	1.549504	1.639244	1.521702	1.84504	2.57896
Observations	114	109	114	95	109	114
			Panel B			
Mean	167956.7	459086.2	10985.96	61428.5	6746.471	5776.638
Median	75343.83	23639	6248.7	31836.4	3348.63	4785.9
Maximum	779954.83	1911309	51053.57	234000.9	25574	18524.4
Minimum	14222.71	76519	1565.12	11066.5	1222.1	154.6
Std. Deviation	205307.5	497292.6	12400.5	65661.47	7469.311	4576.595
Skewness	1.8222	1.76109	2.20661	1.67037	1.58446	0.843335
Observations	171	171	171	168	171	171
			Panel C			
Mean	67626.56	66987.12	1360.833	21475.93	2694.994	1645.365
Median	22531.52	35287.7	731.39	9301.4	1267.29	1138.55
Maximum	429942.7	390673.8	9711.090	103065.6	12260	8511.5
Minimum	2411.39	5391.6	25.61	742.4	127.3	0.2

Std. Deviation	98163.82	78391.37	1790.798	25208.58	3022.564	1608.588
Skewness	2.3173	2.2162	2.8886	1.9172	1.7148	1.7299
Observations	247	239	240	247	242	240

Source: Authors' calculations and E-Views 9.5 output

Based upon the results of the LM autocorrelation test in Table A3, we can confirm that the residuals are not serially correlated. The tests are conducted for the lag length selected for each of the respected models, with an initial lag included to confirm adequate model specification.

Table A3: Autocorrelation LM test

Number of lags	Panel A LM-stat	p value	Panel B LM-stat	p value	Panel C LM-stat	p value
1	48.864	0.062	30.539	0.7256	36.008	0.4683
2	28.848	0.7957	39.34	0.3227	42.91	0.1992
3	34.465	0.5416	34.21	0.5539	47.36	0.0974
4	47.156	0.0865	41.812	0.233	35.591	0.4879
5	36.395	0.4503			44.739	0.1506
6					48.617	0.078
7					28.06	0.8251
8					37.73	0.3901
9					34.892	0.5211

Source: Authors' calculations and E-Views 9.5 output

The results in Table A4 clearly confirm that at the 5% significance level we fail to reject the null hypothesis of no heteroscedasticity.

Table A4: Heteroscedasticity joint test

Panel A Chi-sq	Panel B Chi-sq	Panel C Chi-sq
1027.102	815.3928	2060.793
(0.3308)	(0.066)	(0.2386)

Source: Authors' calculations and E-Views 9.5 output
Note: values in the parenthesis represent the p value

The final test, presented in Figure A1, confirms that the parameters are structurally stable as none of the unit roots lay outside the stability circle. This concludes that the VAR models satisfy the stability condition.
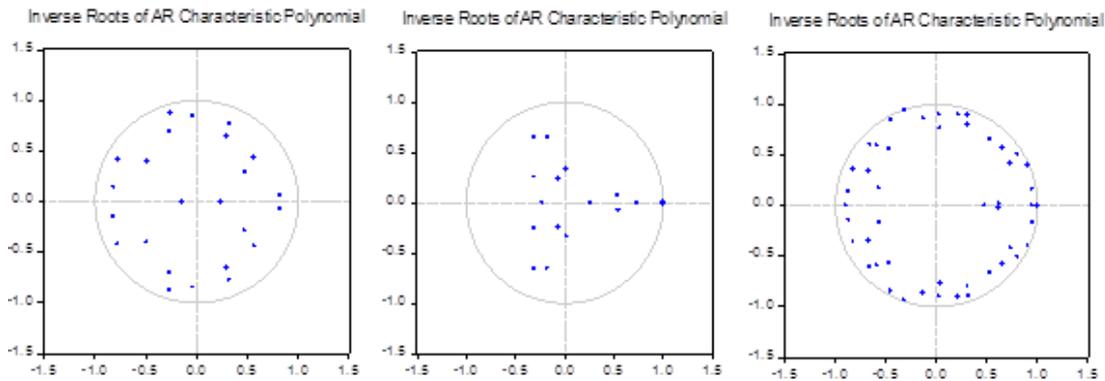
Figure A1: Parameter structural stability test

DEVELOPING EMPLOYABILITY SKILLS VIA CAREER CENTERS AT SECONDARY SCHOOLS

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ABSTRACT

The study investigates the possible influence of career centres in facilitating career development skills among school students which is currently absent in Azerbaijan. Previous research on studying the relationship between corporations and Higher Education Institutions (HEIs has found that the need to design a policy for youth transitioning from higher education to working life requires serious consideration in Azerbaijan (Isaxanli, 2008). It has been found in various studies that around the world, students and families are increasingly worried as they question whether the four years of extremely expensive education they undertook was sufficient preparation for employment (Gault et al., 2010).

Current study, however, will attempt to get insight into possible role and future of career centres in Azerbaijan from the secondary school students' perspective. It will be argued that in order to increase employability skills of students, transition from education to work life should start from secondary schools with the active role of career centres. The study will use the survey research strategy with a quantitative data.

In order to get greater understanding of the role of career centers, students participating in a survey (207 from 7 public and private schools) were asked to score on a 5-point Likert-type scale to identify their approach towards discovering their talents, developing their employability and to investigate the importance of School Career Centres may have in developing communication channels between enterprises and formal education.

Keywords: Employability skills, Career centres

1. INTRODUCTION

Career development has been one of the important researched topics in academic literature. In general it can be defined as "ongoing process that allows individuals to take information they know about themselves, organize it, and use it to learn about the world of work and how they relate to it" (Perry and Vanzandt, 2006).In this context, career programmers are suggested to improve employability skills of students and provide information to them about career pathways. It has been reported that, fluctuations in the employment market require the learning of new skills and personal development for successful career(Watts et al., 2010).. Previous research has mainly focused on the influence of career programmes among graduate students. However, there has been a lack of research in the context of secondary schools. It can be argued that, the role of secondary schools in career development has been underestimated (Perry and Wallace, 2012). According to Baker et al. (1992) roles of schools in career development is an effective but somehow overlooked subject. As such, schools may enable students to find tools for search that will help them to be informed about possible career choices.

Another possible advantage that secondary schools may give students is employability skills. Several researchers have pointed out inclusion of employability skills in the high school curriculum (Choi et al., 2015). Moreover, several frameworks have been developed in order to teach career and employability both in high school and higher education

It is worthwhile to note that, people often make important career decisions during adolescence which affects his/her career future and social status (Mann et al., 1989). Such decisions are often made during high school where choice of courses shapes individual's both academic and vocational future. Not all students are able to make these decisions on their own and often face difficulties in doing so (Gati and Saka, 2001). In Azerbaijan , for example, in most cases, parents affect adolescent's decision , but it doesn't always become futile. Career development programmes have existed at secondary schools for a long time. For example, early career programmes in New Zealand, dates back to 1920s (Winterbourne, 1974). However, career planning and development for secondary schools in Azerbaijan don't exist. As argued by the author, such situation requires a serious consideration of career center or counselling services in secondary schools which may help student's future career decision and provide important employability skills needed. Although development of employability skills should begin at home, it is risky to solely rely on parents and teaching of these skills must be included in the school curriculum (Poole and Zahn, 1993).

2. EMPLOYABILITY SKILLS AND ROLE OF SECONDARY SCHOOLS

Employability has emerged as a concept in Western countries such as USA, the United Kingdom, Canada and other countries with the aim to ensure that students are equipped with necessary skills to enter the job market (Sermsuk et al., 2014).Literature review shows that, there are several definitions concerning employability skills in the academic literature (Yusoph et al., 2012). For example, Rothwell and Arnold (2007) define it as the ability to survive in a job, while others regard them as individual quality required by the employer. According to Harvey (2001) "employability can be understood as the possession of basic 'coreskills', or an extended set of generic attributes, or attributes that a type of employer (discipline-linked, sector-related, company-type) specifies". Despite the diversity of overall clarity in defining the concept of employability skills, it is mainly understood in terms of providing a bridge between education and work. As such, employability skills discourse rest on two major assumptions (Krahn et al., 2002). First is that, in general students don't know what exact skills they need to have to enter the world of work. Second is that, students don't possess such skills mainly because there is lack of emphasis of such skills in education. As a result, a lot of employees report skill gap of students. A research conducted by Chung and Yet (2009) discovered that, there were significant difference in perception of essential skills between employers and students. It has been implied that, such situation is mainly due to the current changes towards knowledge based economy where job-specific skills are difficult to be defined. In order to bring clarity to the discussion, generic employability skills can be used as a term which reflects that what is learned in one context may be applied in other areas too (Curtis and McKenzie,2001). Such skills, as proposed by several researchers, can be developed to ensure employability of students. Furthermore, employability skills have been viewed as a possible reduction of unemployment by many organizations and businesses (Lee, 2011)

It should be noted that, on-going structural changes in economies and societies throughout the world has underlined the importance of up-to-date skills among the workforce. Furthermore, increased technological advancements and globalisations promotes the development of new set of skills and competences. Main question that arises is who or what should be responsible in teaching and equipping students with this new information and how it must be performed. One of the possible ways that can be applied is the promotion of career centers and counselling services in secondary schools. In the USA, for example, the landmark report by the Secretary's Commission on Achieving Necessary skills (SCANS) which equips both employers and students by examining necessary basic skills for effective work performance, have pointed out that, essential employability skills should be included in the high school curricula, instead of

creating a separate course (Zinser, 2003). It has also been suggested that, in order to provide smooth transition from education to work, a closer connection between private and public sector and teachers is required (Horn, 2006). In such process, teachers must be aware of the specific skills needed in the market, so that they can transfer this knowledge to learners. On the other hand, private and public sector employers should contribute to development of curricula and textbooks related to career education at schools.

Role of secondary schools in career education becomes more distinct considering that more and more young adults enter the labour market from secondary level (Jayaram and Engmann, 2014). Furthermore, employers not only look for technical skills that are acquired through formal education but also, for non-cognitive or so-called "soft" skills such as communication, problem-solving which tend to be lacking in the curriculum. For example, about third of employers have reported the lack of skills of the applicants (The Manpower Group's Talent Shortage Survey, 2012). Sermsuk et al. (2014) have identified that employers mainly look for personal management, fundamental and teamwork skills among secondary school graduates. Moreover, Klaus (2010) found that 75% of long-term job – success depends on people skills, while only 25% are related to technical knowledge. Furthermore, it has been reported that 85% of one's success was due to soft skills(John, 2009). Therefore, a possible intervention in this issue, may be the development of career programmes or career education which can benefit students in the acquisition of essential employability skills. For example, a study conducted by Choi et al. (2015) found that students who received career education twice during a 2-year period significantly increased their development skills compared to those who participated once or not at all during that time period. A recent survey conducted by CIPD (2016) revealed interesting finding concerning the role of school in career development. About third of respondents in the survey reported that, they related poor career satisfaction and progression to the lack of career guidance and taking wrong qualification at schools. Such problem was reported to be more distinct among employees from poor backgrounds.

Several frameworks have been developed in order to address the issue of career development and employability skills for younger adults. The Australian Blueprint for Career Development (MCEETYA, 2009) is a framework that can be used to design, implement and evaluate career development interventions. It equips teachers, parents and career development practitioners with essential tools to define competencies and develop career development programs. Furthermore, Career and Personal Planning (CAPP) in British Columbia and Conference Board of Canada's Employability Skills Profile (ESP) can serve as examples of frameworks for building employability skills at secondary schools (Emery, 2000).

3. PURPOSE/OBJECTIVES OF THE STUDY

The purpose of the study is twofold :

1. To investigate student's perception of the possible role of career centers in secondary schools in Azerbaijan.
2. To provide a rationale for establishment of career centers in Azerbaijan.

4. METHODOLOGY

Due to the absence of career guidance and services at schools in Azerbaijan, the major focus of this research will rest on investigating the perception of students from secondary school students regarding the possible role of career centers. This descriptive study will use survey strategy which will allow to examine the attitude towards the importance of career centers at school level.

Data was collected through a 6-item survey allocated among 207 students from five secondary public and two private school students. Secondary students were asked to answer questions based on 5-point Likert scale where 1= strongly disagree 2= disagree 3 = undecided 4= agree 5 = strongly agree. Items in the questionnaire included:

1. I know my capabilities and will choose my speciality accordingly
2. I will choose the profession that I like
3. I will choose the profession which is more demanded in the market.
4. Parents help me in choosing my profession
5. Teachers help me in choosing my profession
6. There should be a Career center at schools which will determine their capabilities and help to guide them in career development

5. SAMPLE DEMOGRAPHICS

Age range of respondents was between 13 and 18. Males and females consisted 43 and 57 percent of the sample correspondingly.

6. FINDINGS

As a result of research, it was found that majority of respondents expressed confidence in their capabilities and reported that, they will choose their speciality according to their talent. Furthermore, almost same results were discovered in relation to the second item of the questionnaire(Table 1.1) . However, it was interesting to find out that, students responses fluctuated when responding to the third item, which concerned the choice of profession which is more demanded in the market. As indicated in Table 1.2 the answers to this item of the questionnaire were more distributed in response categories compared to the previous items. As such, only 21 percent of students expressed that, they totally agreed with this statement, while 20 percent of respondents showed uncertainty. Such responses may be due to the lack of information of students' regarding the current job market trends.

Despite the support of parents, few students agreed that their parents helped them in choosing their job and career. As such, only 11.9 percent of students strongly agreed that, they received support in this regard from their parents, while 17.9 percent strongly disagreed with the statement. As can be seen from Table 1.3 the answers to the fourth item of the survey were more spread than strongly skewed.

Table following on the next page

Table 1.1

Item 1-2 results

- Strongly disagree; I will choose the profession that I like; 1,0
- Disagree; I will choose the profession that I like; 3,0
- Undecided; I will choose the profession that I like; 11,9
- Agree; I will choose the profession that I like; 31,3
- Strongly disagree; I know my capabilities and will choose my profession accordingly; 5,0
- Disagree; I know my capabilities and will choose my profession accordingly; 6,5
- Undecided; I know my capabilities and will choose my profession accordingly; 14,4
- Agree; I know my capabilities and will choose my profession accordingly; 39,3
- Strongly agree; I will choose the profession that I like; 52,7
- Strongly agree; I know my capabilities and will choose my profession accordingly; 34,8

Strongly disagree ■ **Disagree** ■ **Undecided** ■ **Agree** ■ **Strongly agree**

Table 1.2

Item 3 results

- Strongly disagree; I willl choose the profession that is more demanded in the market; 6,5
- Disagree; I willl choose the profession that is more demanded in the market; 17,9
- Undecided; I willl choose the profession that is more demanded in the market; 20,4
- Agree; I willl choose the profession that is more demanded in the market; 33,3
- Strongly agree; I willl choose the profession that is more demanded in the market; 21,9

Strongly disagree ■ **Disagree** ■ **Undecided** ■ **Agree** ■ **Strongly agree**

116

Table 1.3

Item 4-5 results

Strongly disagree; Teachers help me in choosing my profession; 21,9

Disagree; Teachers help me in choosing my profession; 31,8

Agree; Teachers help me in choosing my profession; 14,4

Undecided; Teachers help me in choosing my profession; 24,4

Strongly agree; Teachers help me in choosing my profession; 7,5

Strongly disagree; Parents help me in choosing my profession; 11,9

Disagree; Parents help me in choosing my profession; 24,9

Undecided; Parents help me in choosing my profession; 18,4

Agree; Parents help me in choosing my profession; 26,9

Strongly agree; Parents help me in choosing my profession; 17,9

■ **Strongly disagree** ■ **Disagree** ■ **Undecided** ■ **Agree** ■ **Strongly agree**

Table 1.4

Item 6 results

Strongly disagree; Schools should have career center which will help them to determine their talent and guide them in career path; 4,0

Disagree; Schools should have career center which will help them to determine their talent and guide them in career path; 3,5

Undecided; Schools should have career center which will help them to determine their talent and guide them in career path; 8,5

Agree; Schools should have career center which will help them to determine their talent and guide them in career path; 28,4

Strongly agree; Schools should have career center which will help them to determine their talent and guide them in career path; 18,4

■ **Strongly disagree** ■ **Disagree** ■ **Undecided** ■ **Agree** ■ **Strongly agree**

117

Similar results were achieved when students demonstrated to what extent they received support in career choice from teachers. In this respect, few student expressed positive responses while majority remained undecided or disagreed with the statement.

Finally majority of students agreed that there is a need for career centers at schools. It was interesting to find out, despite the absence of career development at schools , its necessity was positively perceived by students , especially with lack of parental and teacher support in future career choice.

7. CONCLUSION

It can be implied that, findings of the search support the argument of the author that, there is a need for career centers at secondary schools in Azerbaijan. Especially, it seems obvious given the lack of parental and teacher support in determining career path of the students. Survey results have demonstrated that, majority of students lack such support while it remains the sole source of support for career development.

These results were confirmed with the responses to the last item of the questionnaire where importance of career center was questioned. Career centers may play an important role in the career development of students by providing career guidance and teaching important employability skills. Furthermore, they can serve as an important mediator in determining talents of the students. These results overlap with previous research, where it was found that, career advice and guidance given to students can address their individual needs and map out future career pathways (Choi et al, 2015).

Although majority of students expressed their strong agreement on choosing their favourite profession and choosing the one that corresponds to their talents, it was found that students were less confident in terms of choosing the right profession which is more demanded in the market. Due to the massive transformation of the job market in recent years, information about currents trends and developments has become more important for students than ever before. Many students may get disappointed in terms of finding the right job after graduating universities. Moreover, it raises a lot of concern considering that universities don't sufficiently market degree programmes at secondary schools. Therefore, essential career guidance at school level can be expected to be an important element of school curriculum and activities in the future in Azerbaijan. As career choice affects student's future lives such guidance must be an important element of school education. In this regard, Lugulu and Kipkoech (2011) demonstrate that, career guidance can help students to make rational career choices and select programmes which may impact their working lives. In this process all aspects of all aspects of an individual's life are considered as an integral part of the career making and planning.

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VALUATION OF SHARES AND THEIR FAIR VALUE OF THE COMPANIES LISTED ON THE WIG-CHEMIA QUOTED ON THE WARSAW STOCK EXCHANGE IN POLAND WITHIN 2006-2016

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ABSTRACT
This paper examines share price of the companies listed on the WIG-CHEMIA and their fair value between 2006-2016. Data from Q1 2006 to Q1 2016 was collected from the Stooq.pl (Polish portal of shares). Two hypotheses are tested: (1) value of the shares based on the market price; (2) value of the shares as the fair value of shares.
Keywords: *stock exchange, share valuation, fair value, companies, WIG-CHEMIA*

1. INTRODUCTION
In Poland, the chemical sector begins to develop rapidly, and forecasts projected for the next years starting from 2015 define clearly the rate of growth of this sector. In 2016, there will be further acquisitions and mergers that will result in the strengthening of the chemical sector. In recent years, the Grupa Azoty [the Azoty Group], the greatest company, has been founded. It is a brand that represents Poland in the global markets. The main areas of activity of the Group are the production of mineral fertilisers, caprolactam, construction materials, and other highly processed chemicals. The Grupa Azoty is the largest supplier of ammoniac and phosphoric acid, as well as the one of the largest producers of compound and nitrogen fertilisers in Europe (Starzyk, 2015, pp. 1).

2. VALUATION OF SHARES
Shares are the most important group of financial instruments listed on the Warsaw Stock Exchange. In 1991, during the first quotation, the shares were the only financial instrument. At the end of the 90s, the structure of the Warsaw Stock Exchange changed as other financial instruments, including forward contracts, were introduced to turnover. On the first exchange session, shares of 5 companies were listed. In the subsequent years, there was observed an increase in the number of companies and their market value.

A share is an instrument combining rights of property and non-proprietary character which result from shareholder's participation in a joint-stock company or a limited joint-stock partnership, and the sum of rights and obligations that a shareholder has within the framework of a company or a partnership or a part of a share capital.

When purchasing shares, it is possible to distinguish the rights vesting with a shareholder and group them into property and non-proprietary (corporate) rights. These rights, in principle, are equal. However, it is possible that on the basis of a company's articles of association some shares are assigned with special rights or particular obligations.

121

The following property rights are vital for the valuation of shares (Borowski, 2013, Bossa.pl):

- right to a dividend (share in a company's profit assigned for division among shareholders),

- right to participation in the division of assets of a company in the case of its liquidation,

- right to subscription of shares of a new stock issue (The Code of Commercial Companies and Partnerships grants the hitherto shareholders a right to taking up of shares on a new sock issue in the case of an increase of a capital by a company).

A share is a part of a company's capital. A person holding shares of a joint-stock company becomes a shareholder of a company who is, in a way, a co-owner of everything that constitutes company's assets (immovables, machines, etc.).

Two basic types of shares can be distinguished: registered and bearer's shares. A fundamental difference concerns the turnover of these shares. Registered shares, contradictory to bearer's shares, are not placed on a public market. Registered shares may be preference shares connected, for instance, with a right to vote (2 votes – 1 share) or dividend.

One of the elements of a fundamental analysis, which is most important, is valuation of shares. When making investment decisions, an investor should know if a company they want to invest in is not underrated or overestimated by a market. By means of valuation it is possible to estimate the risk associated with an investment.

There are 4 approaches of valuation of shares (Copeland, 1997, pp. 65-69; Kufel, 1992, pp.78-89):

1. Accounting approach

2. Liquidation approach

3. Multiplier approach

4. Revenue approach

Re 1. An accounting approach is also known as a method of a net asset value. It consists in estimating a company's value (as for a single share) by means of reducing the value of assets by company's liabilities. Then, the result is divided by the number of issued shares. This method is used rarely as it does not make allowances for market realities and development prospects.

Re 2 A liquidation approach consists in determining the value of income due to the sale of assets in the moment of liquidating a company. This method is used when a company is liquidated or merged with another one.

Re 3 A multiplier approach, aka comparative or indicative, relies on valuation of a company on the basis of shares belonging to other companies that are similar to the one in question. Usually, such comparison refers to companies of the same area of activity in a given sector.

Most common indicators used in this method are:

- price/profit

 - price/accounting value

 - price/sale

 Re 4 Approach based on a revenue model Valuation is made by means of a method of discounted cash flows.

- Model of discounted dividends.

A ratio analysis is most commonly used by investors due to its simplicity. The above-mentioned indicators were used to illustrate this valuation for an analysis. The first one is an indicator: price/profit.

P/P = price of one share / net profit for one share

Another indicator is the price/company's accounting value ratio. As it was in the previous case, the calculation requires the use of a price of one share and accounting values (assets – liabilities) per one share of a company, where the value is achieved by dividing an accounting value by a number of company's shares (Jajuga, 1996, pp.34-57).

P/BV = price of one share / accounting value for one share

The last indicator is price/net sales. In order to obtain this measure, it is necessary to hold data about sale per one share (quotient of incomes from sales and a number of issued shares), and a value of one share.

P/S = price of one share / net sales for one share

All information concerning an accounting value, net profit and sales includes an annual financial statement prepared by companies. One may use quarterly reports of companies to forecast indicators. Apart from the aforementioned indicators, there are many other types of them which may make the financial situation of a company known.

When valuating shares, one should also use the model of discounted dividends. This model is one of the oldest and most commonly used ones. It is dedicated to minority shareholders. In an adverse situation, when valuation is made by a person having control over a company, a decision regarding the pay out of some part of the profit is made by the person themselves. Here, a dividend policy is of no importance for the valuation.

There are the following models of discounted dividends:

- constant dividend value model
- constant dividend growth model (by Gordon)
- two-stage model
- H model
- three-stage model

A constant dividend value model, as indicated by its name, assumes that a dividend will be paid out in the same amounts at all times (Pierce, 2004, pp.124-145; Thompson, 2008, pp.45-67; Valea, 2001, pp.88-125):

$$P = (D / R)$$

D – dividend

R - return rate expected by an investor

Situations arising from this model are encountered very rarely.

Another method is worked out by Gordon. It is one of the easiest and commonly used models. It assumes that a growth rate of a dividend will be stable:

$$P = [D1 / (r – g)], \ r > g.$$

P - share value,

g - dividend growth rate,

D1 - dividend (per share) paid out in the following year,
r - required return rate.

Formula for a growth rate of a dividend:

$$g = ROE \times f$$

ROE – rate of return from equity capital

f – retention rate (quotient of a retained profit and a net profit)

The two-stage model, as its name suggests, consists of two phases: a growth period at a constant speed g0, and then at a constant speed g:

$$P = D\,(1+g_0)\left[\frac{1}{r-g_0} - \frac{(1+g_0)^N}{(r-g_0)(1+r)^N} + \frac{(1+g_0)^{N-1}(1+g_1)}{(r-g_1)(1+r)^N}\right]$$

The H model assumes that a growth rate of a dividend will decrease linearly at the beginning (from the level g0 to g), and later on it will increase at a constant growth speed g:

$$P = \frac{D_0(1+g) + D_0 H(g_0 - g)}{r - g}$$

H – half of the period when there is a linear decrease in a growth speed of a dividend.

The remaining signs are equal with the previous model by Gordon.

The difference between the three-stage model and the H model is that at the beginning there is an additional regular period in which a dividend rate grows in at a constant speed g0, whereas other assumptions are identical as it was in the previous model.

Thus, valuation of shares consists in determining its value to identify underrated or overestimated shares. For that reason, it is necessary to carry out a technical (fundamental) analysis and check if the price of a share corresponds to a company's value.

3. FAIR VALUE OF LISTED COMPANIES

Share price of the companies listed on the Stock Exchange should reflect also their fair value (Pierce, 2004, pp. 124-145). The fair value can be defined in several ways. In view of the foregoing, the fair value is a value used repeatedly in accounting, and thus in Article 28 (6) of the Accounting Act of 29.09.1994 as "the amount for which a given asset component could be exchanged, and the liability could be paid on market transaction terms between interested and well-informed, unrelated parties.

In view of whether the price of shares that are quoted on the stock exchange corresponds to their fair value, should be found in the value alone, since, after all, the values may be diverse, like the value of a similar company, producing similar goods and operating in the same industry, will also be diverse for various reasons.

The subject of trade covers minority shares, and the main market participants are retail investors or minority institutional investors, thus the price of shares should reflect the fair value characterizing the liquid minority interest (Borowski, 2013, bossa.pl).

The value presented in this way seems righteous, which is confirmed by the premium paid by the investors who announce calls for subscription for shares and plan in this way the purchase of the controlling interest. Then the premium reflects the difference between the level of liquid minority interest and the level of controlling interest. Sometimes the level takes into account benefits resulting from synergy. An investor purchasing the controlling interest in this way

receives premiums that appear after taking over control of a company, in the form of funds, business management and making a number of strategic decisions.

The fair value of the share price should be determined in accordance with the idea of capital market, namely the market participants should have equal access to data, information and all messages concerning a given company. However, the investors are divided into three groups:

a) People with access to the most closely guarded information that affects the price and the business value, namely those can the company's management board or shareholders,

b) Institutional investors with blocks of shares with simultaneous access to the company's management board,

c) Individual investors who have access to public information.

At this point, there should be no differences in particular groups, at least officially, however, it happens that a group that is closest to the company has information which can obviously change its value overnight or distort its value artificially, e.g. other data or informal data, and even fictitious data.

Worldwide we can also appreciate companies that treat individual investors seriously, namely provide them data concerning a company and treat them as equal and as strategic investors, with a large impact on a company in the present and in the future.

Transactions that are concluded on the Warsaw Stock Exchange relate to transactions between interested parties, namely a purchase or sale order should be submitted. Sometimes there are cases of wrongly submitted orders, but these are marginal orders that do not have a large impact on the transactions conducted on the Warsaw Stock Exchange.

Share liquidity is understood as a percentage quantity of shares in a company that are in the possession of minority shareholders. This is, at the same time, free float and the face value of such shares and the value of average daily trade in shares in a given company (Kufel, 1992, pp. 78-89).

Thus, we may presume that if during a day a large trade in shares takes place and a greater part of shares remains in the hands of minor shareholders, the share price reflects their fair value. We cannot agree with the fact that at small or minimum trade the value of shares is reduced to its daily minimum and it would be its fair value. Then it is only a change in the share price to a lower one and it does not indicate its fair value, as the trade alone suggests that this is only a pure coincidence. Such an impact can be exerted by large shareholders, as they can, by using one block, decrease the share value, preventing smaller players from raising the price for one reason: the capital of smaller shareholders does not enable them to raise the share price (Veale, 2001, pp. 88-125; Frąckowiak, 1998, pp. 34-42).

There is one premise more to determine the fair value of share price. The investors are fond of investing in shares, namely they buy them as in the past they managed to earn on them and they feel that presently the share price is ideal and reflects their fair value and will enable them to obtain fair dividend in the future.

Such a purchase or sale of shares can largely overestimate or underestimate the share value of a quoted company. Here the IT industry may serve as an example, namely shares in technological companies at the beginning of the new millennium, when shares in these companies were being purchased without any analysis in technical terms, but looking at their

name and value, which was increasing overnight. In view of the foregoing, this led to excessively high business value above its fair value (Thompson, 2008, pp. 45-67).

The share price should thus reflect the fair value of a company listed on the Warsaw Stock Exchange. For the value of these companies be fair, the market must make available to all investors information regarding companies listed on the Warsaw Stock Exchange.

The shareholders should be treated equally; therefore we cannot distinguish majority shareholders as those who should have information unavailable for minority shareholders. First of all, shares should be liquid securities, therefore they should be in free float and have real-time transferability, namely at any moment and at any time during the office hours of the Warsaw Stock Exchange on a business day.

4. WIG-CHEMIA AND SHARES IN THE COMPANIES LISTED ON IT

The Grupa Azoty SA is the largest exporter in the chemical sector in Poland. As a capital group, it showed PLN 10.1 billion of sales in the last financial year. In comparison with the last year, the increase was 30%. However, 130% of increase in profit draws most attention. In 2009-2012, the products of the Grupa Azoty SA were bought in more than seventy countries (Zieliński, GF24, 2015, pp. 1).

The WIG-CHEMIA index, presented in Figure 1, shows that from 2007 to December of 2008, the chemical sector's companies in Poland showed a downward trend in their values. However, since the first quarter of 2009, it has been possible to notice a significant upward trend, in which the augmentation and consolidation at the level of 13,864 points on the index take place. The values reported on May 15, 2016 reflect the upward trend and confirm it. However, the market values do not reflect their fair value.

Figure 1: WIG-CHEMIA index in the years 2006 – 2016 (source: stooq.pl)

Therefore, it can be assumed that the Polish chemical market is very dependent on the global economy. Most of the companies quoted on WIG-CHEMIA has a very good financial condition and promises great hope for the rapid and large increases of their values. For that reason, the fair value should be included in the market value, however, the market value differs from it due to some other external factors on the financial market and even speculative factors in the development of the share price of the chemical companies quoted on the Warsaw Stock Exchange in Poland (Fig. 1).

The diagram of WIG-CHEMIA P/E (stooq.pl) presents the value as per the 15th of May 2016 (value of 11.05) which proves that a total relation of price to income is on the increase and should reach at least the value of 60. This is because the companies listed in this index have a great financial potential investing properly their financial resources. Yet they have been overrated considerably and their fair value has been underestimated (Fig. 2).
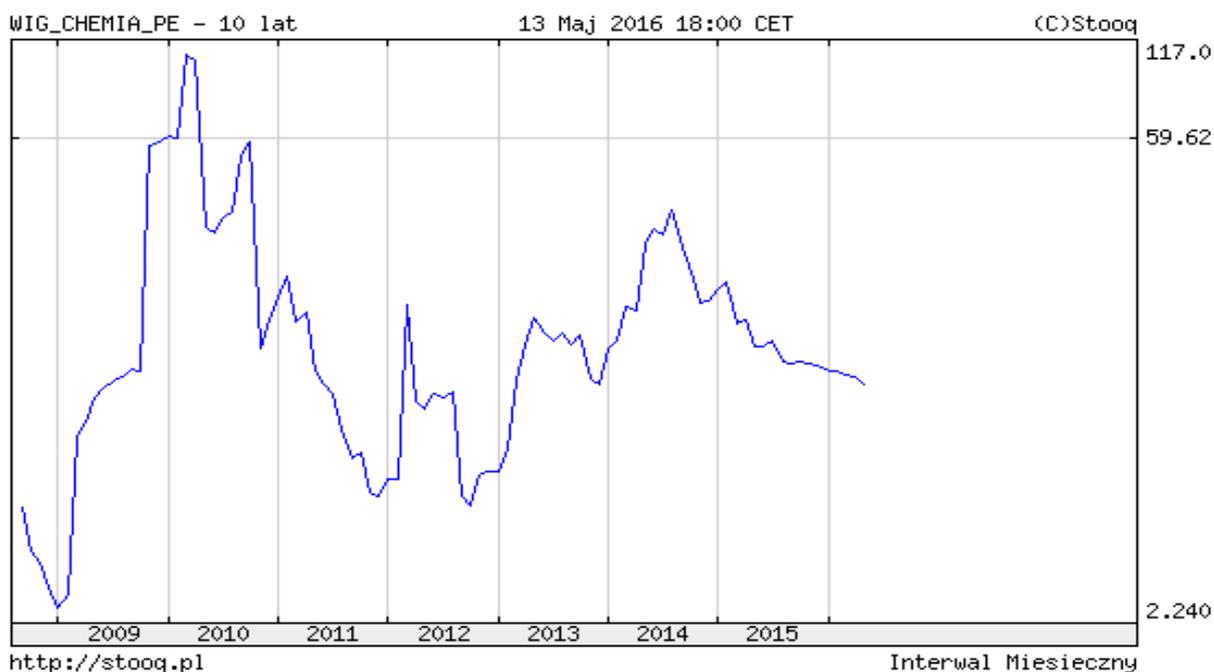
Figure 2: WIG-CHEMIA P/E in the years 2009 – 2016 (source: stooq.pl)

Most of the companies quoted on the WIG-CHEMIA index are characterised by a high rate of return on investments (http://stooq.pl/q/?s=wig_chemia, 15 May 2016):

CIECH – the scope of activities of the Ciech SA company and subsidiaries includes production, trade, and distribution of chemicals, as well as service activities aimed at full service of domestic and foreign markets. The activity is carried out with the participation of domestic and foreign companies, as well as foreign representations of the Ciech SA company.

GRUPAAZOTY – the company is engaged in production and sale of chemicals and plastic elements, in particular: caprolactam - an intermediate for the production of polyamide 6, in the production of which, as a by-product, ammonium sulphate, the one of the fertilisers sold by the company, is produced, construction materials (polyamide 6, polyoxymethylene, modified plastics), and mineral fertilisers (nitro-chalk, ammonium nitrate, ammonium sulphate).

MERCATOR – The group is a producer of disposable, latex medical gloves, as well as a major distributor of disposable medical gloves and other medical and protective devices, mostly dressings and nonwoven products.

PCCROKITA – The basic area of the PCC Rokita SA company's activity is production and trade of chemical products, which are used primarily in the plastic elements sector, as well as in the segment of industrial chemistry and in the construction and textile sectors. The company occupies a leading position on the Central European market in such segments like polyols and alkalies, as well as it is a significant supplier of phosphorus and naphthalene derivatives.

POLICE – The Zakłady Chemiczne Police SA [Chemical Plants Police SA] company is one of the largest chemical companies in Poland. It is a producer of compound mineral fertilisers applied in agriculture and horticulture. It also produces titanium white needed in the production of paint, ink, ceramic formulations, and chemicals, such as phosphoric and sulphuric acids, ammonia, sodium fluosilicate, ferric sulphate, and others. They are used in construction, chemical, glass, ceramics, and pulp and paper sectors, in the production of fertilisers, compound feedingstuffs for animals, agents of water and wastewater purification, etc.

POLWAX – The company is the producer and distributor of refined and deodorised paraffin and a wide range of paraffin waxes. These products are used in various industries, such as fertiliser sector, precision casting, timber processing, production of varnish and paint, rubber, paper and packaging sectors, production of construction materials, explosives, candles and grave lanterns, as well as food and beauty sectors.

SYNTHOS – The company is one of the greatest chemical companies, producers of synthetic rubber and polystyrene. Its activity is focused on three groups of products: rubber and synthetic latex (50% of revenues), styrene materials, and vinyl and copolymer dispersions. The company's mission is to meet needs of customers in terms of chemical raw materials, intermediates, and products for further processing into final products.

5. ANALYSIS AND VALUATION OF THE CHEMIACL SECTOR COMPANIES QUOTED ON THE WARSAW STOCK EXCHANGE (WSE) IN POLAND

In the chemical sector, four companies, the values of which approach to their maximum prices on May 25, 2015, can be recorded, and they are MERCATOR, PCCROKITA, POLICE, POLWAX, and SYNTOS.

One company was overestimated by even 52%, and that is CIECH. However, flagship companies such as MERCATOR, PCCROKITA, POLWAX, and SYNTHOS remain with the best results at the forefront, as it shown in Table 1-2.

Table following on the next page

TABLE 1: Companies listed on the WIG-CHEMIA in Poland as of 15.05.2016 (prepared by the author on the basis of the financial data of the WIG-CHEMIA companies)

Name	Average assessment	rating	Current price PLN	Max price PLN
CIECH	3.5/5.0	BBB-	65.50	136.10
GRUPAAZOTY	4.0/5.0	AA+	77.00	107.90
MERCATOR	4.0/5.0	A-	16.00	18.43
PCCROKITA	4.0/5.0	A-	57.66	59.40
POLICE	3.0/5.0	A-	24.60	29.10
POLWAX	4.0/5.0	AA+	15.80	16.95
SYNTHOS	4.0/5.0	AAA	3.89	4.88

Table 1 contains the most important core values that show financial standing of the WIG-CHEMIA companies.

The current price of shares of the companies listed on the WIG-CHEMIA should reflect their business value and their fair value, however, bearing in mind their maximum value, we should note that for well prospering companies their current value differs strikingly from the average or maximum value that was determined during quotations over the last few years, as shown in

Table 1. The share price of some of them has been reduced by 52% (CIECH) and of some by less than 29% (GRUPAAZOTY), which proves their diverse structure and diverse financial possibilities. With good financial data and generating earnings per share, the companies should resist crisis and stagnation prevailing currently on the world markets. However, it is unjust to quote rating for some companies in a manner showing their weakness, since those companies generate profit and are capable of surviving on the market and maintaining financial liquidity, which is proved by the financial results in tables 2 and 3. SYNTHOS may serve as an example (Parvi, 2014, pp. 33-36; Parvi, 2014, pp. 52-60) .

In the rating, only one companies, CIECH, differs from the rest by the lowest grade BBB-. Other companies have the grade of the "A+" or "A-" category.

The share price of some of them has been reduced by 52% (CIECH) and of some by less than 5% (POLWAX), which proves their diverse structure and diverse financial possibilities. With good financial data and generating earnings per share, the companies should resist crisis and stagnation prevailing currently on the world markets. However, it is unjust to quote rating for some companies in a manner showing their weakness, since those companies generate profit and are capable of surviving on the market and maintaining financial liquidity, which is proved by the financial results in table 2. PCCROKITA may serve as an example.

Table 2 contains the most important ratios that show financial standing of the WIG-CHEMIA companies. EBITDA per share is interesting, as it presents operating profit plus depreciation,

which shows more effectively the companies with large fixed assets which require a very high capital expenditures characterized by a long period of return. In view of the above, EBITDA is a better ratio than EBIT, as it shows a better image of financial standing of an analyzed company (Parvi R., 2014, 33-36; Parvi R., 2014, pp. 52-60; Copeland, 1997, pp. 65-69).

In view of the so conducted analysis, we can clearly see that only four companies had problem with generating operating profit per share in the 4th quarter of 2015: MERCATOR POLICE, POLWAX and SYNTHOS. The other 3 companies generated operating profit per share as presented in Table 2. All companies (7 companies) reduced assets to equity ratio, which resulted in release of equity and larger investment possibilities.

EBITDA per share is interesting, as it presents operating profit plus depreciation, which shows more effectively the companies with large fixed assets which require a very high capital expenditures characterized by a long period of return. In view of the above, EBITDA is a better ratio than EBIT, as it shows a better image of financial standing of an analyzed company.

TABLE 2: Technical assessment of companies listed on the WIG-CHEMIA as of 31.12.2015

(prepared by the author on the basis of the financial data of the WIG-CHEMIA companies)

Name	Net profit (net loss) in thousands	Profit per share	Book value per share	EBITDA per share
CIECH	87729	1.665	25.533	164955
GRUPAAZOTY	133151	1.342	64.189	313792
MERCATOR	2120	0.245	8.407	5632
PCCROKITA	39657	1.997	30.313	59013
POLICE	43219	0.576	15.129	76762
POLWAX	7742	0.762	7.575	10411
SYNTHOS	44404	0.034	1.733	123276

Price to earnings and price to shares express the value in PLN and it is a value characterized by the results of the companies which affect these values (Parvi R., 2014, pp. 262-267; Parvi R., 2014, pp. 169-177). Similarly, price to book value of a company ranges from PLN 1.733 (SYNTHOS) to PLN 64.189 (GRUPAAZOTY). Comparing these values to the maximum values reached by the companies, we should note that the value of PLN 64.189 PLN as maximum (GRUPAAZOTY) and of PLN 30.313 (PCCROKITA) were values reached by the companies during their quotations on the market over the last few years (2014-2016).

Generally, the value of the index P/OE is a useful tool for determining an absolute share value referred to the operating profits (table 3). Using the operating profit instead of a net profit (the C/Z index) allows for rejecting single events. Moreover, a net profit is easier to handle.

TABLE 3: Financial ratios of the companies listed on the WIG-CHEMIA as of 15.05.2016 (prepared by the author on the basis of the financial data of the WIG-CHEMIA companies)

Name	Price/Profit	P/OE (price/ operating earnings)	Price/BookValue
CIECH	1.05	6.60	2.39
GRUPAAZOTY	0.79	8.93	1.03
MERCATOR	0.61	8.39	1.90
PCCROKITA	1.06	8.95	1.81
POLICE	0.69	8.28	1.42
POLWAX	0.57	5.35	2.09
SYNTHOS	1.25	11.26	2.18

Fewer companies incur losses at the level of an operating profit rather than a net value, which allows for a broader use of P/OE. An operating profit helps to determine the efficiency of an enterprise's activity on the market regardless of a financial situation. It does not depend on a structure of financing, i.e. a relation of foreign and own capitals. An operating profit stands for the profitability of an enterprise. It is clearly visible that these values are added in the case of each company, and even 5 companies have two-digit values, which means that these companies have a very good financial situation (Parvi, 2015, pp. 177-184).

The P/BV index informs how the company's own capital is valued by the market at a given moment. A general interpretation of the index consists in the fact that the P/BV indices below 1 mean a low price of a company, whereas a value over 3 that a company is overrated. The number of companies of a high value below 1.0 amounts to 7.

Thus, these companies are attractive for investors. The all enterprises are also worth recommendation and attention . In view of the foregoing, we should note that from the above financial data we can calculate fair values of particular companies listed on the WIG-CHEMIA.

The value of the P/P index is expressed in the way that when the value of the index is lower, then the price for the purchased company's shares is theoretically lower too, which means that the enterprise is more attractive. It is used in order to demonstrate cyclic profits and losses of the analyzed companies (the income is much more stable than the company's profit). Therefore, it is evident that companies (3) have the index close to the value of 1.0 - this stands for the company's attractiveness (Parvi, 2015, pp. 83-88).

Table following on the next page

TABLE 4: Values of the companies listed on the WIG-CHEMIA as of 15.05.2016 (prepared by the author on the basis of the financial data of the WIG-CHEMIA companies)

Name	Present value	Maximum value
CIECH	65.50	136.10
GRUPAAZOTY	77.00	107.90
MERCATOR	16.00	18.43
PCCROKITA	57.66	59.40
POLICE	24.60	29.10
POLWAX	15.80	16.95
SYNTHOS	3.89	4.88

From table 4, it can be concluded that the fair value is significantly higher than the current share price of the companies listed on the WIG-CHEMIA. A particular "pearl" in the index may be a well prospering SYNTHOS that is largely undervalued.

TABLE 5: Values of the companies listed on the WIG-CHEMIA as of 15.05.2016 (prepared by the author on the basis of the financial data of the WIG-CHEMIA companies)

Name	Deviation from the fair value in PLN	Fair value
CIECH	39.50	105.00
GRUPAAZOTY	21.00	98.00
MERCATOR	1.50	17.50
PCCROKITA	1.34	59.00
POLICE	2.40	27.00
POLWAX	0.70	16.50
SYNTHOS	0.61	4.50

It should be noted that fair values of particular companies listed in the WIG-CHEMIA index can be calculated on the basis of the above-mentioned data and financial data (Parvi, 2015, pp. 51-67; Parvi, 2015, pp. 82-85).

The Table 5 shows that the fair value is much higher than the current value of the share price of the companies listed in WIG-CHEMIA. Particular jewels in the index may be thriving companies such as: GRUPAAZOTY, MERCATOR, PCCROKITA, POLICE, POLWAX and SYNTHOS which are greatly underrated.

133

6. CONCLUSION

The share price of the chemical sector's companies quoted on the Warsaw Stock Exchange in Poland is significantly underestimated by the current financial situation in the world, especially when companies' values are so unstable. Indeed, the chemical companies should show higher values, at least a fair one because the Polish chemical market is developing splendidly, and it promises even faster development. Currently, both the domestic production and the export are growing very fast. Those are not only occasional transactions; the demand for chemical products is growing in various sectors, which is related to the increased production.

Last year, the chemical sector's companies reported large profits and increased turnover in comparison to the previous years. However, in some cases, they are still underestimated by investors, which results in their low stock exchange value. The example of such company is GRUPAAZOTY which, increasing its production and market dominance not only in Poland, but also in the world, should be estimated at least PLN 98.00 per share.

The fair value of the chemical sector's companies quoted on the Warsaw Stock Exchange in Poland should be reached within three years, that is up to 2018 because it is the right estimation of further fast development of the Polish chemical sector.

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STUDENTS` PERCEPTION ON THE ROLE OF HIGH EDUCATION IN IMPROVING IMAGE OF RETAILING AS A CAREER

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ABSTRACT
Despite its important role in the economy, retailing has been generally neglected, even by many of the high education institutions. It is not in accordance with the transformation of retailing into dynamic and more competitive industry which seeks for motivated and high educated human resources. This paper, using the results of a study conducted among students attending undergraduate trade study in Croatia, examines students` perception of retailing as a destination career, the role of high education in forming that perception, and in improving the image of retailing as a career, as well. Results of the study reveal that similar to previous researches overall negative perception prevails, and that partnerships between retail companies and higher educational institutions are needed in order to promote and encourage young people regarding future career in retailing.
Keywords: career, Croatia, high education, retailing, students

1. INTRODUCTION
As career decision-making has internal meaning to each individual *(Kelly and Pulver, 2003)*, it is important to study students` career decision-making not only from an academic advising perspective but from a company`s human resources (HR) standpoint, and both perspectives should interact each other in order to improve students` skills and knowledge. Nowadays, there is increasing awareness of the importance of employees' knowledge and skills as the most important source of the company and essential for the companies' success *(Jones et al., 2007)*. Excellent companies know that only highly educated and competent employees can lead to customer satisfaction and the overall profitability. This paper addresses one of the most dynamic sector, recognized as an enormous employer and sector of the economy – retailing, and its cooperation with education sector, their mutual understanding, and working together as an imperative *(McKay, 1978)*. Drawing on previous research, this paper explores the current perceptions of undergraduate students to a career in retailing in Croatia, where despite the fact that retailing has very high share in BDP and 20,91% of the population is employed in retailing, there is the lack of research on retailing as a career. Moreover, the purpose of this paper is to reveal the importance for educational institutions to collaborate with retailers to improve the industry`s image.

McGoldrick states (1983, p. 15) that despite its important role in the economy, retailing has been generally neglected, even by many of the more progressive management centres and business schools. *Gilbert (2003)* points out that the retail sector has had a reputation for not supporting its employees and for having lower pay and longer hours than other sectors. For generations retailing has had to fight against its image as a second-class occupation. The problem — retailing as a subject — has not been deemed to be *'academically respectable'* and as a career it has been considered insufficiently '*professional*' or '*scientific*'. *McGoldrick, 1983),* *Brennan & McGreevor (1988)* found that only 31% of college graduates employed in retailing described their job as utilizing their education.

As the retail environment has changed over the years, primarily due to increased competition *(Byrom et al., 2003; Warnaby et al., 2004)*, retail expansion *(Williams, 1997)*, changes in technology *(Hart et al., 2007)*, and the market *(Broadbridge, 2002)*, so too have its educational demands grown *(Swerdlow, 1978, p.38)*. Thus, retail education has to be focused on those criteria necessary to make a contribution to the retail industry and there is the link between higher education and retail, as well as their interrelationships in improving image of retail as a career. However, a view is still widely held within many retail companies that university education can contribute little to the abilities of their managers or the profitability of the company.

In accordance, paper is structured as follows. Following the introduction it begins with the background where literature within education in retailing and retailing as the career are discussed. Also, the presentation of Croatian universities and other high educational institutions offering special retail courses is given. The sections that follow discuss the research methodology and results of the qualitative study among students attending undergraduate trade study. Finally, the paper discusses the theoretical and managerial implications, including the limitations of the study and directions for future research.

2. BACKGROUND
2.1. The relationship between education and retailing

In response to growing competition and innovation, and to its growing complex corporate structure, retailers require bright, motivated, capable individuals with a range of personal and technical skills *(Broadbridge, 2003a, p. 287)*. To remain competitive, it is anticipated that small independent retailers will need to pay greater attention to service quality and will therefore need staff with excellent customer service skills developing technology. In response to business developments there has been a growth of graduate recruits to the industry and retail courses offered at higher educational establishments, often in conjunction with retailer sponsored academic posts. Retailing as an academic subject area in the UK gained momentum during the 1980s. The Institute for Retail Studies at the University of Stirling was established in 1983 as a centre for academic excellence in research and management development/industry activity. The transition from higher education to the world of work is a major life change for many young people, during which they face the complex demands of the economy; of a challenging, highly competitive job market; and of an increasingly diverse population and work-force *(Hurst and Good, 2009)*. Students invest a great deal of their time, energy, and resources in obtaining a higher education degree; hence, they have high expectations regarding their future careers and employment status *(Wood, 2004)*. Prior to starting any job, potential employees form expectations of what the job will be like. This anticipation of what will happen is preconceived, based on existing work and life experiences, career aspirations and dreams, and personal characteristics *(Woods, 1993)*.

In their worth-mentioning work, *Hart et al (1999)* explained that due to the critics of UK universities for their lack of graduate preparation in developing the core competences required

for graduate entry positions and an operational problem-solving context *(Schmidt, 1996)*, the Consortium of Retail Training Companies (CORTCO) was formed to address the retail image problems.

Gush (1996) examined the role played by higher education in meeting the needs of retil sector and showed the gap between retailers` needs and education`s output. In early 1978, *Lazarus* pointed out that greater emphasis in education should be placed on the so-called pragmatic approach and less on theory. Accordingly, one of the most important aspects of any retail educational program is to provide enough pragmatic experience so that a student really knows what it takes on a day-to-day basis to be successful in a retailing career.

Retailers face a human resource environment characterized by a large number of inexperienced workers, long hours, highly visible employees, a diverse workforce, many part-time workers, and variable customer demand. These factors complicate employee hiring, staffing, and supervision. Human resource management is particularly important in retailing because employees play a major role in performing its critical business functions *(Levy and Weitz, 2012, p. 219)*. Retailers rely on people to perform the basic retailing activities, such as buying, displaying merchandise, and providing service to customers. They face the continual challenge of attracting, recruiting and retaining a competent workforce *(Knight et al., 2006)*.

The experience that most customers have with a retailer is determined by the activities of employees who select merchandise, provide information and assistance, and stock displays and shelves. Thus, employees can play a major role in differentiating a retailer`s offering from its competitor`s. Employers face considerable challenges in that retail employs the highest proportion of part-time workers, suffers a higher than average staff turnover, and has a poor image as a career destination, particularly for well-qualified employees *(Hart et al., 2007)*.

2.2. Retailing as a destination career

Research based on student perceptions is almost certainly based on perceptions of *store* retailing positions, and many press reports expressly discuss a negative *store* retail work environment *(Rhoads et al., 2002)*. In the 1980s, and early 1990s, the attraction of high-calibre graduates into retailing occupied a number of academics and practitioners alike; *Swinyard et al. (1981; 1991). Swinyard (1981)* conducted a study among students at universities and colleges in the United States and found negative perception of retailing as a career choice. The findings of his replica study *(Swinyard, 1991)* as well as the findings of subsequent research in the UK (for example, *National Retail Training Council, 1995*; *Hemsley-Brown and Foskett, 1999*; *Broadbridge, 2003a; 2003b)* confirmed retailing as not a particularly attractive career alternative among students. Compared with other careers, perception of retailing was rated below average in respect of social status, salary potential and for overall personal satisfaction and success *(McGoldrick, 1983, p. 16). Broadbridge et al. (2007)* considered negative perceptions of retail careers as a result of part-time employment of many of younger employees while they are finishing their college degree.

Having that in mind, it would be expected to have retailing as a more attractive career choice. However, existing literature suggests that as a profession retailing has not had attractive image *(Commins and Preston, 1997; Broadbridge, 2003a, 2003b) Broadbridge`s* research *(2003b)* suggests that students do not fully understand what a job in retailing entails. Additionally, *Foresight (2001)* suggests that perceptions of retail careers appear to also be influenced by a company's image and type of retail sector, with some sectors (i.e. department stores; specialty and designer boutiques) more highly rated by students as preferred career destinations than others (i.e. grocery, home improvement and other do-it-yourself sectors). *Hart et al. (1999)* think that the image of retailing as a graduate career had greatly improved, with greater numbers of graduates applying to retail, but the ability to attract and retain the right graduates possessing

the required competences may need greater work. On the contrary, *Rhoads et al. (2002)* state that compared to other marketing positions, it is believed that jobs in retailing demand longer workweeks but offer lower compensation and less work satisfaction.

2.3. The Croatian high educational system offering specialist retail courses

As in the USA *(Hurst and Good, 2009)*, UK *(Broadbridge, 2003)*, and many other countries, the retail industry is also one of the largest employers in the Croatia. Although retailing is perceived as the second largest sector regarding the number of employees in the Croatian economy, little research has been conducted into the perceptions of retailing as a career for Croatian graduates.

Retail education has a long history in universities and business schools in the Republic of Croatia, possibly dating back to 1920 with the founding of the *School of Commerce and Transport*. This was later to become the *Faculty of Economics and Business in Zagreb*. Other universities soon followed suit (especially state universities, such as *Faculty of Economics and Business in Osijek*, *Department of Economics and Business Economics of the University of Dubrovnik*) and basic retailing education even percolated through to the curricula of some secondary schools *(McGoldrick, 1983)*, some of which are *First school of Economics*, *Second School of Economics*. According to the latest available data, there is diversity in retailing education programmes in Croatia, from associate degree study programmes in retailing (provided by *Faculty of Economics and Business in Zagreb, Department of Trade*; *Faculty of Economics and Business in Split*, *University Department for Professional Studies*; *Faculty of Economics and Business in Osijek*, *professional study Trade*) to graduate university studies (*Faculty of Economics and Business in Zagreb*, *graduate study Trade*; *Faculty of Economics and Business in Osijek, graduate study Trade and logistics*). According to the diversity of the education programmes, the number of retailing courses offered and their content varies considerably between universities, the most typical range of offerings being between two (*Department of Economics and Business Economics of the University of Dubrovnik*) and five (*Faculty of Economics and Business Zagreb, Faculty of Economics and Business Osijek)* courses.

3. METHODOLOGY

In order to develop a broad framework for research of students' perception on the role of high education in improving image of retailing as a destination career, preliminary, qualitative research was conducted. The aim is to gather more insights into the research topic and current state.

In order to explore undergraduate students` perception of retailing as a career choice and the role of educational providers in raising the image of retailing as a career, qualitative approach was used. It included focus group interviews with two groups of students (the first group consisted of students on the second year of studying, and the second group consisted of students on the third year of studying) registered for university undergraduate studies, retail-management degrees at the *Faculty of Economics and Business in Zagreb, Croatia* (leading high education institution in Croatia). *Hine (2000)* considers focus group interviews particularly suitable for exploring phenomena in-depth.). The research instrument consisted of questions adopted from previous research, most notably *Broadbridge (2003b)* and *Swinyard et al. (1991)* related to three main areas: *(1) attributes associated with a career in retailing*; *(2) the evaluation of the appeal of the 17 career areas available at the Faculty of Economics & Business in Zagreb*; *(3) the role of the institution in making more positive picture of retailing and in improving its image to students.*

Each focus group consisted of ten students and was led by the same moderator. Participants were assured anonymity and confidentiality. The discussion lasted, on average, about 45 minutes and was transcribed verbatim. The inductive data analysis aimed at framing concepts and detecting patterns that would give further insights into the three main analysed areas. Accordingly, interpretations were organised following the previously identified areas of investigation.

4. FINDINGS
The respondents` average age was 20 and half of them were male students.
What follows is a short discussion of investigated themes and some interpretations.

Attributes associated with a career in retailing
To enable comparison, the same attributes associated with the career in retailing, used in the original study by *Swinyard (1981)*, *Swinyard et al. (1991)* and *Broadbridge (2003b)*, were offered to respondents in the current research in the Croatian settings. Similar to those previous researches, retailing was associated with more neutral or negative attribute perceptions. A career in retailing was described as being *'boring'*, *'routine'*, and *'without opportunity for career advancement'*. Moreover, respondents pointed retailing as *'having long hours'* but *'poor salary'* career. Such results were expected not only because of findings of secondary data analysis, but because of the current situation in the Croatian retailing in general. Namely, high concentration level, internationalization and intense competition, caused that retailers operating on the Croatian market are making effort to cut costs (and prices), and to offer more services (such as longer working hours).

Evaluation of the appeal of the 17 career areas
The respondents` evaluation of the appeal of the 17 proposed career areas suggests that the students remain negative attitude about pursuing career in retailing. Careers in marketing, management, accounting, tourism, etc. were all perceived as more appealing than a career in retailing. In accordance with previous results, this negative position of retailing among other courses is expected. Respondents ranked a career in retailing very low, because respondents do prefer marketing and management as they perceive them as challenging and interesting.

The role of the institution in making more positive picture of retailing/improving its image
In answering the question about the role of high educational institution in attracting students to retailing as a destination career, neutral role of the educational institution prevails. Students agree that neither institution nor teachers provide them with the variety of career opportunities in retailing. Students only see the job in retailing from their personal experiences as consumers or as part-time employees. This is in line with *Broadbridge (2001; 2003b)* who reported that student did not really understand what a retail management job entailed:
„There are really few professors` exceptions that are trying to explain opportunities and benefits working in retailing. There are only few of them who are dealing with the actual situation in retailing, while others are repeating the same case studies and examples.“

Moreover, respondents point out the lack of connection and co-operation between education and industry. Accordingly, there is the situation that students learn about retailing principles, new retail technology, store decision making, etc. in an inadequate surroundings, without possibility to see that in praxis: *„It is funny without seeing to try to imagine data on POS screen and how to use it for further analysis“*.

It is interesting that respondents do not criticise only Croatian educational system, but similar to *Houlton and Thomas (1990)*, the retail industry for failing to market the positive images of retailing career to higher educational institutions and prospective employees, as well. *Broadbridge (2001)* suggests that the retail industry and high education providers of retail courses can work more closely on course development, that they have to communicate in innovative and effective way in order to raise the profile of the industry and improve its image and perception to young people.

5. CONCLUSION AND FURTHER RESEARCH DIRECTIONS

Although it is widely known that retailing is a major labour-intensive industry sector and one of the largest employers, it still suffers from problems in recruiting suitable employees, particularly those with the necessary skills. *Gilbert (2003)*, as well as many other previous industry and academic researches *(Broadbridge, 2003b, Swinyard, 1981; Swinyard et al., 1991)*, has identified the reason for such a situation. Namely, retailing has had a reputation for not supporting its employees and for having lower pay and longer hours than other sectors. According to *Rhoads et al.(2002)*, retailers face major obstacles in recruiting talented college graduates due to perceptions that retailing offers a low quality of work-life. Thus, retailing has had a poor image as a career choice for existing and potential employees, particularly for more highly qualified employees. This paper examined students` perception of retailing as a destination career, and assessed the role of high education in improving the image of retailing as a career. The developments in many European countries show the changing attitudes of students for whom retailing now provides modern and attractive career prospects *(Merkel et al., 2010)*. However, the results of the study among undergraduate students at the Faculty of Economics and Business in Zagreb, Croatia confirmed that retailing is still far from the first choice for top graduates and that a great deal more could be done both by the industry and the educators to promote retailing as a career option. High education institutions should transform to the world of work, and to vitalize and sell the concept of *'retailing as a career'*.

Therefore, the findings of this paper are important to both academia and practitioners because having a more concrete understanding of students' expectations and perceptions regarding a career in retailing will assist advisors and professors in preparing them for their future careers. Study results provide directions for industry subjects to assist with the education institutions in offering the opportunity for students to observe and participate in a number of aspects of retail business and accordingly to associate retailing with positive career attributes. Similar to *Broadbridge (2003a)*, to improve the perception students hold of retailing, there is further need for both retailers and academics to work independently and together to dispel the retailing myth. Both retailers and higher education institutions need to make students aware of what a career in retailing entails. Moreover, *Simmons et al. (2014)* consider government as the shareholder which could try to reshape education and training in various ways, including a re-alignment of the curriculum to more closely serve the perceived needs of business, which is currently happening with Croatian education system.

Whilst this paper has highlighted some important issues that need to be addressed in order to improve the perception of retailing as a destination career, it has limitations. Firstly, as the study was conducted solely in one Croatian region (with the highest level of retail concentration), one must be cautious when drawing generalisations from this work to Croatian retail as a whole. Also, this study covered only a small sample of respondents and suffered from a limited response rate. Similar to the limitations of the work of *Hart et al. (2007)* research ideally needs to be conducted across a broader sample of the institutions offering retail specific degrees. In order to overcome current research limitations, the future work in this area will be focused on other education institutions in the area of retailing as well.

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IMPACT OF EMOTIONAL LABOR STRATEGIES ON EMPLOYEE BURNOUT MEDIATING ROLE OF EMOTIONAL DISSONANCE AND MODERATING ROLE OF WORKPLACE SOCIAL SUPPORT

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ABSTRACT

This study specifically aims at determining the association between two emotional labor strategies (i.e. surface acting and deep acting) and employee burnout by investigating the intervening role of emotional dissonance and buffering role of workplace social support. The survey was conducted on employees working in different branches of private and public banks of Pakistan through self-administered questionnaire. Results indicate that both emotional labor strategies; surface acting and deep acting positively and significantly influence burnout. In addition, emotional dissonance mediates between two emotional labor strategies and burnout. Emotional labor strategies have positive significant relationship with emotional dissonance whereas workplace social support (i.e. supervisor support and colleague support) buffers the impact of emotional labor strategies on emotional dissonance. The implications of these findings are also discussed.
Keywords: *Deep Acting, Emotional Dissonance, Employee Burnout, Surface Acting, Workplace Social Support*

1. INTRODUCTION

An extensive body of literature has focused on employees' burnout during current years. Numerous researchers have consideration towards employees who experience burnout caused by their interaction with customers or clients (Quade, Greenbaum, Eissa, Mawritz, & Kim, 2013). Researchers across the past several decades have analyzed burnout affected by two emotional labor strategies which are surface acting and deep acting (Carlson, Ferguson, Hunter, & Whitten, 2012). The workplace stress damages the employee health during economic recession of organization, whereas stress and burnout increases over a period of time (Ravalier, Mcvicar & Munn-Giddings, 2014).

The literature shows that intrinsic motivation, role ambiguity, role conflict, affectivity and organizational politics are all significant antecedents of burnout (Low, Cravens, Grant, & Moncrief, 2001; Karatepe, Babakus & Yavas, 2012). The reduction in organizational commitment occurs with the increase in emotional exhaustion and depersonalization and this increase leads to high level of turnover intentions (Lin, 2012). Job performance, work performance, absenteeism, team performance and objective performance are job related outcomes of burnout and depression, anxiety, psychological disorder, mood disturbance, life

dissatisfaction and sleep disturbances are some health related outcomes of burnout (Bakker, Demerouti & Sanz-Vergel, 2014).

Emotive dissonance has been discussed and measured as an inherent component of emotional labor in numerous ways (Chu & Murrmann, 2006; Wong & Wang 2009; Zapf, Vogt, Seifert, Mertini, & Isic, 1999).

Conservation of resource theory (COR) posits that when employees show fake empathetic behavior or try to change their inner feelings required by job, they feel stressed because of difference between actual emotions and displayed emotions. Emotional labor and its outcomes are well tested in previous studies but the mediating mechanism of emotional dissonance has been tested rarely (Vandijk & Brown, 2006). So, it is important to test this mediating mechanism through empirically testing of the data. Workplace social support plays an important role in occupational stress models to buffer the stress level (Bowling et al., 2004). This study also investigates the moderating role of workplace social support between emotional labor and emotional dissonance.

2. LITERATURE REVIEW
2.1 Employee Emotional Labor Strategies
The act of conveying emotions desired by an organization during providing services is called emotional labor (Morris & Feldman, 1996). There are two components of emotional labor strategies; surface acting and deep acting. In surface acting, employees mislead others about their real thinking but they do not mislead themselves while in deep acting employees change their inner feelings to match with the requirement of the job (Morris & Feldman, 1996). Surface acting is the response based strategy in which the incongruence between the internal authentic feelings and displayed acting causes dissonance (Mesmer-magnus, Dechurch & Wax, 2012). According to the lens of intrapsychic processes, emotional displays that are distinct from internal psychological states create awkward dissonance and negative outcomes such as job dissatisfaction (Bhave & Glomb, 2013). In deep acting, the internalization of assigned emotions or the compatibility between internal feelings and displayed acting settles the dissonance (Mesmer-magnus, Dechurch & Wax, 2012).

2.2 Employee Burnout
Burnout is a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment (Siegall & McDonald, 2004; Maslach 1993; Maslach and Jackson 1981, Maslach, Schaufel & Leiter, 2001). Many psychological issues such as anger, helplessness, depression and nervousness are the negative personal outcomes of burnout (Cordes and Dougherty, 1993; Maslach, Schaufeli & Leiter, 2001), whereas reduced organizational commitment and job satisfaction, turnover and absenteeism (Chenevert et al., 2013; Jourdain & Chenevert, 2015) are organization negative outcomes.

Emotional exhaustion, depersonalization and reduced personal accomplishment are three dimensions of burnout (Hakanen & Schaufeli, 2012). Emotional exhaustion is defined as emotional resource depletion and it is an important strain element. It is specified by depletion of energy and mental fatigue. Depersonalization refers to the negative feelings and perceptions about customers or clients. Reduced accomplishment is crises in professional capability, capacity and inefficiency to meet job requirements (Leiter et al., 2013). Emotional Exhaustion originates from job demands and loss of resources (Gan & Gan, 2014). In depersonalization, employees treat customers as 'impersonal objects' instead of human beings and they have no feelings for customers. Employees isolate themselves from customers and work (Dellagi, 2015). Diminished personal accomplishment is the reduction or decrease in person's feelings of achieving something and negative evaluation about oneself (Shih et al., 2013).

2.3 Employee Emotional Labor Strategies and Employees Burnout

Literature found that surface acting has significant positive influence on work exhaustion (Blau et al., 2012) as in this acting there is more emotional dissonance which lead to exhaustion. In deep acting, employees literally encounter or feel the emotions desired by organization that they are expected to perform (Yoo & Arnold, 2015). In surface acting, employees shape expressions while in deep acting employees manage emotions (Goldberg & Grandey, 2007). In expressing genuine or actual expressions, no labor is required (Bono & Vey, 2005), whereas in the other situation, emotional labor is required (Huang et al., 2015).

Researchers argued that surface acting and deep acting create emotional dissonance, job stress and turnover intent and thus harms well being of an employee as well as an organization (Hochschild, 1983; Ashforth, 1989, Pandey and Singh, 2015; Jung & Yoon, 2014). There is vast literature on positive outcomes of deep acting but little literature identified the negative outcomes of deep acting (Pandey and Singh, 2015). Therefore, it is argued that when employees change their inner feelings according to the requirement of job, it has negative influence on job satisfaction and other positive outcomes of an organization whereas burnout, emotional dissonance, turnover intentions and other negative behaviors of employees will be intensified.

H1: Surface acting will be positively associated to burnout.
H2: Deep acting will be positively associated to burnout.

2.4 Mediating role of Emotional Dissonance between Employee Emotional Labor Strategies and Employee Burnout

Emotional dissonance refers to the clash between the actually experienced emotions and emotions desired by an organization (Middleton, 1989; Abraham, 2000; Morris & Feldman, 1996; Zapf et al., 1999; Crego et al., 2013). Emotions portrayed from surface acting create the sense of strain which is termed as emotive dissonance and it is similar to cognitive dissonance (Ashforth & Humphrey, 1993). Cognitive dissonance is a negative intrapersonal state which is aroused through psychological discomfort (Elliot & Devine, 1994). Emotional dissonance mediates between surface acting and emotional exhaustion (Vandijk & Brown, 2006; Dijk & Kirk, 2007). In previous studies, emotional dissonance has positive relationship with all three components of burnout (Lee & Ok, 2012).

Individuals can understand situations and communicate with each other through emotional reactions (Thoits, 1989). These emotional reactions may be distorted by deep acting and damage the sense of authenticity of an individual. Emotional dissonance is linked with negative health outcomes and as dimension of emotional labor, it has positive link with two dimensions of burnout (i.e. emotional exhaustion and cynicism) (Andela, Truchot & Borteyrou, 2015). Previous literature indicates that emotional dissonance escalates depletion and detachment. Thus it is hypothesized that the modification in inner feelings can also create dissonance leads to burnout.

H3: Emotional Dissonance mediates the relationship between surface acting and burnout.
H4: Emotional Dissonance mediates the relationship between deep acting and burnout.

2.6 Moderating role of Workplace social support between Employee Emotional Labor Strategies and Emotional Dissonance

Social support can be defined as beliefs of an individual that his/her well being is cared and he/she has value in interactions of social networks (Kossek et al., 2011). Social support at work has been analyzed through supervisor support and colleague support (Sawang, 2012). The support perceived by an employee from his supervisor can reduce stress and emotional exhaustion (Penney & Spector, 2005). Social support is the job resource which can decline the

individual's anxiety and stress by lowering the negative effects of occupational stressors such as job insecurity, work overload, high job demands and insufficient resources (Schaufeli & Taris, 2014, Moeller & Chung-Yan, 2013). Perceived organizational support is the main design of the organizational support theory and it is the extent to which individuals assume that organization appreciates their participation and is responsible for their welfare and prosperity (Baran, Shanock & Miller, 2012). Social support acted as moderator between negative association of heavy workload and performance of academic staff in Pakistan (Yusoff et al., 2014). Workplace social support which involves supervisory support and coworker support plays the moderating role between work load and tension-anxiety (Kirmeyer & Dougherty, 1988). High supervisor support helps to minimize burnout and turnover intentions (Kalliath & Beck; 2001). It is argued that superiors who are supposed to be helpful are to be potent in organizing subordinates' emotions. Also support from coworkers reduces the influence of emotional labor strategies on emotional dissonance. We therefore hypothesized that:

H5: Workplace social support moderates the relationship between surface acting and emotional dissonance such that the relationship would be weaker when the level of workplace social support is high.

H6: Workplace social support moderates the relationship between deep acting and emotional dissonance such that the relationship is weaker for those who are high in workplace social support

2.8 Theoretical Model
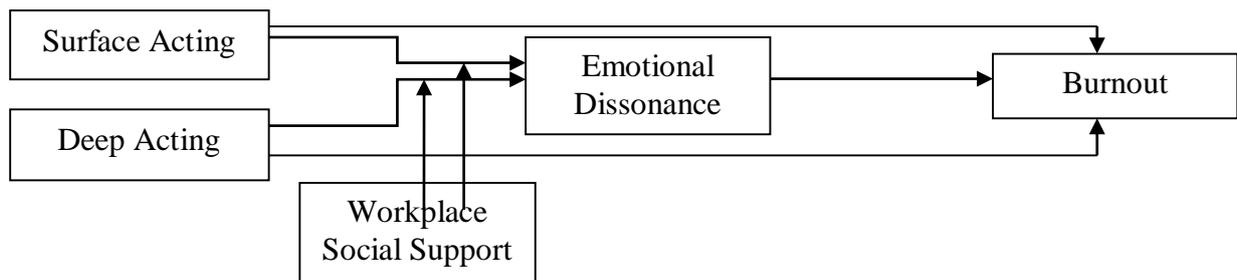
***Figure 2.1** Theoretical Model*

3. METHODOLOGY

3.1 Sample and Procedure

In this study, the data were collected from different branches of private banks located in four cities of Pakistan through self-administered questionnaire by using personal and professional links. Out of 300 respondents 210 were found useable yielding 70% response rate.

Cronbach's alpha was calculated for internal reliability and consistency of the scale. Preacher and Hayes (2013) process method was applied for testing regression, mediation and moderation analysis. 5 point Likert scales were used.

3.2 Measuring instrument

Surface acting and deep acting were measured using 6 items scale developed by Brotheridge & Lee (2003). Surface acting and Deep acting involved 3 items each. The sample items include 'I hide my true feelings about a situation' (SA) and 'I really try to feel the emotions I have to show as part of my job' (DA). The scale was ranging from 1 (never) to 5 (always). Cronbach's alpha for surface acting was 0.70 and deep acting was .77.

Emotional dissonance is the psychological state in which employee feels distressed. Elliot & Devine, (1994) used discomfort index having items 'uncomfortable', 'uneasy' and 'bothered' to access emotional dissonance. Using this index, it was inquired from respondents to indicate

their level of feelings when faking it in these situations. The scale was ranging from 1 (does not apply at all) to 5 (applies very much). Cronbach's alpha was 0.73.

Burnout having three dimensions i.e. emotional exhaustion, personal accomplishment and depersonalization was measured using 22 items inventory developed by Maslash & Jackson Burnout (1981). The sample items include 'I feel frustrated by my job'. The scale was ranging from 1 (never) to 5 (always). Cronbach's alpha was .86.

Workplace social support having two sub-constructs i.e. supervisor support and coworker support was measured using 10 items scale developed by Karatepe (2013). The sample items include 'My supervisor offers new ideas'. The scale was ranging from 1 (strongly disagree) to 5 (strongly agree). Cronbach's alpha was 0.89.

4. RESULTS
4.1 Control Variables
We also made individual demographic characteristics as part of our questionnaire as these demographic may have affected the relationships of employee burnout (Choi & Kim, 2015). We entered gender, age, qualification and experience to check their effect on dependent variable and found that they had no effect. Atinc, Simmering & Kroll, (2012) suggested that including of non significant control variables in the analysis would erode degrees of freedom so we finally did not control these all demographics variables.

4.2 Correlation Analyses
Table 4.1 indicates the correlation among the study variables. Reliabilities mentioned on the diagonal show strong internal consistency across all variables.

Table 4.1 Mean, Standard Deviations, Correlations and Reliabilities

	Variable	Mean	S.d	1	2	3	4	5
1.	Surface Acting	3.1000	1.00189	(.70)				
2.	Deep Acting	3.3000	.95148	.514**	(.773)			
3.	Emotional Dissonance	3.0000	.99707	.204**	.238**	(.735)		
4.	Burnout	3.1338	.61340	.353**	.369**	.409**	(.861)	
5.	Workplace Social Support	3.4676	.82375	.101	.230**	-.129	.257**	(.898)

* Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed).

4.3 Regression Analyses
Hayes (2013) process method was employed for regression analysis. The number of bootstrap samples was 1000 and results were tested at 95% confidence interval. Table 4.2 shows the result of regression analysis for direct effects of IV on DV.

Table 4.2 reveals that surface acting and deep acting were significantly and positively associated with burnout as indicated by regression coefficients (B=.1725, p<.001) and (B=.1855, p<.001) respectively, supported hypothesis 1 & 2.

Table following on the next page

Table 4.2 Regression Analysis for Direct Effects

Variables	B	SE	T	P
Surface Acting ⟶ Burnout	.1725	.0378	4.5600	.0000
Deep Acting ⟶ Burnout	.1855	.0401	4.6293	.0000

In table 4.3, the result of bootstrapping analysis shows that the emotional dissonance mediates between surface acting and employee burnout (-.1116 to -.0098) and deep acting and employee burnout (-.1056 to -.0088) with 95% confidence interval excluding zero between upper and lower values, supported hypothesis 3 & 4.

Table 4.3 Regression Analysis for Mediation

	LL 95% CI	UL 95% CI
Bootstrap results for indirect effect of Surface Acting	-.1116	-.0098
Bootstrap results for indirect effect of Deep Acting	-.1056	-.0088

Note: Un-standardized regression coefficients reported. Bootstrap sample size 1000; LL = Lower limit; UL = Upper limit; CI = Confidence Interval

Table 4.4 indicates that workplace social support moderates the relationship between surface acting and emotional dissonance (B=-.2548, t=-3.6585, p<.001). It also indicates that workplace social support moderates the relationship between deep acting and emotional dissonance (B=-.2696, t=-3.8647, p<.001). Moderation graphs (figure 4.1 & 4.2) indicated that high workplace social support weakens the relationship between surface acting and emotional dissonance and also between deep acting and emotional dissonance. So hypothesis 5 & 6 are also supported.

Table 4.4 Regression Analysis for Moderation

Predictors	B	SE	T	P
Surface Acting× Workplace Social Support	-.2548	.0696	-3.6585	.0003
Deep Acting × Workplace Social Support	-.2696	.0698	-3.8647	.0001
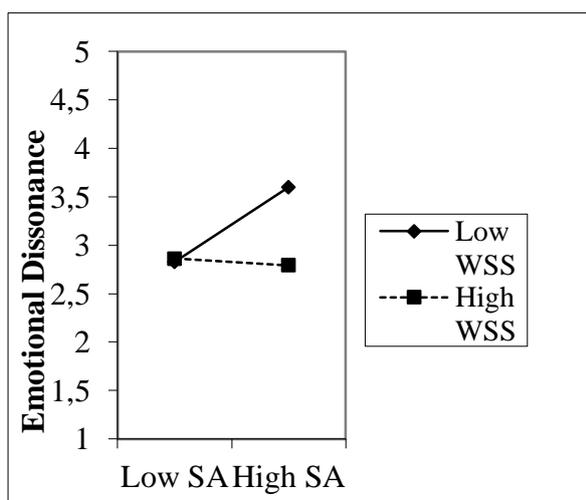
Figure 4.1
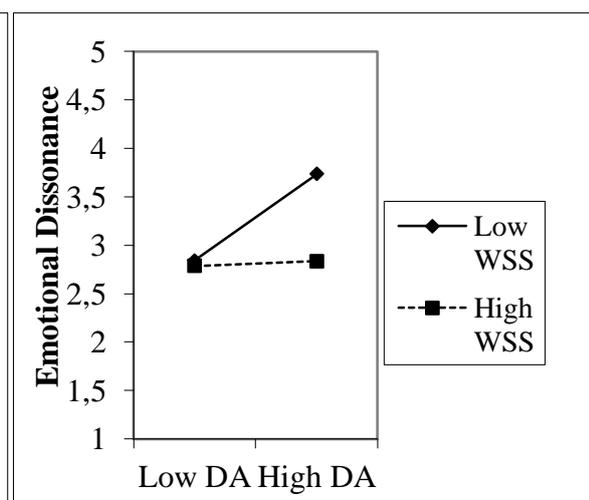
Figure 4.2

5. DISCUSSION

In present study, we hypothesized that both emotional labor strategies (i.e. surface acting and deep acting) were positively and significantly associated with burnout which was supported after analyzing results. The results are in line with the previous findings (Cheung, Tang & Tang, 2011; Grandey, 2003; Ghanizadeh & Royaei, 2015; Lee, An & Noh, 2014; Mikolajczak et al., 2007; Pandey & Singh, 2015). The reason for this association is that when employees exhibit fake emotions and suppress their true feelings during work, then their emotions are in conflict with those required to be exposed. Emotional labor generates resource depletion, depression and employee burnout. In Pakistani context, unwanted job demands create burnout symptoms and changing employees' internal feelings according to organizationally desired rules is emotional job demand (Khan, Yusoff & Khan, 2014). Excessive emotional job demands, low wages and low self-alienation generates burnout.

We also hypothesized that that emotional dissonance mediates the relationship between both emotional labor strategies (i.e. surface acting and deep acting) and burnout which was also supported by the results of this study. These findings are aligned with the past studies that emotional dissonance has intervening role between surface acting and emotional exhaustion (a dimension of burnout) (Vandijk & Brown, 2006) and the extent of emotional exhaustion was increased by deep acting through value dissonance (Schaible & Gecas, 2010). These findings follow the view that the disparity among felt and displayed emotions on job creates psychological dissonance which is related to harmful psychological outcomes and burnout, (Noor & Zainuddin, 2011). The inner resources of service employees exhausted by prolonged emotional dissonance can create negative effects for an organization. The display rules are in conflict with their inner feelings, so in the process of managing inner feelings according to job rules; employees feel uncomfortable and distressed which leads to burnout.

We used workplace social support as a moderator between the emotional labor strategies (i.e. surface acting and deep acting) and emotional dissonance such that the relationship would be weaker when the level of workplace social support is high. The results supported the moderations role as well as the hypothesized direction of this buffering role. These results are also in line with the previous study of Choi and Kim (2015) in which it is identified that support from colleagues and superiors reduced the impact of emotional labor on three dimensions of burnout. The support from colleagues is beneficial in overcoming anger and fulfilling employees' emotional needs. Social interactions can moderate the adverse effects of tension or pressure on employee's health and well-being.

6. CONCLUSION

The findings of this research have few functional suggestions for employees, managers as well as for an organization i.e. organizations should design training programs and interventions to know about employees' feelings and emotions during work. A supportive organizational culture is important to cushion the harmful influence of surface acting and deep acting on employees' health and on organization. Organizations should work on team management and participation to improve colleagues support. Organization should follow proper human resource policies regarding ethical and moral standards.

This study has some limitations as well which can be considered and overcome in future. First, the sample size was small. Second, the current study is cross-sectional therefore casual associations cannot be properly accessed through cross sectional data. Third, the population of study was limited to only one sector which was private banking sector of Pakistan thus restricting the range of the study. Fourth, the use of common method approach for collecting data which is through survey questionnaire. Future studies could address these limitations.

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EFFECTS IN UNIVERSITY COOPERATION: RESOURCES – RISKS AND BENEFITS

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ABSTRACT
In recent decades, higher education institutions have started engaging in a variety of forms of inter-organizational cooperation, ranging from collaborating with private for-profit firms to the establishment of foreign branch campuses. While cooperation between private firms has been the subject of much research, higher education institutions are different in a number of aspects and results from the private sector do not necessarily carry over. We therefore conducted a systematic review of the literature on cooperation at universities. Our particular focus is on risks and benefits arising from cooperation in this setting. Due to the importance of resources, we concentrated our investigation on this factor and identified four main issues, namely 'finance', 'staff', 'time', and 'equipment'. Our results suggest that these aspects are differently important in particular phases of a cooperation and we discuss their differential influence in each phase.
Keywords: *cooperation, risk management, systematic literature review, university*

1. INTRODUCTION

In recent years, cooperation between universities and also between universities and industry has become significantly important due to the increasingly competitive environment. Because of the growing globalisation, companies need to improve productivity and a unique selling point. Firms are continuously under pressure to achieve their goals and be innovative. One opportunity to develop new innovation capability is to seek out for university cooperation (Flores et al., 2009, p. 4935). Furthermore, companies also avail of the variety of highly qualified researchers (Myoken, 2013, p. 49) and a range and depth of technology and knowledge (Barnes, Pashby, and Gibbons, 2002, p. 272). But not only companies have advantages from these cooperation, according to Barnes et al. (2002, p. 272), universities are benefiting too, e.g. from additional funding, licensing and patenting income as well as from knowledge and technology transfer. In addition, universities are able to get access to industry equipment, financial support and highly developed technology and students gain superior training and employment opportunities due to university–industry collaboration (Newberg and Dunn, 2002, p. 197). Governments also encourage such collaborations to create wealth and support local innovation (Barnes et al., 2002, p. 272).

However, university cooperation also bears risks and challenges for both partners. While universities are especially interested in creating new knowledge and future education, companies see a competitive advantage that comes with a cooperation with an university. These different approaches of partners can lead to some difficulties (Bruneel, D'Este, and Salter, 2010, p. 858).

Many academic researchers have already empirically studied the complex relationship between universities and the private sector by focusing on challenges and benefits cooperation partners typically face. However, the large body of literature produces an unclear and indistinct picture.

Therefore, we conducted a systematic literature review we analysed one of the most important factors occurring in university cooperation, namely 'resources'. Therefore, our research question is: What are the most important positive or negative aspects (risks or benefits) related to resources that may affect the success of a cooperation with an university? According to this research question, the paper gives an insight into the complex collaborating system of universities with benefits turning into risks and previously believed challenges suddenly become opportunities.

2. METHODOLOGY

We conducted a systematic literature review in order to answer the research question. Systematic reviews differ from traditional or narrative reviews by using "a more rigorous and well-defined approach to reviewing the literature in a specific subject area" (Cronin, Ryan, and Coughlan, 2008, p. 39). Similar to traditional reviews, the goal of a systematic literature review is to provide a comprehensive overview of a particular topic but systematic reviews include the entire scientific literature on a subject area and use explicit criteria to evaluate and synthesise this literature (Cronin et al., 2008, p. 39). We applied a systematic literature review to make the review replicable and transparent as well as to minimize bias due to the subjective assessment of different researchers (Tranfield, Denyer, and Smart, 2003, p. 210). The iterative review process consisted of a number of stages and is summarised in Figure 1.
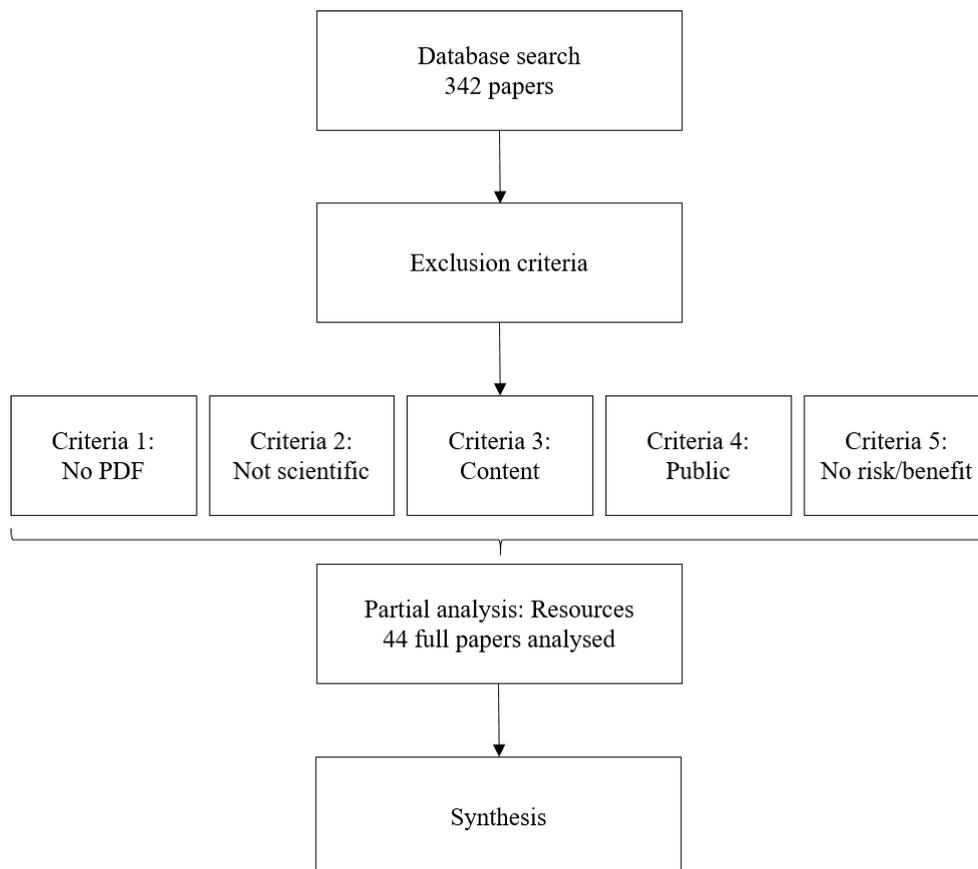
Figure1: Overview of the systematic review process

First, the process started with a database search. The database used was EBSCO Business Source Premier, being prominent for subjects related to management and business administration. The search period was limited to 2000–2016 because there has been an increased interest of university cooperation in recent years (Barnes et al., 2002, p. 272). The database search covered only peer-reviewed papers written in English. We focused on university cooperation with other universities or private companies in the field of research, teaching, administration or another general purpose. Therefore, we searched for the following terms 'in title': 'universit* cooperat*'; 'universit* collaborat*'; 'universit* allianc*'; 'universit* ventur*'; 'universit* partner*' and 'inter-universit*'. The database search resulted in 342 papers, excluding duplicates.

In the next step, we applied five exclusion criteria for selecting articles for the review. Two reviewers independently assessed all of the 342 papers concerning the exclusion criteria. The first exclusion criteria addressed the availability of the article. In the rare case, no PDF-file was attainable, the paper was excluded from the review. We did not contact authors for sending us the article due to avoiding any bias. The next exclusion criteria was about whether a paper is scientific, meaning that solely book reviews, newspapers or working papers as well as articles without any references were excluded. The third exclusion criteria addressed whether the article contains university cooperation per se. Papers that slipped into our search just by having words like 'university' or 'cooperation' in their title but without dealing with this topic in their content, were excluded. As we focused on university cooperation with other universities or private companies, we also excluded papers that contain cooperation between universities and the public sector. Since our emphasis was on risks and benefits in university cooperation, the fifth exclusion criteria addressed whether a paper gives attention to cooperation's risks or benefits. Articles were included when risks (or synonyms like challenges, problems, barriers, threats, hurdles, obstacles etc.) or benefits (or synonyms like chances, success, potential, opportunities, reasons, motives etc.) appeared in the text.

In the next step, we assessed the different kinds of risks and benefits occurring in university cooperation. For the full reading of the articles, data extraction sheets were determined to provide additional quality and transparency. They included different categories: exclusion criteria, bibliographic data, research aim, method, form of cooperation, country, university, results, limitations as well as the most important section 'risk and benefit factors'. We are aware of limitations due to semi-objective judgments regarding the relevance assessment and personal interpretations in the thematic analysis. Therefore, two reviewers independently assessed the articles with the aid of the data extraction sheets and compared their results with each other afterwards. In case of disagreement, the opinion of a third reviewer was decisive.

With respect to our research questions, we do not provide a quantitative analysis of articles but examine the most important results of the factor 'resources'. Hence, for our in-depth synthesis only papers containing risks and benefits about resources in university cooperation were selected, 44 papers in total.

3. EFFECTS IN UNIVERSITY COOPERATION

In this chapter, the synthesis of the systematic review process is discussed. In particular, we present risks and benefits that occur regarding resources in university cooperation. In our analysis, we detected four main factors that can effect cooperation on the one hand and concern resources on the other hand, namely 'finance', 'staff', 'time', and 'equipment'. When we analysed these factors we defected that we can distinguish three different phases where these factors have different effects or are differently important: the planning phase, the implementation phase, and the establishment phase (Figure 2).

| Finance | Staff | Time | Equipment |

Phase 1: Planning

Phase 2: Implementation

Phase 3: Establishment
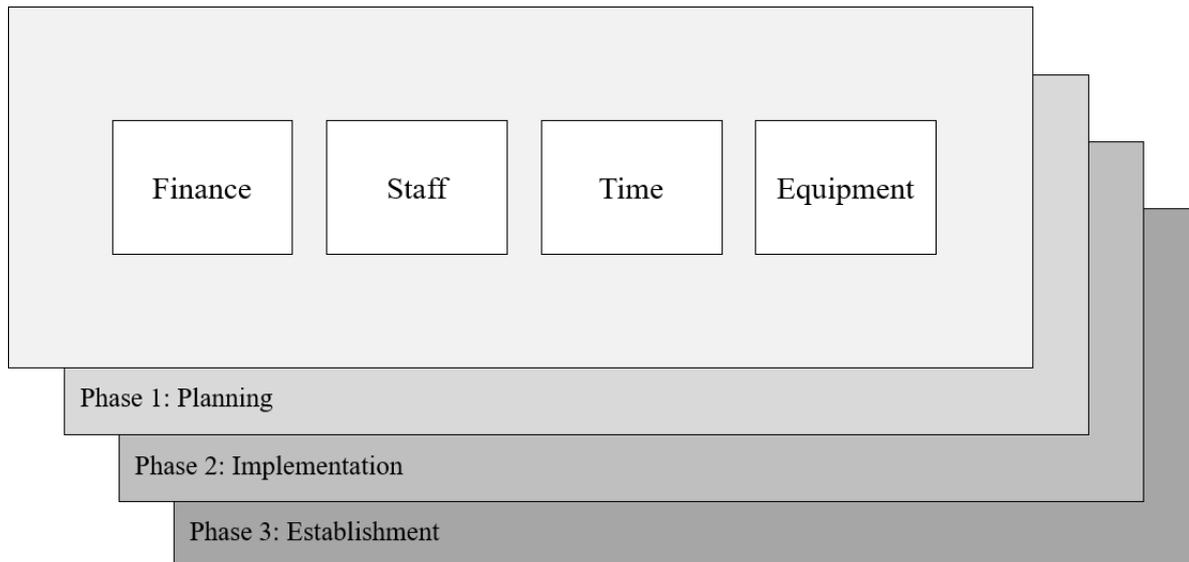
Figure 2: Overview of risk and benefit factors (resources)

In the following sections, we consider each phase and discuss the appearing risks that were argued about in literature.

4. PLANNING PHASE

Finding the right partner for cooperating is a significant part at the beginning of the planning phase. According to Barnes et al. (2002), a partner evaluation method with certain criteria should be implemented in order to enable the correct partner choice. To be more specific: it is important to find a partner who is interested in the cooperation and is capable to provide adequate resources for a successful partnership. Moreover, the extent of the contribution of each partner should be clarified at the beginning (Barnes et al., 2002, p. 282). As soon as a cooperation partner has been selected, a proper planning phase in line with Borgia, Bonvillian, and Rubens (2011) is essential in order to succeed in a collaborative partnership. Therefore, goals and strategy of each partner have to be well planned. Planning variable should include, amongst other resources, financial issues and staffing (Borgia et al., 2011, p. 104). Regarding the planning phase of university cooperation, several risks and benefits were mentioned in the analysed papers. Essentially, a widespread failure in university cooperation are financial risks (Ankrah and AL-Tabbaa, 2015, p. 400). To correspond with Borgia et al. (2011), the inaccurate estimation of costs and revenues as well as unsettled commitments endanger the success of cooperation. This is shown by the case of a cooperation between Florida Gulf Coast University and Nankai University that illustrates the difficulties arising from financial commitments. Although the partners assumed that they will receive financial support from a private donor, this donation was never materialised. As a result of lacking financial commitment, the implementation of the cooperation could not be realised. Therefore, financial projections and cost-benefit analysis should be planned as realistic as possible (Borgia et al., 2011, pp. 103–104). According to Ryan (2009), the availability of financial resources and the access to financial support from the government and other private donors differ from young and young established universities. Long established universities receive more financial funding and have more resources available than recently established universities (Ryan, 2009, p. 1316). Apart from the mentioned financial risks, partnerships can also enable financial benefits. For instance, university cooperation increases the possibility to access funding and additional financial resources which would not be available otherwise (Attia, 2015, p. 120). Moreover, university

cooperation facilitates cost sharing between the cooperation partners (Veugelers and Cassiman, 2005, p. 15). Besides the financial aspect, cooperation planning is very time-consuming. Schofield (2013) analysed potential critical success factors in university–industry cooperation. The findings included, besides others, the factor 'time' and precisely emphasises the time pressure on the individual level of the partner (Schofield, 2013, p. 51). University cooperation also requires a strong time commitment, particularly for initial arrangements between partners, e.g. meetings, idea sharing and negotiations (Poston and Richardson, 2011, p. 61). Goduscheit and Knudsen (2015) examined the existence of differences in the perception of time between universities and companies. This may also cause problems in the mutual cooperation (Goduscheit and Knudsen, 2015, p. 40). Moreover, Borgia et al. (2011) mentioned that different time frames are often dependent on the partners' culture. For example, cooperation agreements with Chinese partners take more time and patience compared to Western partners. In general, Western partners prefer agreement negotiations with clear structures as well as time frames and after signing an agreement the negotiation is completed. In contrast, negotiating agreements with Chinese partners is not only a drawn-out but also an ongoing process (Borgia et al., 2011, p. 106). Due to the time- and cost-consuming aspects of the planning phase, Borgia et al. (2011) suggested to use intermediaries in the planning phase of a cooperation. An intermediary is critical for the cooperation process. Especially, intermediaries with experience can support partners to save enormous costs and time. Skilled intermediaries, who know the culture, expectations and objectives of each partner, can assist to establish relationships, providing support in negotiations and helping to materialise the interests of the partners (Borgia et al., 2011, pp. 102–103). With respect to the planning phase, the factors 'finance' and 'time' appear as the most significant challenges to make a successful university cooperation work. According to the literature, in this phase the factors 'equipment' and 'staff' were less essential.

5. IMPLEMENTATION PHASE

The implementation phase begins as soon as the planning and pre-organisation is completed and the partners start an official collaboration with each other. Regarding this period, the resource factor 'time' is mentioned in numerous analysed articles of our systematic literature review. In agreement with Poston and Richardson (2011) the factor 'time' can be a significant challenge in the planning phase (e.g. introductory meetings, sharing of ideas, level-of-involvement negotiations etc.) and is similarly challenging in the implementation stage. In particular, industry professionals have other priorities of timing, university members are often working on certain schedules. Therefore, flexibility is a key aspect that should be kept in mind, if there are different opinions when it comes to timing (Poston and Richardson, 2011, p. 61).

As Uwadia, Ifinedo, Nwamarah, Eseyin, and Sawyerr (2006) highlighted, delays and postponements during cooperation can result in doubts about the partnership and the commitment can easily wane. The risk of a cooperation failure is also high then and therefore the communication about timetables and deadlines is crucial. Realistic project and delivery duration times have to be agreed upon by both cooperation partners (Uwadia et al., 2006, p. 104). However, there are of course not only risk factors that occur in the implementation phase of a cooperation with an university, there are also benefits. According to Flores et al. (2009, p. 4949), a firm can be encouraged to establish a cooperation, if they can get the possibility to use the laboratories of the university because this highly expensive equipment sometimes is not affordable for the companies. The approach to equipment can be an important advantage in a competitive environment. In the case study of Collier, Gray, and Ahn (2011), five companies were analysed to find the most important barriers and enablers for successful university–industry cooperation. The resource factor 'equipment' (e.g. university libraries,

journal collections) provided considerable assistance to the companies' work and can therefore be seen as an advantage, if there is a suitable university connection (Collier et al., 2011, p. 12). Finally yet importantly, the resource factor 'staff' shows significant influence in the implementation phase of a cooperation with an university. In a quantitative analysis of Japanese companies which are involved in university collaborations, Myoken (2013) mentioned that about 70 % of the analysed companies saw highly qualified human resources as the most essential benefit. Even new ideas and product developments were not as important as qualified staff. Most of the analysed firms mentioned that they benefited from the upgraded quality of researchers (Myoken, 2013, p. 49). Nevertheless, staff can also be seen as a risk factor and challenging barrier for university partnerships. Especially in quite new technology firms, staff can be a crucial barrier to increase innovation. An innovative cooperation can suffer due to a lack of skilled persons on both sides (MingJi and Ping, 2014, pp. 81–82). In the implementation phase, the analysis highlights especially the resource factors 'time', 'equipment' and 'staff'. The financial aspect during the implementation phase is of course always present but gains greater importance in the above-mentioned planning phase.

6. ESTABLISHMENT PHASE
Once the implementation of university cooperation took place, many challenges and benefits arise during the establishment phase. Many benefits develop for both partners after collaborating successfully. For companies it is beneficial to easily acquire talented students involved in the collaboration at a relatively low price (Ford, O'Neal, Sullivan Diane M., and Sullivan, 2010, p. 704). For students it is a chance to start a career right after graduation (Gunn and Mintrom, 2013, p. 182). Therefore, the resource factor 'staff' is not only important during the implementation stage but also while establishing a long-term relationship. Furthermore, Attia (2015) emphasised that universities can receive financial support due to collaborations with the industry, which is a major advantage and motivation factor. University research and royalty payments, the university support to business and good publicity are also benefits of a long-term establishment (Attia, 2015, p. 117). On the other hand, according to Banal-Estañol, Macho-Stadler, and Pérez-Castrillo (2013), costs of cooperation can increase, if the partners have different opinions and approaches of how to work together. Industry partners support project outcomes only if their partners are valuable (Banal-Estañol et al., 2013). As already mentioned in the implementation phase due to Ryan (2009), the access to comprehensive libraries and reference material is a benefit for companies when cooperating with universities. Especially during the establishment phase, the equipment aspect is reasonable for a long-ranged efficient relationship between both partners. Moreover, specialist lecturer's know-how and university research relevant to industry areas are special benefits for firms (Ryan, 2009, p. 1315). The resource factor 'time', mentioned in the previous sections, is especially important at the beginning and in the implementation phase of a collaboration. During the establishment phase, 'staff', 'finance' and 'equipment' are crucial for the success of a long-term cooperation.

7. CONSLUSION
Cooperation is becoming more and more important, not only in industry but also in other sectors. In recent years, we can observe an increasing trend in this direction, this is also the case for universities. Today there are many collaborations between universities and the private sector as well as between universities and other universities. These collaborations concern not only research projects but also the mutual cooperation in teaching and administration. Besides many advantages that go along with a cooperation there are also negative effects or risks that have to be considered. One main issue in this context are resources. In our paper we conducted a systematic literature review with 342 articles to answer the question of which positive and

negative effects of university cooperation are evident in literature regarding the factor 'resources'. The analysed articles include case studies as well as quantitative or qualitative empirical articles in peer-reviewed journals. In the course of the partial analysis of the factor 'resources' we examined 44 papers that dealt with this topic. With respect to the question of resources in university collaborations, we can draw two main conclusions from our results: 1) we could identify four main aspects that can influence the success or failure of a collaboration: finance, staff, time and equipment. Finance not only means the provision of money, but also the accuracy of planning and a strong commitment of partners and donors. Staff implies the possibility to get access to highly qualified human resources (e.g. experts, employees or students). The access to appropriate human resources is not only one of the main reasons for a cooperation, it is also one of the main risks for companies and universities. Regarding the aspect time it is crucial to achieve consent about the time table and to understand that the partners can have different time issues and – especially partners from different cultures – may have a different perception of time or time pressure. Finally yet importantly, the mutual use and acquisition of technical equipment is an essential driver for collaboration. 2) We were able to identify that these aspects are apparently differently important in different stages of a collaboration. In the planning phase, finance and time are essential factors. During the implementation phase, these factors are of course still very important but should have already been agreed upon at this stage. In this phase, the partners should draw their attention to staff and equipment. In the establishment phase the aspects finance, staff and equipment seem to be most important, as the main challenge is to discuss how a long-term relationship between the cooperation partners can be established. Due to globalisation, cost pressure and specialisation, the necessity for university cooperation is becoming more important. Simultaneously, the possibilities for cooperation are becoming easier. This will lead to a continuous increase of cooperation at universities. Therefore, it is a current challenge for the academic and practical world to analyse and consider the specific effects – risks and benefits – that occur in university collaborations.

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THE RESOURCE CURSE IN SUB-SAHARAN AFRICA: A REALITY CORROBORATED BY THE EMPIRICAL EVIDENCE

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ABSTRACT
The abundance of natural resources is usually considered the blessing for the countries that own such resources. However, such wealth is often associated with poverty and a slower economic growth. This phenomenon is called the resource curse, and it shows that most countries that are rich in natural resources have markedly reduced economic growth and development, and it shows that the wealth of natural resources adversely affects their economies, although it is intuitively expected to be the opposite i.e. that such wealth would have a positive impact on the country's economic development. This paper, a product of the mentor-student joint effort, studies the paradox of natural resources and its most common channels through which it is converted from a blessing into a curse. The purpose of this study is to make conclusions about the existence of the natural resource curse, and to show the way or channel through which the wealth of natural resources becomes a blessing or a curse. The research was conducted in the countries where the largest part of exports in total merchandise exports were exports of natural resources, and such countries were selected from the region of Sub-Saharan Africa given that in this region natural resource curse is the most present. In the paper the export of natural resources is analyzed and compared with a GDP per capita of those countries, the dependence of these countries on the prices of resources is analyzed as well as diversity of their economies, the quality of institutions, and the presence of corruption. The data, which were used for analyzing, are statistical data collected by the World Bank, and the data from the other statistical sources related to such matters (BP and Transparency International).
Keywords: natural resources, natural resources curse, economic growth, development, institutional quality

1. INTRODUCTION

Natural resources are extremely important in the world economy and trade, especially the non-renewable natural resources such as oil, gas and minerals. For countries that have them, these natural resources are deemed to be blessed, but over the last few decades, various studies show a strange paradox. The majority of countries, which are, extremely rich in natural resources, have no positive benefit from them. Nevertheless, the opposite happens – they experience extremely low economic growth and are faced with different problems, which are linked to natural resources. Therefore, the link between the natural resources and a poor economic performance of the country has been established. In the literature, this situation is called the natural resource curse or the paradox of natural resources.

Natural resources are one of the four factors of economic growth. Economists have found that there are four factors, determinants of economic growth (Samuelson & Nordhaus, 2000) and these are natural resources, human resources, capital goods and technology.

Nevertheless, natural resources are defined as "stocks of materials that exist in the natural environment that are both scarce and economically useful in production or consumption, either

in their raw state or after a minimal amount of processing" (WTO, 2010). The most common example of non-renewable resources are fossil fuels and mineral coats. While there are many resources that can be classified as natural resources, in this paper is mostly about oil and oil products, gas, coal and coke. In the past decade, it has been noted that oil, natural gas and other natural resources do not always have a positive effect on economic growth and prosperity, even they should since they represent the production and export, which increases the country's GDP and therefore encouraging economic growth. Many African countries such as Angola, Nigeria, Sudan and Republic of Congo are rich in oil, diamonds and other minerals, and yet residents have a low income and low quality of life. On the other hand, East Asian countries like Japan, Korea, Taiwan, Singapore and Hong Kong have almost reached the standard of the West, although they are actually peninsulas without the export of natural resources and any significant amount of natural resources.

Some countries did gain positive benefits, which can be attributed to the wealth of natural resources. For example, Ecuador has experienced a significant increase in income after the resource boom, German and British industrial revolution was triggered by a large discovery of ore and coal and Norway has made good use of their natural wealth and turned it into economic prosperity for all next-generation (Papyrakis & Gerlagh, 2003). Ross (2012) also mentioned similar allegations in the same context, which claims that this phenomenon does not apply to all countries. The countries such as Norway, Canada and the UK have developed as one of the largest economies of the world, regardless of the share of natural resources in the economy, resulting from the strong economy and strong democratic institutions. Natural resources are an important source of national prosperity, yet different experiences and studies show that natural resources are not necessary and sometimes not even enough for the economic well-being and economic development. The researches show that the abundance of natural resources is the problem only of the poor countries, which is the irony of oil wealth because these are the countries with the greatest needs, but eventually they suffer from its own wealth (Gylfason and Zoega, 2002a, 2002b).

If one considers the definition of economic growth and the impact of the export of natural resources from countries that are rich in them, the given situation presents incomprehensible mystery which shows that in this case the wealth in natural resources and export of natural resources, not necessarily affect the increase in GDP and the increase in economic growth in the long term. For example, the countries that are one of the largest oil producers in the world, such as Algeria, Angola, Iran, Saudi Arabia, Venezuela and even Trinidad and Tobago, have experienced a significant decline in per capita income in recent decades, and as one of the most negative examples is Nigeria, where 70% of the population lives on less than one dollar a day, which is disappointing if we take into account the fact that earned Nigeria over 340 billion dollars in revenue from the production and export of oil since 1970 (Schubert, 2006).

A tendency where countries which are rich in natural resources have low economic growth represents a "conceptual puzzle" (Papyrakis & Gerlagh, 2003) because economists believe that natural resources are a potential source of income, and such revenues have transformed the capital with the aim of supporting the increase in output in the future. This phenomenon is called the resource curse or "the paradox of natural resources" (as it was called by J. Stiglitz). The resource curse is therefore certainly a surprising empirical result showing a negative relationship between the wealth of natural resources and their economic growth (Torres et al., 2013). The above is first confirmed by Sachs and Warner in many of their research on the same subject (1995, 1997a, b, c, 1999a, b, 2001), and later it became a fact in many studies of different authors and scientists.

Economic explanations are trying to find the causes of the above curse and it is believed that the cause lies in the exposure to high price fluctuations, and in a high dependence of these

165

countries on oil prices, which directly affects their GDP and thus economic growth (Le Billon, 2008). Then the curse is explained over the fall or weakening of trade, the depreciation of natural capital, squeezing the sector that is not a resource sector, rent seeking, as well as bad and misguided economic and social policy.

Political explanations show the negative effects of the natural resource renting, shortsighted and bad politics and politics of special interests. This all leads to high levels of corruption and the country's fiscal independence, due to large resource revenues, leading to a lack of democracy and all of this is resulting in reducing the quality of institutions and the government itself (Le Billon, 2008). Additionally, a big problem that arises because of dependence on resources is the unfair and unequal distribution of income.

TMany indirect and direct influences shape the phenomenon of the resource curse. The discovery of natural resources leads to a sudden increase in income, which leads to laziness and less need for good economic governance and the quality of institutions (Papyrakis & Gerlagh, 2003, according to Sachs & Warner, 1995; and Gylfason, 2001a, 2001b). The economies that suffer from corruption, low investment, which have large actions of protectionism, closed trade and low rates of education, are unlikely to benefit from the natural wealth for the opposite indirect effects. According to Papyrakis and Gerlagh (2003), their empirical analysis indicates that the wealth of natural resources increases growth, if the negative indirect effects are excluded. In fact, the wealth of natural resources itself in one country does not adversely affect economic growth, on the contrary, it should have a good effect, but the possession of natural resources leads to many other negative variables which impact negatively on economic growth, thereby creating a negative correlation between natural resources and the rates of economic growth.

2. METHODOLOGY

The literature and research have shown that countries, which export the majority of natural resources in the world, possess similar characteristics. In this analysis, we will try to show the most important characteristics of natural resources curse in the countries with a high share of natural resource exports in their total exports. Countries chosen for the analysis are Republic of Congo, Gabon, Nigeria and Sudan, all from Sub-Saharan Africa. Based on the analysis of all countries, it is concluded that this region comprises the poorest natural resource exporters in the world[1] (as measured by GDP per capita and exports of natural resources) and it is most affected by the natural resource curse. In the following analyses, the selected countries are analyzed for a period of 25 years, from 1988 to 2012. Due to the unavailability of data, the analysis of data is taken from the last known year, which is noted in the analysis.

We will analyze the export of natural resources and changes in the growth of GDP per capita, the dependence of countries on the prices of natural resources, the diversification of the economy, i.e. how dependence on exports of natural resources affects the diversification of the economy and also the quality of institutions and the level of corruption in these countries. According to the law of economy, countries that have a wealth of natural resources and that trade with them should enjoy a high degree of development. Nevertheless, the countries from Sub-Saharan Africa are extremely poor with a very low rate of GDP. The aim is to show that these countries are affected by other problems, such as a high dependence on fluctuations in fuel prices, the Dutch disease, a substantial increase in non-quality institutions and the problem of high levels of corruption. In the literature, if a country is affected by these problems, natural

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[1]We analyzed the so-called "dependent" countries, i.e., countries that are dependent on natural resources and where the average share of the export of natural resources in the last 25 years was greater than 50% of total exports.

resources become a curse, instead of a blessing, and the country cannot enjoy economic growth and development, remaining underdeveloped and poor.

Exports of natural resources and changes in the growth of GDP per capita were analyzed based on comparison of exports (as a percentage of total exports of the country) and GDP per capita. The dependence of countries on the prices of natural resources was analyzed based on the comparison of changes in GDP per capita and the changes in crude oil prices. The diversification of the economy was analyzed by comparing the average exports of natural resources, of agricultural resources[2] and other manufactured goods[3] in the period studied (from 1988 to 2012). The quality of institutions was analyzed by the government's indicators in the last observed year, while the level of corruption was analyzed based on the index of corruption in the last year studied. In the analysis, we used the data from the World Bank[4], BP - Statistical Review of World Energy 2014 Workbook[5], and the Transparency.org[6].

3. RESULTS

Table 1. Fuel exports and GDP per capita in Sub-Saharan Africa

Region	Country	Fuel exports (% of merchandise exports) [7]	GDP per capita ($ current) 2012	GDP per capita ($ current) The average of the region
Sub-Saharan Africa	Congo, Rep. Gabon Nigeria Sudan	67,72 *(2010)* 83,13 *(2009)* 84,04 *(2012)* 90,86 *(2011)*	2.401,30 10.577,92 2.507,68 1.439,53	4.231,61

Source: Made by the author according to the data from http://www.worldbank.org/ (indicators: NY.GDP.PCAP.CD. TX.VAL.FUEL.ZS.UN)

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[2]Agricultural raw materials exports (percentage of merchandise exports) - Classification according to SITC section 2: raw materials except fuels, coal, petroleum and precious stones.

[3]Manufactures exports (percentage of merchandise exports) - goods from SITC sections 5: chemicals, basic manufacturing, machinery and means of transport, other manufactured goods.

[4]Indicators: GDP Growth Anual Per Capita (NY.GDP.MKTP.KD.ZG), GDP constant 2005 US (NY.GDP.MKTP.KD) Agricultural raw materials exports% of merchandise exports (TX.VAL.AGRI.ZS. UN) Fuel exports (% of merchandise exports) (TX.VAL.FUEL.ZS.UN), Government Indicators, Manufactures exports (% of merchandise exports) (TX.VAL.MANF.ZS.UN).

[5] Oil: Crude oil prices 1861 - 2013 (US dollars per barrel)

[6] Indicators: Voice and Accountability (VA), Political Stability and Absence of Violence / Terrorism (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL) Control of Corruption (CC).

[7] These resources belong to the standard international classification: SITC Rev. 3 Section 3 - Mineral fuels, lubricants and related materials (Standard International classfication, Rev. 3 code 3) and this classification of natural resources continues to be used in this paper under the term "natural resources" unless otherwise indicated.
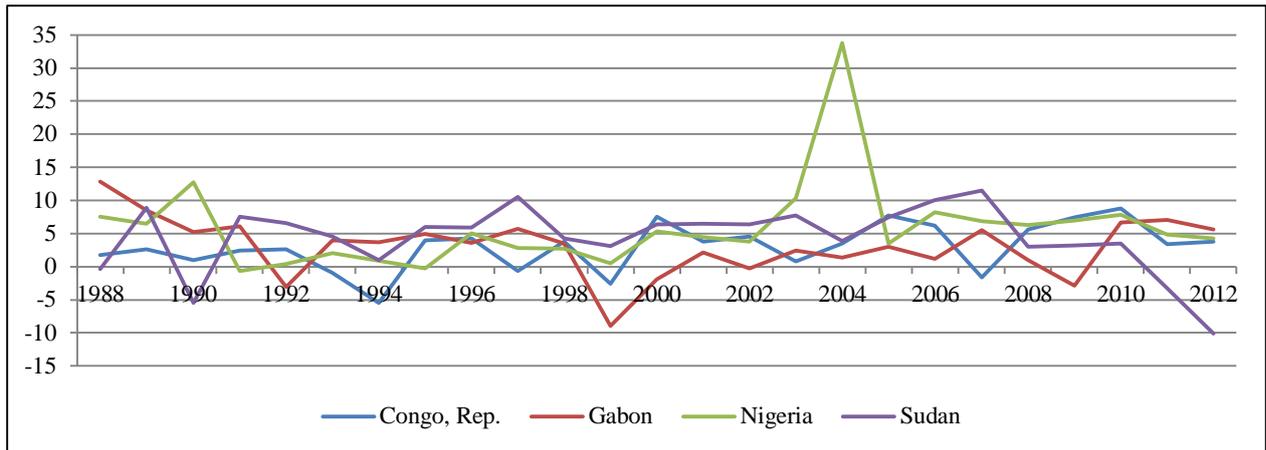
Chart 1. Changes in GDP per capita in export-dependent countries in the region of Sub-Saharan Africa 1988 – 2012

Source: Made by the authors according to the data from http://www.worldbank.org/ (indicators: NY.GDP.MKTP.KD.ZG)
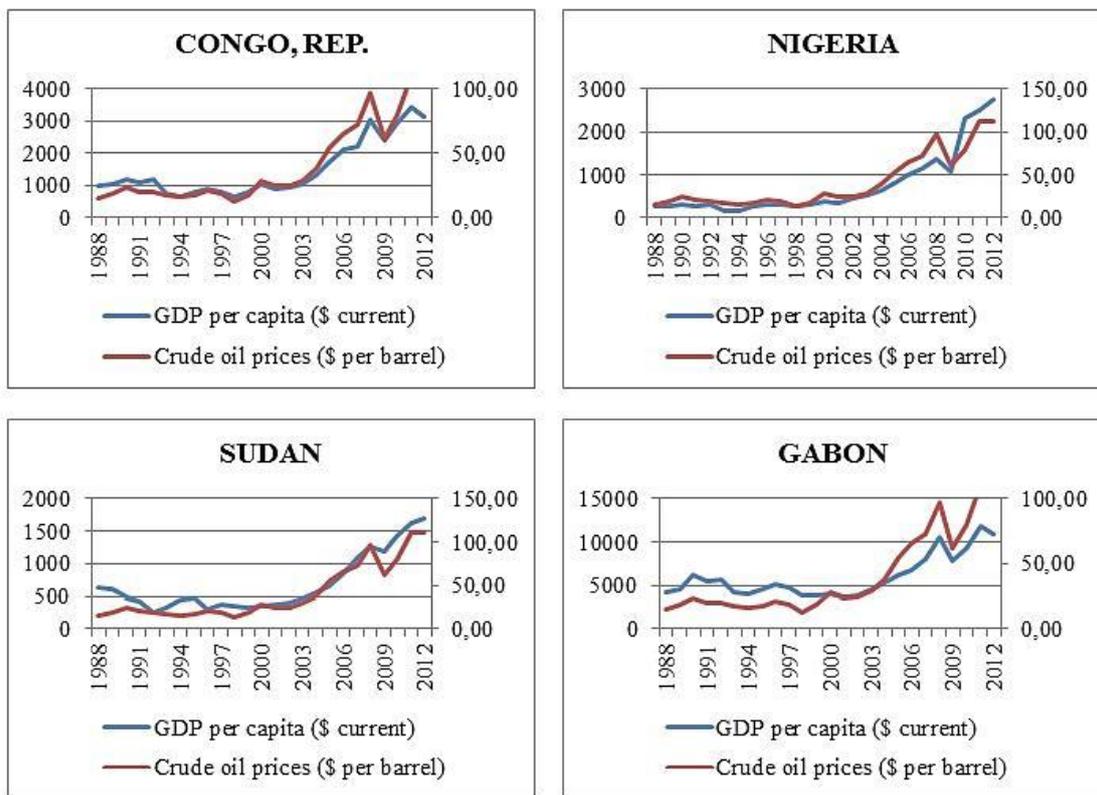
Chart 2. - The ratio of GDP per capita and the price of crude oil in selected countries of Sub-Saharan Africa (1988-2012)

Source: Made by the authors according to the data from http://www.bp.com/ - BP -Statistical Review of World Energy 2014 Workbook and http://www.worldbank.org/ (indicators: NY.GDP.PCAP.CD)
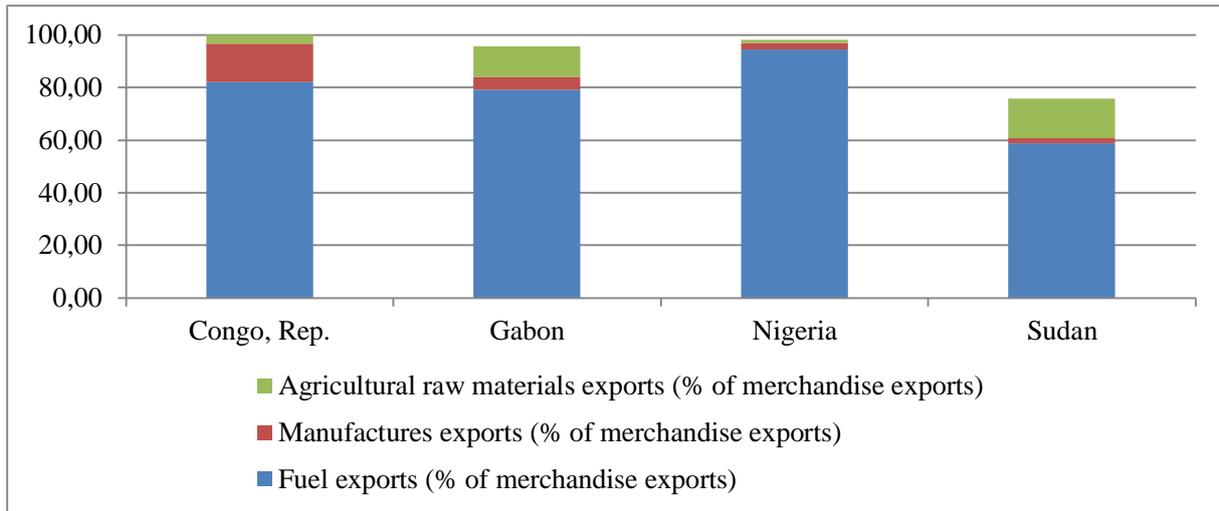
Chart 3. The diversification of the economy in the region of Sub-Saharan Africa (the average export from 1988-2012)

Source: Made by the authors according to data from http://www.worldbank.org/ (indicators: TX.VAL.AGRI.ZS.UN, TX.VAL.FUEL. ZS.UN and TX.VAL.MANF.ZS.UN)
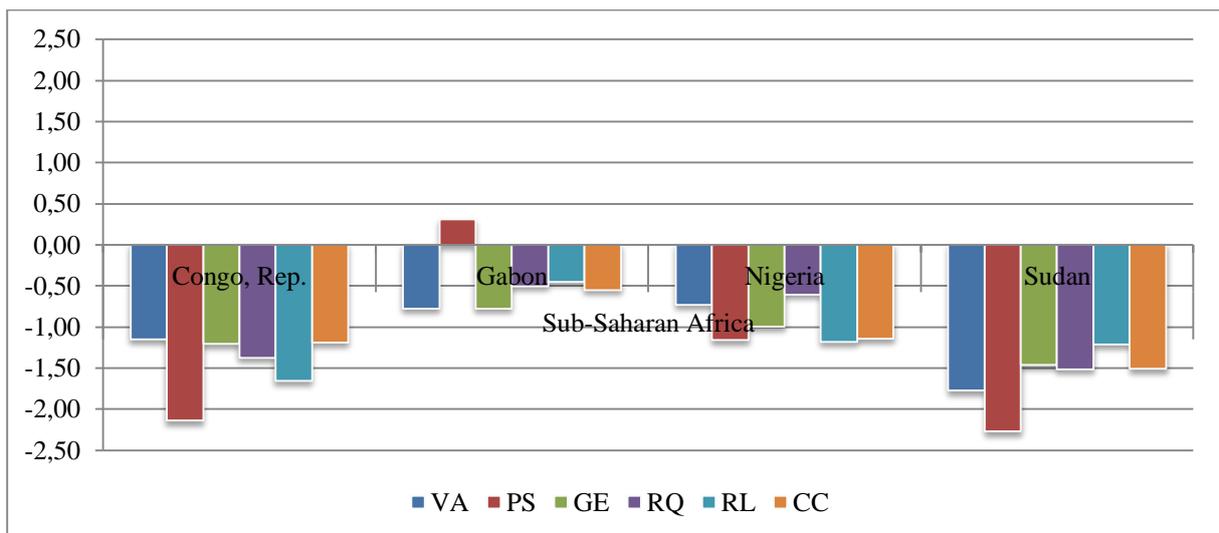
Chart 4. Governance indicators in the export-dependent countries in sub-Saharan Africa, 2012
Source: Made by the authors according to the data from http://info.worldbank.org/ (Governance WGI)

Chart following on the next page

169
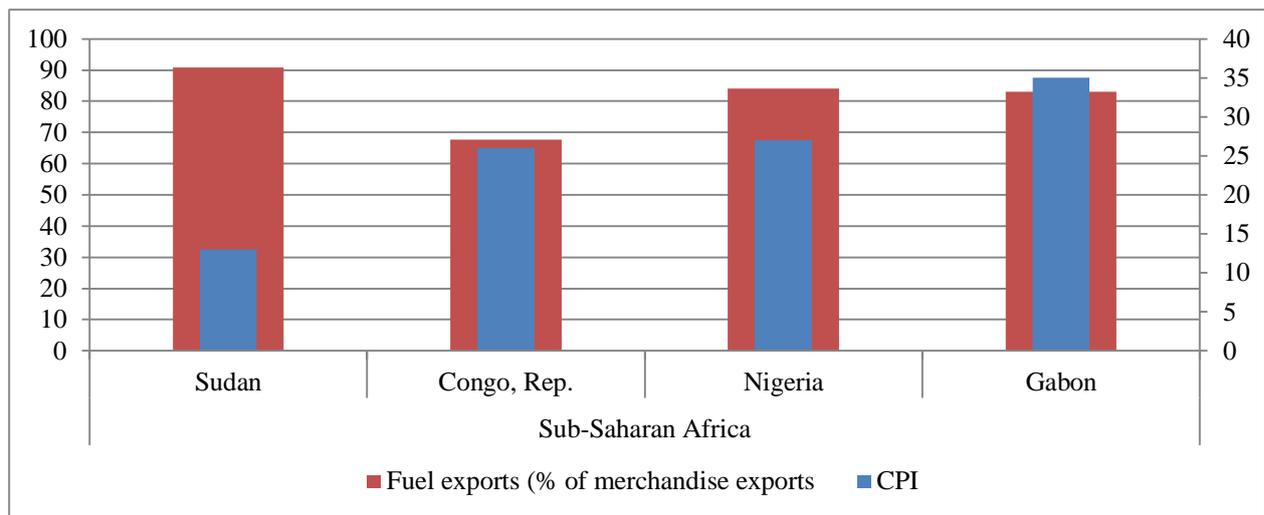
Chart 5. The corruption perception index in the region of Sub-Saharan Africa, 2012

Source: Made by the authors according to the data from http://www.transparency.org/ (CPI) and http://data.worldbank.org/ (indicator TX.VAL.FUEL.ZS.UN)

Research results:

Table 1 shows that these countries have an extremely low GDP per capita despite the fact that they are major exporters of natural resources, and regardless of these natural resources, they have not gained economic stability and development.

In Sub-Saharan Africa, the oscillations - rise and fall throughout the studied period are visible and high, as shown in the Chart 1. The changes in growth or decline in GDP in the observed 25 years is highly visible, and the fluctuations are large. There was also a steep fall and growth of GDP in very short periods. None of these countries has sustained a noticeable stable level of GDP per capita. The most striking change happened in Nigeria. In 2003, Nigeria had a particularly high growth, but then in the next year it fell sharply, and continued to rise and fall, which is understandable considering that Nigeria is one of the most unstable countries of all observed countries. The main reason lies in the fluctuations of the oil prices.

In the period from 1988 to 2012, there have been several major fluctuations in fuel prices. These fluctuations affect the GDP of the country if the country is largely dependent on oil exports, and if exports of natural resources represent the largest share of all exports. Chart 2 shows the impact of those price changes, i.e., the relationship between GDP per capita and the price of crude oil through the studied period. In these charts, it is evident that the increase or decrease in oil prices almost perfectly follows the rise and fall in GDP per capita. It is therefore visible that in all of those countries that are dependent on exports of natural resources, prices and fluctuations in the price of natural resources are strongly reflected in economic growth.

Chart 3 shows the (non)diversification of the economy and sectors in the selected countries of Sub-Saharan Africa. The average exports of natural resources were studied, as well as the export of agricultural resources and other manufactured goods in the same period of 25 years. In these countries, the specialization in exports of oil is evident while other sectors take up a small percentage of total merchandise exports. The diversification is low and export of natural resources leads over all other sectors. The only exception is Sudan, which is more diversified compared to the other observed countries, where exports of natural resources represent more

than a half of the total average exports in the studied period. However, the other manufacturing sectors were also noticeable.

The social effects and quality of institutions are examined through indicators of an institutions quality that are Voice and Accountability (VA), Political Stability and Absence of Violence / Terrorism (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL) Control of Corruption (CC)[8]. Chart 4 shows the mentioned indicators in these countries in 2012[9]. Indicators represent a range rating of between -2.5 (the worst rating) and 2.5 (maximum, or the best rating). The Sub-Saharan region is the poorest region of the world, according to government indicators. All countries have a negative mark except Gabon that has a positive mark only in political stability. However, it is far from a democracy, like most of the countries in the region. These countries are also characterized by a weak influence on government decision-making, have a high degree of crisis of political instability, government efficiency is very low as well as law and order, there is a high possibility of terrorism and violence, and the control of corruption has decreased.

Corruption is a major problem that is linked to the resource curse. Chart 5 shows the index of corruption in parallel with the percentage of exports in 2012. The corruption index CPI (Corruption Perceptions Index) shows the perceived level of corruption in some countries. The index ranks countries on a scale of 100 (clean) to zero (highly corrupt).

IThe analysis shows that the region of Sub-Saharan Africa is particularly undeveloped and poor, regardless of the natural wealth that it possesses and exports. The GDP per capita of the region in the monitored period was highly dependent on the oil prices while its GDP per capita had great fluctuations, which shows a high dependence of these countries on the oil prices that are difficult to control. In addition, it is shown that these countries are not diversified because they have all invested in only one sector, the natural resource sector. These countries have extremely low government indicators, which show that the institutions are very poor and the level of corruption in these countries is extremely high.

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[8]**Voice and Accountability** (Reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media)

Political Stability and Absence of Violence/Terrorism (Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism)

Government Effectiveness (Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies)

Regulatory Quality (Reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development)

Rule of Law (Reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence)

Control of Corruption (Reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests). Source: Transparency.org

[9] Note: if there was no data in the specific year, the data from the nearest previous year was taken.

For all these reasons, it is shown that the abundance of natural resources that these countries have, have not assisted in their development and economic growth. This can be explained by a poor background that those countries have, particularly meaning poor government indicators, bad policy and a high degree of corruption, which was the reason why their natural resources did not become a blessing but a curse.

4. DISCUSSION AND CONCLUSION

The more common macro-economic effect associated with the flourishing of natural resources is called the Dutch disease. High oil revenues increase foreign exchange rates, promote negative balance of payments and the burden of imported goods when prices fall. In a short period, the competitiveness of the non-natural resource sector is destroyed, displacing all the vital sectors such as agriculture and manufacturing, and leaving oil or natural resources as the only functional source of income.

A good example is Gabon, where after the oil exports have risen, the agricultural sector has suffered a breakdown, and now the whole country depends on imported food (Schubert, 2006). Sachs and Warner (2001) have presented empirical evidence to suggest that countries that are rich in natural resources tend to increase price levels, and therefore, their non-natural resources or other goods are not competitive and cannot be exported. Because of this, they lack the benefits of growth associated with exports. They also show that owning natural resources has the opposite effect on growth. The loss of competence in the export of non-natural resources can be a major problem for the future.

Competitiveness in exports can be reached at some future time when revenues from natural resources dry up. Krugman (1987) has shown that countries where production has been eroded during the increase in revenues from natural resources can irreversibly lose competitiveness. Therefore, a temporary resource boom causes hysteresis, permanent loss of competitiveness. For developing countries, this means that their potential in exports of manufactured goods and diversify production is stunted. Dutch disease is a relatively dangerous phenomenon for the countries because it undermines diversification, which is an essential component for the development.

Diversification promotes competitiveness, innovation, and investment opportunities. Countries that have income from oil or other natural resources, focus and invest everything in one economic factor. The number of workers in these sectors increases. As such, the country is failing to diversify its own skills, and it is caught in the trap of dependence on oil and thus in itself prevents the growth and modernization.

One characteristic of natural resources is the occasional extreme price volatility, especially in the field of oil. Prices for minerals and metals have also fluctuated dramatically in previous years, although their importance to the world economy is reduced due to the lower contribution in the world trade. According to the IMF, the price of oil rose 234% from 2003 to 2008 while metal prices rose by 178% (WTO, 2010). The dependence on oil and volatility of oil prices on the international markets leads to significant fiscal planning and spending problems, leading to financial disaster when the oil price collapses. That also creates instability of currency, prevention of trade liberalization and the quality of government spending is dramatically reduced (Schubert, 2006). Less developed countries whose export mainly consists of primary goods are faced with greater instability revenue generated from exports than the developed countries. This is due to large fluctuations in the prices of primary goods. Volatility leads to temporary trade shocks and suggests the possibility of constantly recurring crises. For example, since the discovery of oil in Nigeria, the country has become one of the ten most unstable economies of the world. This is because the primary goods in these countries have a large share of GDP, and any change in price leads to a big shock to their economy (Nelson & Behar, 2008).

Economic institutions are important for economic growth, since they determine how economic inputs are transformed into economic output and growth (Karabegović, 2009). Observation of developing countries that are rich in natural resources reveals a stark contrast between the successful countries (Australia, Canada, and Scandinavia) and unsuccessful countries as in the case of the African countries. This suggests that the development of a successful modern economy based on exports of natural resources, crucially depends on the existence of the right policies and institutions that support them. Lately, there are more and more agreement on explaining this curse that is related to institutions, where it is said that better quality institutions reduce natural resource curse, but then the curse of resources affects the quality of institutions (Torres et al. 2013). The natural resource curse is closely connected with the government and government responsibility. Governments that receive their income from natural resources become less democratic, and therefore less responsible than countries that rely on other sources of income, such as taxation. One reason for this behavior is that when governments have a wealth of income they tend to use them to suppress dissent - for example for the creation of local military forces. It has been shown that the governments of the countries that are rich in natural resources spend very large amounts of money on military power. Another reason is corruption. Instead of serving all citizens equally, corrupt government seeks favoring the rich, because the poor cannot pay the necessary bribes. The third reason is the involvement of the military. In some countries, resource industries are controlled by the military, giving the armed forces a greater autonomy and a greater influence on civil government (Ross 2012b). It is evident that the effects of dependence on natural resources in the economy and the government can strengthen each other, creating a trap. For example, economic stagnation destabilize the government. When government becomes unstable, corruption flourish. Corrupt government cannot manage the economy in the right way and cannot neutralize stagnation. Many countries have fallen into the trap of this kind. Sometimes the outcome of this are civil wars. If a country seeks rapid development for escaping from poverty, neither the oil nor any other natural resource are not a blessing. The recent research has shown a link between the wealth of natural resources with corruption. This connection is more visible and stronger in less democratic countries (Bhattacharyya and Holder, 2008). However, many studies have shown that if the government of a country gets high income from natural resources, it increases the probability of being corrupt. Part of the problem is the large amount of revenue that is due to resources. The government can absorb and effectively track only a limited amount of money. The wealth of resources often floods the government with more income than they cannot manage them effectively. Another part of the problem comes from the fluidity and volatility of resource revenues: rapidly descending and revenue streams lead to flooding the normal procedures of budgeting and can weaken the state institutions. The analysis indicates that the natural resource wealth quite easily can become a curse and cause many problems in the country if the country suffers from certain weaknesses and if there is no pre-based high-quality institutional framework, as shown in this paper on the example of countries in Sub-Saharan Africa. Poor institutional background has extremely hindered the economic growth and development there, and regardless of the wealth of natural resources, these countries have failed to create and maintain long-term economic growth. On the other side, if a country already has a good background for growth and development (such as Norway), the resource curse disappears and resources are positively associated with economic growth. In fact, the wealth of natural resources in one country does not adversely affect economic growth. On the contrary, it should have a good effect, but the possession of natural resources leads to many other negative variables, which affect economic growth negatively, thereby creating a negative correlation between natural resources and the rates of economic growth.

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THE EFFECT OF COUNTRY OF ORIGIN ON PURCHASE INTENTIONS FOR MEDICAL SERVICES AND MEDICAL TOURISM

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ABSTRACT

A rapid development of international trade in health services started in the late 1990s, and it is now known in the literature as medical tourism. Despite the growing interest of scientists, the phenomenon is not well recognized, and some aspects remain relatively scarcely studied. World literature on the internationalization of medical services focuses predominantly on describing the market and entities operating on it, and very few research papers have been devoted to the issue of medical tourism in Europe. The authors of the presented article focus on the consumer's perception of the medical services. The theoretical base for a given research paper is the concept referring to the effect of the country of origin (COO). The aim of the study is to answer the following questions: 1/Does the image of a country influence the purchase intentions for medical services; 2/How do the purchase intentions for medical services vary, dependent on the country of origin of the service. Data have been collected using a questionnaire developed by the authors. In order to provide an in-depth analysis, a weighted COO coefficient has been introduced. 264 respondents have participated in the research. The data have been collected from German, Lithuanian and Polish participants. The analysis of regression has been applied as a statistical method. The results confirm that the image of the country is crucial for purchase intentions. Readiness to purchase medical services varies between services offered by Germany, Lithuania and Poland: the lowest is for the Polish medical services, and the highest for the services offered in Germany. The results of the research can be applied in business practice and in the strategies developed by institutions shaping the image of the country and positioning it in the international context.

Keywords: dimensions of the country-of-origin (COO) effect, medical services, purchase intentions, regression analysis, services marketing

1. INTRODUCTION

Referred to as medical tourism, international exchange of medical services began to develop extensively at the end of the 1990s. The initial impulse was the liberalisation of international trade within the framework of multilateral agreement entered by the member countries, so called the GATS (General Agreement on Trade in Services), under the auspices of the WTO. The second reason was the change in the structure of international exchange of medical services

(Lautier, 2014). It is manifested by growing significance of export from developing and emerging countries, which comes as a result of competitive prices and improving quality of health care, as well as the increasing demand for this type of services, communicated by the citizens of those countries, who become more and more well-off.

Despite the growing interest in international trade of services, scientists have not achieved any consensus as far as the name of the phenomenon is concerned, its definition and reliable data referring to its scale (Lunt, Carrera, 2010; Connell, 2013; Lautier, 2014). World expert literature focuses mainly on the description of the market and entities which operate on it (Al-Amin, Makarem, Pradhan, 2011), especially in the American continent and far less on such a description which refers to the situation in Europe (Lunt, Carrera, 2010).

The following article presents an analysis of customers' perception of medical services. The aim of the article is to provide answers to the following questions 1/Does the image of a country influence the purchase intentions for medical services; 2/How do the purchase intentions for medical services vary, dependent on the country of origin of the service.

The COO effect in services is relatively scarcely analysed, and the analysis of expert literature indicates that so far the question of the COO effect in medical services has been discussed in one article only (Mechinda et al., 2010) [1]

The article is based on a survey carried out on a sample of 264 respondents from Poland, Lithuania and Germany. The collected data have been processed with the use of regression analysis.

The article is started with a theoretical part which refers to medical tourism and the COO effect and its dimensions. The next part presents the research method, the research results and the conclusions. The study is ended with the indication of the limitations and recommended directions for further research. The research results can be applied in marketing operations performed by service providers and used by the institutions which are responsible for the creation of the country image and its positioning.

2. THE COO EFFECT IN MEDICAL TOURISM

Medical tourism comprises the issues of medical and tourist nature, and that fact proves the complexity of the phenomenon. In the presented study the following definition of medical tourism has been assumed: 'the act of travelling abroad to obtain medical care' (Cormany and Baloglu, 2011) [2]

Expert literature provides some analyses which refer to the choice of destination (Pennings et al., 2009; Culley et al., 2011), the motivation for medical travelling (Horowitz, Rosenweig, 2007, as cited in: Mechinda et al., 2010; Culley et al., 2011; Connell, 2011a; Laugesen & Vargas-Bustamante, 2010; Menvielle et al.,2014; Inhorn and Shrivastav, 2010, as cited in: Culley et al., 2011; Shenfield et al., 2010; Ehrbeck et al., 2008; Menvielle et al.,2014) and the perceived threats (Menvielle et al., 2014).

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[1] The literature review is provided with the use of the database of full-text publications accessible in EBSCO, ProQuest, Emerald and ScienceDirect.

[2] As cited in: Connell (2013, p.2). Literature offers elaborate definitions, the authors of which try to include the variety of aspects referring to the phenomenon, for example: „medical tourism means purposeful travelling to a foreign country to undergo intended medical treatment in order to save good health, to improve quality of life or a patient's appearance. It is caused by financial or qualitative reasons or because of inaccessibility of particular services in patients' country (it may result from the lack of medical staff, lack of required knowledge, equipment, procedures or long queues to obtain the required medical treatment, and also from legal restrictions). Medical tourism frequently involves sightseeing of the visited places." (Białk-Wolf, 2014).

2.1. The COO effect in marketing and tourism

The COO effect is defined as the influence of the image of a country and its citizens on customers' attitudes and behaviour referring to the goods and brands which are produced in that country or which are associated with that country (Sikora, 2008, p. 174).

The phenomenon has been extensively analysed in literature on international marketing and consumer behaviour in the reference to material products (for relevant literature reviews, see eg: Bilkey and Nes, 1982, Al-Sulaiti and Baker, 1998; Peterson and Jolibert 1995; Javalgi, Cutler, and Winans 2001; Pharr 2005; Rezvani et al., 2012; Saran and Gupta, 2012), whereas the same phenomenon in the reference to services has been relatively scarcely discussed (Ahmed, Johnson, Ling, Fang, & Hui, 2002; Chattalas, Kramer and Takada, 2008; d'Astous et al., 2008; Boguszewicz-Kreft, 2014).

So far, the research referring to services has indicated that the COO comes an important information carrier for the consumers (Ahmed et al., 2002). It affects the assessment of quality (Wong and Folkes, 2008), purchase risk (Michaelis et al., 2008) and purchase intentions (Harrison-Walker, 1995; Berentzen et al., 2008; Khare and Popovich, 2010; Bose and Ponnam, 2011; Morrish and Lee, 2011; Boguszewicz-Kreft, Magier-Łakomy and Sokołowska, 2015).

In expert literature on tourism we can find a concept which is analogical to the COO, and it is defined as the destination image (Crompton, 1997 as cited in: Mossberg, Kleppe, 2005, p. 497). Mechinda et al. (2010) state that medical tourists who hold a positive image of a particular destination are more likely to positively process the information on medical services. The authors also indicate the influence of that image on tourists' attitudinal loyalty towards medical tourism.

2.2. The dimensions of the COO effect

So far, publications indicate that there is no consensus among scientists on the question whether the COO effect is a phenomenon characterised by one (e.g. Hong and Wyer, 1989) or by many dimensions. Referring to the previous suggestions, in 1992 Roth and Romeo presented a COO model which consisted of four dimensions 1) innovativeness, understood as the use of technical advance and modern technologies, 2) design, defined as the appearance, colours, style and variety, 3) prestige understood as exclusiveness, brand reputation, status, and 4) workmanship defined as durability, reliability, craft and the quality of workmanship.[3] After some modification, the model has been used in later research on entertainment services carried out by Bose and Ponnam (2011). On the basis of their research, the abovementioned scholars have been inclined to follow a unidimensional approach towards the COO.

Adapting the models presented above for the requirements of the research on the broadly understood services, Magier-Łakomy & Boguszewicz-Kreft (2015) have suggested the following dimensions 1/ *innovativeness* - the use of the latest knowledge and advanced technology, 2/ *diversity* - variety, the wide range and attractiveness of an offer, 3/ *prestige* - exclusivity, status, brand name reputation, 4/ *quality* - reliability, durability, professionalism. In their research the authors indicate that the COO comes as a multi-dimensional category. They have also presented the multidimensional character of that phenomenon in transportation services (Boguszewicz-Kreft, Magier-Łakomy and Sokołowska, 2015) and medical services (Magier-Łakomy, Boguszewicz-Kreft and Janiunaite, 2015). Additionally, to determine how the COO dimensions are assessed in the services provided by the particular countries and how significant these dimensions are for the particular services, the authors have introduced the

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[3] The review of the research methods used in the research on the COE can be found in: (Bose and Ponnam, 2011).

weighted coefficient of the COO effect), defining it "as the global perception of the COO of the service weighted by the significance of the particular dimensions in the particular service" (Boguszewicz-Kreft, Magier-Łakomy and Sokołowska, 2015, p. 29).

3. RESEARCH METHODOLOGY

The research has been conducted with the use of a questionnaire developed by the authors. The questions have been answered with the use of a six-grade scale.

264 respondents have participated in the research. The data have been collected from German, Lithuanian and Polish students of major study courses in economics. The questionnaire form also includes a question about the number of foreign trips (M=12,91; SD=12,40), it indicates that the participants of the survey have some experience which refers to staying abroad.

All the statistical analyses have been carried out with the use of a statistical package, STATISTICA 10.

Table 1. Characteristics of respondents participating in the research

Respondents	N	age		Gender*	
		M	SD	Women	Men
German	72	22,53	2,75	45	27
Lithuanian	65	23,02	6,60	33	31
Polish	127	23,43	6,51	72	53
Total	264	23,09	5,70	150	111

*the *sum of women and men does not include the general number of participants due to the lack of gender information in several questionnaires*
Source: the authors' own study.

4. RESULTS

Hypothesis 1. The power of the country affects the readiness for the purchase of medical services.

In order to verify the hypothesis which refers to the influence of the country of origin of the service on the readiness for its purchase, the collected data have undergone mixed regression analysis.

It has been also considered that four dimensions of the COO effect (that is namely: innovativeness, diversity, quality and prestige) can have various weights for the consumer as far as a particular service is concerned. Therefore, a weighted ratio has been constructed: the power of the country.

The ratio of the weighted power of the particular country has been determined by the following equation:

The power of the particular country k (k=1,2,3) in the assessment of medical services for the jth consumer (j=1, … 264):

$$U_{k,j} = now_{k,j} \cdot w_{now,j} + roz_{k,j} \cdot w_{roz,j} + jak_{k,j} \cdot w_{jak,j} + pres_{k,j} \cdot w_{pres,j},$$

where:

$w_{inn,j}; w_{div,j}; w_{qual,j}; w_{pres,j}$ - the weights or the significance of the particular dimensions (respectively: innovativeness, diversity, quality and prestige) for the jth respondent in the choice of a medical service.

The weights have been obtained by asking respondents to do the following: "Using the scale from 1 to 6 (where 1 means 'definitely no', and 6 means 'definitely yes'), please, evaluate the significance of the following characteristics as regards to medical services."

$inn_{k,j}; div_{k,j}; qual_{k,j}; pres_{k,j}$ - the perception of the particular dimension by the jth consumer in the k country, provided in the respondent's answer to the question: "Using the scale from 1 to 6 (where 1 means 'very low' and 6 means 'very high'), how would you evaluate innovativeness (and then respectively diversity, quality and prestige) of the products and services offered in the particular country?"

Obtained in such a way, the ratio has been used as an independent variable. A dependent variable has been the readiness for the purchase of a medical service and it has been obtained by the respondents' answers to the following question: "Using the scale from 1 to 6 (1 means 'definitely no', and 6 means 'definitely yes'), could you evaluate your readiness for the purchase of a medical service offered by the particular country?"

The readiness for the purchase of a medical service and the power of the country have been measured three times for each consumer, that is: (1) the consumer has assessed each country (Germany, Lithuania, Poland) in terms of four COO dimensions, (2) the consumer has assessed his/her readiness for the purchase of a medical service in Lithuania, Poland and in Germany. The similarity in the measurements obtained from the same respondent has been also considered. Therefore, a linear mixed model has been applied, where the consumer effect has been assumed as the random effect. When the data are unbalanced, a mixed model is generally preferred, because it is asymptotically efficient (Linear Mixed, p.12, 2005). More information on mixed models can be found in Zieliński (2010), Radkiewicz and Zieliński (2010), Grabowski (2015), Biecek (2013).

In order to obtain answers to the questions whether and to what extent the proposed regression models explain the variance of readiness for purchase, at first a null model with a constant has been estimated. The variance of results has been presented in two components: interpersonal (random effect for slope) and intrapersonal (the rest). On that basis, an intraclass correlation ratio has been calculated (Zieliński P., p.250). It has allowed the authors to state that the percentage of the total variance of results, which refer to the variance among the surveyed respondents is small:

$$ICC = \frac{\hat{\sigma}^2_{cons}}{\hat{\sigma}^2_{cons} + \hat{\sigma}^2_0} = \frac{0,032153}{0,032153 + 2,670367} = 0,011897 \approx 1,19\%$$

Subsequently, the parameters of the model in the following theoretical form have been estimated:

$$G_{k_{ij}} = \alpha_0 + \alpha_1 U_{Cij} + b_{0j} + \varepsilon_{ij}$$

The symbols in the equation presented above refer to the following variables:

$G_{k_{ij}}$ - ith readiness for the purchase of a medical service ($i = 1,...,792$, i – the number of measurements), in kth country k = 1,2,3, declared by the jth consumer ($j = 1,...,264$)

U_{Cij} - the centered power of the country; its values have been obtained by the subtraction of the average value, calculated from all the observations, from the power of the country, independently of country of origin of service and country of origin of consumer. The decision to use the centered power of the country instead of the power of the country has been justified by the fact that the power of the country has not taken the zero value. Hence, the interpretation of the α_0 parameter (which follows the assumption that the power of the country takes the zero

value) would not make any sense. The centered power of the country results in the fact that the estimation of the α_0 parameter equals the arithmetic average of the dependent variable.

ε_{ij} - random disturbance $\varepsilon_{ij} \sim N\!\left(0, \sigma_0^2\right)$

b_{0j} - random effect $b_{0j} \sim N\!\left(0, \sigma_{cons}^2\right)$

Table 2. Estimates of fixed effects and covariance parameters for Model 1.

Model 1[a]				
Estimates of Fixed effects				
Parameter	Estimate	Std. error	t [Wald Z for cov. param.]	p
Intercept	3,787879	,051972	72,883	,000
Centered power of the country	,039760	,001361	29,220	,000
Estimates of covariance parameters				
residual $\hat{\sigma}_0^2$	1,142745	,072977	15,659	,000
Intercept [subject=person id] Variance $\hat{\sigma}_{consumer}^2$	,332179	,073143	4,541	,000

[a.] Dependent variable: readiness for the purchase

The result of the test (type III test of the fixed effect) for Model 1 indicates that the centered power of the country significantly affects the readiness for the purchase of medical services $(F(1, 775,427)=853,814, p<0,001)$. The power of the country has been calculated in accordance with the following equation (Zieliński P., p. 251):

$$R_1^2 = \frac{\hat{\sigma}_{0\,basic\,model}^2 - \hat{\sigma}_{0\,evaluated\,model}^2}{\hat{\sigma}_{0\,basic\,model}^2} = \frac{2,670367 - 1,142745}{2,670367} = 0,572064$$

and it equals 57,21%; it means that the model explains 57,21% of the variability in the readiness for the purchase of the service. Hence, the readiness for the purchase of a medical service referring to the services coming from Lithuania, Poland and Germany is significantly related with the level of the power of the particular country.

The interpersonal variance has increased in comparison to the null model, and it equals $\hat{\sigma}_{kons}^2$ =,332179. The estimates of the Model 1 parameter (see Table 2) indicate that –irrespective of the COO of the service and the COO of the respondents, the readiness for the purchase of medical services is $\hat{\alpha}_0 = 3,79$, whereas the increase in the power of the country by one unit results in the growth in the readiness for the purchase by $\hat{\alpha}_1 = 0,0398$ units.[4]

Model 1 has proved the hypothesis about the influence of the power of the country on the readiness for the purchase of a medical service. A general confirmation has been obtained as regards the relation between the analysed variables. However, Model 1 does not provide an answer to the question about a specific relation between the variables. Therefore, an attempt at testing the second hypothesis has been made.

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[4] It should be however remembered that the highest possible value of the power of the country is 144 (6x6x4), and the lowest is 4. Hence, a change in the value of the power of the country per unit indicates only a small change in the perception of that country. Therefore, it will not generate a big changes in the readiness for the purchase of a service in that country. However, a change in the power of the country by 100 units (e.g. from 44 to 144) will increase the readiness for the purchase approximately by 4 units. It is a very high result, considering the fact that the readiness for the purchase has been measured with the use of the scale from 1 to 6.

Hypothesis 2. The readiness for the purchase of a medical service is differentiated, depending on the COO of the service. The significance of the influence exerted by the power of the country on the readiness for the purchase of services differs, depending on the COO of the service.
In order to verify the hypothesis, the following model has been applied:

$$G_{k_{ij}} = \alpha_0 + \alpha_1 U_{C\,kraj\,ij} + \beta_1 medLith_{ij} + \beta_2 medGer_{ij} + \gamma_{11} U_{C\,kraj\,ij} medLith_{ij} + \gamma_{12} U_{C\,kraj\,ij} medGer_{ij} + b_{0j} + \varepsilon_{ij}$$
$$(i = 1,...,792,\ \ j = 1,...,264)$$

where:
$medLith_{ij}$ - a variable 0-1, taking value 1when the jth person declares his/her readiness for the purchase of medical services in Lithuania, and 0 in all other cases (that is namely: the person declares his/her readiness for the purchase of medical services in Germany or in Poland). The variable $medGer_{ij}$ has been constructed in a similar way.

Table 3. Tests of the fixed effect for Model 1. Degrees of freedom, F and p values for the factors included in the generalized linear mixed Model 1.

Effect	Num df	Den df	F	p
Intercept	1	254,497	6849,023	,000
centered power of the country	1	615,536	226,264	,000
COO of the service	2	518,323	470,410	,000
centered power of the country x COO of the service	2	620,848	14,233	,000

The number of variables indicating the countries in which respondents have declared their readiness for the purchase of services is lower than the general number of the countries by 1 (otherwise the variables would be linearly dependent). The omitted variable has been assumed as a reference group. The estimates of the model parameters for that group are obtained by setting 0 value in the place of all the variables. The authors have chosen Poland as a reference group, considering the fact that the readiness for the purchase of medical services has turned out to be lower than the readiness for the purchase of such services in Germany and Lithuania.
$U_{C\,kraj\,ij}$ - the centered power of the country has been obtained as follows: the average power of the country has been subtracted from each value of *the power of the country* variable (that is: Germany, Lithuania, Poland).
The results of the test (the type III test of the fixed effect) indicate that the influence on the power of the country and the COO of the service, as well as the impact of the interaction of these variables on the readiness for the purchase of a service is significant at the level of p<0,001.
The Table 4 presents the estimates of the parameters of the fixed and random effects of Model 2. The estimates of the random effects indicate that another variable (the COO of the service) applied in the model has decreased the intrapersonal variability of the results by 11.53% and the interpersonal variability by 31.92%. The interaction effect has decreased the intrapersonal variability of the results by 4.29%, and it has increased the interpersonal variability (by 1.94%). Based on the results referring to the fixed effects of the model, it is possible to state that the average readiness for the purchase of medical services in Poland is $\hat{\alpha}_0 = 2,981059$, whereas the difference between the average readiness for the purchase of services in Poland and Lithuania equals $\hat{\beta}_1 = 0,098487$, and between the average readiness in Poland and in Germany it is $\hat{\beta}_2 = 2,321970$.The difference is significant for Germany (p<0,001), and it is not significant for

Lithuania (p=,251). The estimate of the parameter $\hat{\alpha}_1$=,029686 indicates the significance of the influence exerted by the growth in the power of the country per unit on the readiness for the purchase of medical services in Poland. The estimates of the parameters $\hat{\gamma}_{11}$=,004545 and $\hat{\gamma}_{12}$=-,013765 indicate the differences between the significance of the influence of the power of the country on the readiness for the purchase of medical services in Poland and respectively in Lithuania and in Germany. The difference is significantly lower for Germany (p<,001), and it is not significant for Lithuania (p=,250).

Table 4 . Estimates of fixed effects and covariance parameters for model 2.

Model 2[a]				
Estimates of fixed effects				
Parameter	estimate	Std. error	t [Wald Z for cov. param.]	p
Intercept[5]	2,981059	,067368	44,250	,000
centered power of the country	,029686	,002972	9,990	,000
COO of the medical service: Lithuania	,098487	,085619	1,150	,251
COO of the medical service: Germany[6]	2,321970	,085619	27,120	,000
COO of the medical service: Poland	0[b]	0	.	.
COO of the medical service: Lithuania x centered power of the country[7]	,004545	,003948	1,151	,250
COO of the medical service: Germany x centered power of the country[8]	-,013765	,003708	-3,712	,000
COO of the medical service: Poland x centered power of the country	0[b]	0	.	.
Estimates of covariance parameters				
residual $\hat{\sigma}_0^2$	,967636	,060107	16,098	,000
Intercept [subject=person id] Variance $\hat{\sigma}_{consumer}^2$	,230508	,053438	4,314	,000

[a.] Dependent variable: the readiness for the purchase
[b.] This parameter is set to zero because it is redundant.

The obtained result indicates that the power of the German country influences the readiness for the purchase of medical services less than for Poland and for Lithuania. The result can be interpreted in the following way: in the countries of well-established reputation (Germany seems to be such a country) the perception of the country in terms of the COO dimensions affects consumers' purchase intentions less than in the countries which are assessed at a lower level. To verify such a conclusion, it will be necessary to analyse such influence in a larger number of countries. At the same time, it is possible to state that the power of the influence of the discussed variable on the readiness for the purchase may be different in various countries of origin of the services.

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[5] the readiness for the purchase of medical services in Poland

[6] the difference between the readiness for the purchase of medical services in Poland and in Germany.

[7] the difference in the influence of the power of the country on the readiness for the purchase between services coming from Poland and Lithuania

[8] the difference in the influence of the power of the country on the readiness for the purchase between Poland and Germany.

5. CONCLUSION

1. The evaluation of the country in terms of the COO dimensions weighted with the significance of the particular dimensions for medical services, that is: the power of the country, significantly affects the readiness for the purchase of such services in the country which offers them.

2. The readiness for the purchase of medical services differs, depending on the country from which these services come from: it is the lowest for the services coming from Poland and the highest for the services coming from Germany.

3. In the case of services offered by Germany, the influence of the power of the country on the readiness to purchase is significantly weaker than the influence of that power on the readiness for the purchase of services offered by Poland and Lithuania. It may result from the fact that in the countries of a high positive image, the evaluation of the COO dimensions is not as strongly connected with purchase decisions as it is in the countries where medical services are assessed at a lower level.

The obtained results lead to the formation of the subsequent hypotheses which will be analysed and their results will be published in the next article. It seems interesting to find answers to the following questions; 1) does the readiness for the purchase of a medical service differ, depending on the COO of the consumer? 2) does the readiness for the purchase of a medical service differ, depending on the COO of the consumer and on the COO of the service?

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THE EVOLUTION OF THE INFORMAL LABOUR MARKET IN ROMANIA BETWEEN THE CONSTRAINT OF THE REGULATIONS AND THE CHALLENGES OF THE ECONOMIC DEVELOPMENT

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ABSTRACT

The labour force market in a modern society must identify solutions for the integration of the active population, thus providing the long-term and medium-term stability of the economy. If the economy is well consolidated, it shall be able to provide a good absorption of the labour force, so that it would not cause a strong tendency towards migration. The precariousness of the labour market generates the increase of the informal economy and also causes its infiltration into the formal field. Within this work, I have identified different forms of informalization of the labour force market, and I have analysed the motivations and effects of resorting to the international mobility in order to achieve employment at a higher salary level. Equally diverse as the official economy, the sphere of the informal activities, which is missing from the statistical records, avoiding the control of the public power, exists to a larger or smaller extent in all the countries of the worlds, enjoying a perennial existence. The underground economy exists where there are also market restrictions. The underground economy must not be understood as a deviation from economy in its whole but as a component of it, as the activities omitted by the control of the governmental regulations are considered underground. The underground economy is a feedback of the economic system to the governmental, institutional - juridical management act. The more extensive the underground economy, the more profound the governing deficiencies. An effective management shall know how to take note to their own true extent, of the signals highlighting the presence of the underground economy. Based on them the government shall intelligently react, eventually causing its restriction "to a limit" under which (like other macroeconomic variables, such as inflation rate or unemployment rate) one can consider that it does not exist, i.e. can be controlled.
Keywords: informal labour, international mobility, migration of the labour force, non-observed economy

1. INTRODUCTION

The non-observed economy has appeared at the same time as the official one, as it is the human nature to search for a more favourable alternative of performing an activity. The phenomenon is well-known - and analysed as such in the economic doctrine - under several names: grey, informal, parallel, underground, hidden, invisible, unrecorded, shadow, or second economy. The mentioned names are not synonyms, and can designate different or opposed economic realities. Moreover, the same terms can have a different meaning, sometimes even unexpected, depending on the context.

The underground economy is essentially a phenomenon, which concerns the employment manner. Where governments do not offer employment possibilities, great employment opportunities emerge in the underground economy. The motivation of performing moonlighting is very diverse, and usually has a deep economic nature. The economic specific nature of certain periods, tradition, and legislation are elements causing the behaviour of the citizens. Clandestine employment allows the one performing it to increase his resources, and the one

using it - to reduce his expenses, and both - to avoid the fiscal and social expenses. This can be motivated, to the same extent, by administrative constraints, such as the case of the overlapping of incomes, subject to a maximum tax level.

2. INFORMALIZATION OF THE LABOUR MARKET

Chen M. A. (2008) reveals the fact that the labour market becomes more and more flexible and informal. This concept of the frequently used "informalised" labour includes: jobs implying a informal arrangement between the employer and the employee; full-time employment in the absence of a secured contract; self-employment of the workforce, with or without employees. The terms of "moonlighting", illegal, sub-declared or undeclared labour include the lucrative activities exerted outside or within the limits of the legal dispositions and regulations: social legislation (labour accidents, sick leave, pension and unemployment insurances); tax legislation (a large part of the taxes is related to the labour incomes); labour legislation (the labour of the women, children, duration of the working hours) (David M., 2008).

We can estimate that the poor persons are mainly exposed to the risk of being involved in activities related to the informal economy (they can be considered to be under the stress of circumstances). In the case of this category of persons, the only solution consists in the general increase of their income, and the main way of doing that is the economic growth on the whole, i.e. the GDP increase. At the same time, it is necessary to build, for certain periods of time, a more equitable redistribution system, in order to reduce the polarization of the society. We identify, as a measure that could support such a process, the increase of the minimum wage, up to a level that could provide a decent living standard to all citizens, but which could be borne by the real economy. At the same time, as the economic increase allows it, one must take into account an effective social protection system, directed towards those who really need help, which would increase their access to free medical assistance, to several budgetary aids for food and other facilities meant to provide a decent living. For employees and employers, reducing the health insurance fund could be a significant incentive for transferring an important part of the informal economy into the formal economy.

The contribution to the informal economy also exists among the persons with significant incomes who have voluntarily chosen the informal sector, in order to avoid the mandatory taxes and charges according to the regulations of the legislation in force. Here we find the bosses of the unrecorded companies, the employers in the formal sector who employ undeclared workforce (with no labour contracts), those who underdeclare their profits, but also the workers that, under the mutual agreement with their employer, are involved in tax evasion, accepting that the remuneration from the employment record books would be substantially lower than the real one (Voinea L., Albu L., 2011).

This is how the need to improve legislation, adapt it, and strictly implement it occurs, as well as the adaptation to the one used in the respective field in the European Union. To this end, it is recommendable to pursue, on the one hand, the effectiveness increase of the inspections and of the labour and tax record system, and on the other hand, the strict enforcement of the penalties and sanctions in case informal activities are found. Attracting the economic activities and labour from the informal sector to the formal sector can be achieved by means of a series of economic incentives, such as: the simplification of the tax and charge system, at the same time as the decrease of bureaucracy; the diminution, after a careful analysis, of certain taxes and charges that decelerate labour in the formal sector, decelerate investments or can decrease the private initiative, at the same time as the increase of others which are currently undersized in Romania, such as the wealth or capital tax, and the land tax; the introduction in the tax field of a complex system of deductions and incentives, and its effective enforcement, according to the model of the Western countries; the extension of the statistic and control system of the household

189

economies, especially in the rural environment, and implicitly the increase of the economy monetization degree.

So, illegal labour, as a generic denomination, refers both to the services provided under clandestine conditions, and to the ones undeclared to the real value (the so-called undeclared illegal labour). For this reason, the undeclared labour leads to the alteration of the balance on the labour market, because a derangement occurs between the supply and demand of workforce, and implicitly the creation of a parallel strongly informal labour market (on which a parallel labour price is also negotiated: the "under-counter" salary, exempt from the payment of the related tax obligations, and precisely for this reason, more attractive under a net amount and in the immediate perspective than the one existing on the official labour market).

Labour outside the legal framework is present and takes different forms, among which:

- unrated activity, totally unhighlighted and untaxed, taking place outside the individual labour contract or temporary work contract, without a legally prepared payroll and the payment of the obligations to the state budget, without timekeeping for highlighting the time norm, without documents regarding the production norm and the work type, and the failure to nominate in any way the person providing the work.

- partially unhighlighted and untaxed labour performed by means of double record, and the so-called "under-counter" payment, which is an extra amount as compared to the records.

- the incorrect highlighting of the production performed within exhausting time frames, longer than 8 hours, while the worker is abused and at his boss's discretion.

- the 3-hour per day convention work which in fact takes place within 8-12 hours a day;

- jobbery, illicit trade, and smuggling;

- occasional seasonal labour;

- domestic activity performed in people's households;

- unrecorded labour, performed during the so-called "probationary period" (www.inspectmun.ro).

"Moonlighting" is favoured in all economy sectors in which cash is handled, a context in which the commercial activity, in the broader sense of the word, is the favourite manifestation area.

The causes of the undeclared labour are extremely various, have a multifactorial determination, and are related to the economic status of the employee and employer at a certain point, to their level of education, and last but not least, to the legal framework and sanctioning regime.

For the EU countries, we consider the following causes to be significant:

- the amount of the income tax and contributions to the social security system;

- the availability of complicated and bureaucratic administrative procedures;

- a labour legislation which is not adapted to the labour market and the development needs of the society;

- the development of subcontractors chains which causes the increase of the number of independent workers, that in certain cases remain undeclared;

- high levels of unemployment, poverty and temporary and precarious labour, as under such circumstances, workers are forced to renounce any insurance or other rights;

- illegal migration, as the persons who are in such a situation are more willing to work under precarious conditions, as they are more exposed to the risk of becoming undeclared workers.

In Romania, the causes of the undeclared labour are numerous, and the number of those doing undeclared work is approx. 31% of the employees, so that when the Romanian labour decides to emigrate, they consider it acceptable to be employed in the informal sector of other states:

- the imbalance between the demand and supply of jobs on the labour market, due to the disappearance of the large industrial units or their restructuring with limited personnel;
- the taxation considered to be high by most of the operators on the labour market;
- the existence of the underground economy;
- the fact that the large majority of the employees are supporters of the policy of obtaining short-term significant profits, to the detriment of the companies' long-term and medium-term development strategies;
- the economic and financial instability of certain private SMEs;
- the vulnerability of large social and professional categories resulting from the fact that they find it difficult to get a job according to their specialised training and experience in the field;
- the low level of professional reconversion;
- the low incomes of a significant part of the active population and very low incomes of pensioners, as well as the pressing need to supplement them up to the individual's acceptability level;
- the large number of graduates of several forms of education searching for a job, as a result of schooling figures that do not take into account the labour market demand, but are dictated either by the intent to maintain the schooling institution at all costs, or for commercial reasons;
- the regime sanctioning only the employer, not the employee as well.

Taxation decreases the marginal utility of labour, while the underground economy increases it. This implies however the risk of the tax inspection authorities finding undeclared labour, with the possible consequence of its being sanctioned by the judicial system. This risk is directly proportional to the productivity of the worker operating in the underground economy: it is minimal for the regular worker doing a few extra hours at the end of the week, without recording his activity. The governmental authorities, although illegal, usually ignore his additional incomes. In exchange, for instance, the enterpriser who employs such workers outside the regular working hours, and earns significant fiscally undeclared amounts of money is an important target for the investigating bodies. The different degree of risk regarding the feedback of the state authorities explains the extension of the underground economy in certain sectors of activity and social categories.

It is however very unlikely that the large enterprises or corporations choose the undeclared labour, not because of the large number of tax inspectors and auditors, but especially because of the employees that would inform the authorities on any violation of their rights or on any amount that would be prevented from being transferred into the accounts which would provide the social security system.

Any set of governmental measures aiming at the underground economy must also take into account an aspect related to the distribution of costs and benefits among those operating in the underground. The cost of going underground, which includes the mental stress of undeclared labour, the risk of being caught by the authorities, the reduced productivity, as well as the actual cost of concealing the activity - is particularly decreased in the case of certain categories of persons, such as young persons, immigrants or persons who are not socially integrated because of their ethical origin or language. These persons are disadvantaged when it comes to finding a

job in the official economy. That is why, any policy trying to approach the issue of the underground economy must consider the fact that the measures taken shall disproportionally affect the above-mentioned categories of persons.

Poverty associated with the lack of legal employment opportunities thus causes people to search for alternative surviving strategies, often in the so-called informal employment (with no legal labour documents or "moonlighting"), or by migration, or both combined. The informal employment itself can often lead to poverty, depending on the type of employment and the particular national context, as well as the time frame. (Mănăilă I.).

If the labour market is characterised by precariousness (the labour relations are flexible and informalised), it cannot provide stability and durability (i.e. access to the social security system, social care system, medium-term pension plan) for those who are to be under formal conditions on medium and long term. The correlation of the precarious labour conditions and the possibility of the international mobility can influence the life strategy of the young people, so that the temporary labour migration appears as a real insertion alternative on the labour market among young people, and not always does it mean a formal status in the host country, as young people often get involved in informal engagements. The informal engagements abroad acquire a different sense than the precarious engagements in the country of origin. The new informalization forms identified under the aegis of the formal/legal economy (different combinations of formal and informal) cause new forms of adaptation. Thus, the context of migration in this approach changes: the culture of migration acquires new dimensions, as it has tight connections with the informalization of the labour market. The possible migration practice, whether optional or wanted, turns into a necessity, which becomes "mandatory" for certain social categories - most often, the young people (Horváth, 2008).

The combined research of migration and informal economy is not new in the specialised literature: there are studies which have researched the integration of the immigrants on the labour market in terms of the informal economy (e.g. Marcelli, Pastor, & Joassart, 1999; Waldinger & Lapp, 1993), and the contribution to the informal economy, or the informalization of the contribution to the labour market, as an effect of the migration, has been the topic of several studies prepared in the context of the international migration (Morawska, 2001). However, in most of these studies, the informal economy is revealed as the final act of the international migration in the host country. One must however look in the opposite direction as well, starting from the premise that the precariousness of the Romanian labour market (and not only) creates the favourable conditions and a well-founded pretext for the international migration among those who fail to become integrated on the labour market according to the expectations of the society (Voinea L., Albu L., 2011).

In this approach, young people can be considered to belong to disadvantaged groups which select ways of adapting to the conditions available on the precarious Romanian labour market either by accepting the informalised integration conditions, or by migration. Irrespective of the chosen strategy (acceptance of conditions or migration), while these are being implemented by the actors, they can generate a continuous informalization, in their turn. We can see that, besides the main favouring factors - significant differences regarding incomes, GDP/inhabitant ratio, living standard, risks, networks of migrants, economic regulations, migration policy - there is also a series of microeconomic factors, that play an important part in the migration. Thus, we can speak about a migration that is adapted to the "non-normative" model (Horváth, 2008), which helps the potential young participants in the labour market fill the gap between the expectations of the society (the need of a stable job) and the restricted possibilities - also (not) offered by the society - that they are facing (Gal K., 2013). Economically, immigration is not only based on the differences of salaries between the poor countries and the rich countries, but by the extension of the economic development from the rich countries towards the poor

countries, and the persistent need for cheap workforce in the developed countries. Immigration has several social grounds, but the creation of migration networks is probably the most important one. The networks created in the migration process are a self-perpetuating moment which leads to its increase in time, in spite of the fluctuations from the differences of salaries, recessions, and the more and more restrictive anti-migration policies (Pîrvu R., 2011).

Further to the studies performed at the Member States level, it has been found that, actually, the undeclared labour is manifested, among others, by means of the following:

- formally, the individual labour contract provides a wage which is usually the minimum wage guaranteed for payment (to this wage, the employer and the employee pay for taxes, charges and contributions owed to the state budget), while de facto the employees are paid by the employer with an amount higher than the one provided by the individual labour contract (informally called "envelope wage");

- the regular work time is paid according to the individual labour contract signed by the employee and the employer, while the additional work performed by the employee is paid in cash; thus, the amounts received by the employee for the additional work are no longer declared, and for these amounts no owed taxes, charges and contributions are paid;

- the employee provides work for lack of an individual labour contract signed with the natural or legal entity under the authority of which and to the benefit of which he works; under these circumstances, the following aspects are incidental: the employee is deprived of the rights and benefits that he would have as an employee of the person under the authority of which he performs his activity; the employer is exempted from the legal obligation of recording the individual labour contracts with the competent territorial labour inspectorate; the social funds and the state budget are impaired by the circumvention of both the employee, and of the employer to pay for the social contributions;

- no individual labour contracts are signed for the probationary period;

- no individual labour contracts are signed with the persons providing services and works in their individual households;

- the daily and/or seasonal workforce is illegally used.

Thus, among the traditional causes of moonlighting one could mention the high levels of taxation and social contributions, as well as the intricate administrative procedures to be followed in the case of the legal employment. An unjustified decrease of the workforce supply can be considered an increase, to the same extent, of the underground economy (Buziernescu R., Nanu R, Spulbar C). As of late, there is a growing trend towards sub-contracting and false businesses on one's own. Also, in certain member states, the transitional regulations for the workers in the new EU member states have exacerbated moonlighting. The situation greatly differs from one member state to another.

The availability and extension of the informal labour both of the migrants, and of the population in the more developed EU countries is mostly related to the institutional aspects of the economy, which differs in each of the member states, such as (European Commission, Brussels, COM (98)):

The tax burden – taxes, charges and social contributions: the level of taxes and social contributions certainly influences the undeclared labour. A burdening tax is an incentive for the manifestation of the underground economy, both for the employer and for the employee. The

phenomenon is caused, on the one hand, by the level of taxes and contributions to the social securities, and on the other hand, by their structure. In countries where the taxation of the incomes is high, the pressure comes from the workforce supply, and the undeclared labour is a feature especially of the persons working on their own. In countries where the level of the social security contributions is high, the pressure comes from the workforce demand, and the undeclared labour tends to be performed under the form of the enterprises with - completely or partially - informal, undeclared activity.

In Romania, the undeclared labour phenomenon is generated and favoured, among others, both by the excessive bureaucracy, and by the high level of taxes, charges and social contributions owed by the employee and employer. Thus, among the contributions borne by the employer in 2015, one mentions the following:

- social securities: 15.8 % for normal labour conditions; 25.8 % for particular labour conditions; 30.8 % for special labour conditions.
- unemployment securities: 0.5 % of the monthly gross wage fund;
- health social securities: 5.2 % of the monthly gross wage fund;
- the national fund for work accidents and occupational diseases: between 0.15 % and 0.85 % of the monthly gross wage fund;
- the fund for guaranteeing the payment of the wage debts: 0.25 % of the monthly gross wage fund;
- vacations and health social security compensations: 0.85 % of the monthly gross wage fund.

The contributions borne by the employee (and retained by the source) are:

- social securities: 10,5 % of the monthly gross wage;
- unemployment insurances: 0.5 % of the monthly gross wage;
- health social securities: 5.5 % of the monthly gross wage (Mihai A., 2015).

If we follow the taxation level in other member states according to the public information available in this respect, in Finland, for instance, the following taxes and contributions are applicable:

- the income tax is progressively applied, and varies between 7 % (for an income between 13,000 EURO and 21,700 EURO) and 30.5 % (for an income higher than 64,500 EURO);
- besides the income tax, for the annual earnings higher than 2,200 EURO, a municipality tax is also applied, which varies between 16.5 % and 21 %;

The contributions borne by the employer refer to: social securities: between 2 % and 5.10 % of the gross wage; life insurance (only if it is provided by the applicable collective labour contracts): 0.08 % of the gross wage; work accidents: 1 % of the gross wage; unemployment insurances: between 0.65 % and 2.65 %. Within the contributions borne by the employer, we mention: unemployment securities: 0.34 % of the gross wage.

According to the public information available in this respect, in Luxembourg, the following taxes and contributions are applicable: the income tax is progressively applied, and varies between 0 % and 38.95 %; the employees also bear the costs related to a house insurance amounting to 1.4 % of the wage.

Both the employee, and the employer bear the following contributions: health insurances: 2.95 % of an employee's wage (both for the employee, and for the employer); social securities: 8 % of an employee's wage (both for the employee, and for the employer). Also, the employer bears the following consequences: workplace health: 0.11 % of the wage of all its employees;

workplace accidents insurance: between 0.43 % and 5.92 %, depending on the employee's professional activity.

The information regarding the tax burden shows that it was 39.0 % for EU-28 in 2013. The heaviest tax burdens for the low-income workers have been recorded in 2013 in Belgium, Hungary, France, Germany, Italy, Austria, Romania, Latvia and Sweden (all exceeding 40.0 %). On the other hand, the lowest tax burdens for the low-wage workers have been recorded in Malta, Ireland and the United Kingdom (under 30.0 %), as well as Cyprus (the most recent data is from 2007).

Within the EU member states, no clear tendency regarding the modification of the tax burden for the low-income workers has been outlined between 2005 and 2013: thus, the tax burden has been increased in 15 of the member states, and it has been decreased in 12 of the member states; no data is available for Croatia. The most significant decreases are recorded in the Netherlands (-9.3 %), and in Sweden (-5.7 %) (Eurostat).

The global figures at the EU-28 level indicate an increase by 4.8 % during 2005-2013 of the discouraging factors of the low-income workers, single and without children, in obtaining higher incomes, as a larger part of their incomes has been "lost because of the taxes", while the discouraging factors for a married couple with one single income and two children have increased by 3.9 % (Eurostat). In exchange, there have been very different evolutions among the member states. The most significant increase (44.1 %) of the income ratio that would be "lost because of the taxes" for a married couple with one single income and two children has been recorded in the Czech Republic, while in Portugal a decrease of 45.4 % has been recorded.

Bureaucracy and administrative tasks: excessive bureaucracy and administrative procedures (for instance, for enlisting a services provider or for formalising the employee-employer relation) contribute to the discouragement in declaring the provided labour. In the latter case, both categories of the relation (employers and employees) shall note and profit by the advantages of not declaring it. The availability of the handicraft cooperatives can also lead to the occurrence of the informal labour. In certain countries, the affiliation to a professional association is required with the purpose of exerting certain professions. If, on the one hand, the availability of these associations guarantees the quality of the products or services, on the other hand, they can act as barriers in the competition with the non-members who are consequently tempted to illegally exert their trade.

Faulty legislation, inadequate regarding the labour market: the insufficient promotion and awareness of the national legislation allowing the exertion of new typologies of the working hours restricts the information of the workforce regarding the practical possibilities for which they can opt, such as:

- atypical working hours, which implies a certain degree of flexibility of the working hours: non-standard working hours, usually set by means of mutual understandings between the employer and the employee (depending on the requirements of the clients, agglomeration of the works during certain periods of the month, of the year, etc.);
- partial working hours of several types: a) reduced number of working hours per day, but with daily working hours, b) reduced labour week - 8 hours per day, but only 2 or 3 working days/week, c) reduced working month - 8 hours daily, but only two working weeks per months;
- fixed-term labour contracts: a) fixed-duration contract, for instance: 6 months or b) until the exclusion of the product or service requested by the client (Pisică S., Vasile V., Voineagu V., 2012).

The limited knowledge of the current legislation regarding new types of labour can constrain the individuals to resort to the informal labour. When workers are aware of their rights, the risk of informal labour is much lower.

The demographical structure of the enterprises: in the areas where the labour market is dominated by a few large companies, the underground economy is relatively insignificant; in exchange, in the local economies where the small firms and even the micro enterprises are prevailing, the likeliness of informal labour and economy being manifested is very high.

Low competitiveness: resorting to not declaring labour can be caused by the need to operate with lower costs in the case of the firms from certain declining sectors of activity, which would not otherwise be able to survive on a competitive market. At any rate, in the long run, it is difficult for an undeclared sector to survive in the competitiveness race, because it is more disordered, and implies a high degree of mutual trust among the operators, which hinders the enrichment phenomenon that could take place in a closed circuit.

The cultural profile: in certain territorial areas, the informal economy is not perceived as a negative phenomenon. On the contrary, it is completely accepted, as it is considered to be an exchange of services or mutual aid which does not require to be declared (provision of cleaning services, seasonal agricultural labour).

The availability of opportunities: each individual chooses whether he gets involved or not in the undeclared labour, weighing up the advantages and disadvantages of the undeclared labour: in the former case, obtaining immediate, untaxed gains, in the latter case, the risk of being caught, the sanctions if he is caught or, in some cases, the moral reasons. In other words, the more an individual has the possibility to exert an undeclared activity with a low risk of being caught (because of the easy inspections, as (s)he is already covered in terms of social securities by his/her spouse), the higher the temptation to profit by the opportunity at hand, while informality is maintained (Pisică S., Vasile V., Voineagu V., 2012).

3. CONSLUSION

The difficult economic conditions and the increase of the poverty level during the transition period have led to the extension of the informal employment and external migration. Romania is concomitantly confronted with the economic crisis and an employment crisis, which has settled in the long run, and exerts a strong impact on the social life. There are a series of vulnerabilities of the labour market in Romania which are difficult to manage: the decrease of the employed population, precariousness of employment and increase of the workforce sub-employment processes, decrease of the number of persons performing a secondary activity, emergence and extension of the informal labour, migration and its forms: the legal permanent and temporary migration, illegal migration, illegal transit migration, and circulatory migration. Romania has gone through the crisis against the background of persistent structural issues, partially masked by the effusion during the previous economic growth. Currently, in spite of all its efforts, Romania is still far behind the European mean regarding the level of economic and social development, in general, and labour productivity at national level. One of the fundamental causes is the still very large disparities which are structurally separating Romania from the developed EU states. Despite the recent economic recovery, the conditions available on the labour market still show modest improvements. The Romanian labour market continues to be characterised by the persistence of a low employment rate and high inactivity rates, to which the decrease of the active population is added, further to the aging of the population and immigration, as well as the sub-employment in the agricultural field. The unemployment rate is roughly stable, i.e. around 7 % from the end of 2009, and it has recently recorded a slight decrease. The labour demand and creation of jobs are maintained at a low level. Although it has recorded a slight increase in 2014 (reaching 0.9 %), the vacant jobs rate is maintained under the

EU mean (1.6 %), and the ration between unemployment and employments is the fifth highest in the EU (over 4 in 2013). The lack of employment opportunities pushes people to non-participation or illegal participation, contributing to the migration of the workforce, both skilled and unskilled.

The current economic status of Romania is characterised both by micro-economic imbalances at the level of the real economy, and a precarious macroeconomic balance, further to the tax consolidation measures imposed by the government, overlaying the effects of the crisis. In the attempt to counteract the effects of the crisis, in 2008 and especially in 2010, they have taken several governmental measures of budgetary and structural reform, meant to determine the economic recovery, creation of jobs and provision of the sustainability of the public finances, which have not however created the conditions for the economy to be able to cope with the competitive global pressures, or attract new direct investments.

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THE IMPACT OF BRAIN DRAIN ON THE COMPETITIVENESS OF THE CROATIAN ECONOMY

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ABSTRACT

Brain drain is a global problem that involves the migration of highly educated people who are looking for better living conditions abroad due to dissatisfaction with the situation in their home country. The Republic of Croatia was increasingly confronted with the above phenomenon primarily because of high unemployment rate and other unsatisfactory living conditions. The economic development of a country depends largely on its competitiveness; moreover, a key factor to maintain and increase the competitiveness is the human capital. Long-term development of the economy of the Republic of Croatia depended largely on the quality and expertise of human resources, which entailed the fact that the investment in human resources, their professional development and encouragement of the implementation of measures for their stay in home country should have been highly positioned on the priority list of the Republic of Croatia. This scientific paper conducted an analysis and determined the relationship between competitiveness and brain drain, as well as stated measures and proposals for reducing the brain drain, which should consequently affect the increasing competitiveness of the Republic of Croatia. The research results suggested that the brain drain caused by dissatisfaction in the home country greatly affected the competitiveness of the Republic of Croatia diminishing its importance on global competitiveness ranking. These findings were confirmed by international experiences which indicated that it was necessary to continuously work to prevent emigration of highly educated professionals by giving them satisfactorily working conditions, opportunities for constant development and life in general in their home country.
Keywords: Brain Drain, Competitiveness, Republic of Croatia

1. INTRODUCTION

Brain drain is a term which has been used more frequently in recent times, and is becoming a significant problem for the Republic of Croatia. It involves the migration of highly educated people who, dissatisfied with the situation in their country of origin, seek better living conditions abroad. The inability to find employment in profession, lack of advancement and career development, as well as getting to know the world appear as the main drivers of potential brain drain. Unemployment is at a very high level in Croatia at the moment; therefore, highly educated people are prompted to consider leaving the country in search of better living conditions. Highly educated people are the main drivers of the overall development of an economy and thus increase of country's competitiveness; therefore, the migration of professionals necessarily means a loss to the country they leave behind and gain for the country to which those professionals arrive. Brain drain should be reduced if the competitiveness of the Republic of Croatia is sought to be improved. The portion of highly educated people in the total

workforce of Croatia is increasing through years; however, not sufficiently, while on the other side the brain drain is high, which consequentially causes a deficit of intellectual capital in Croatia. It is necessary to work on motivating and developing human potentials, as well as introducing new ways and techniques to reduce the brain drain. The purpose of this scientific paper is to determine the connection between competitiveness and brain drain, and to specify measures and proposals for the reduction of brain drain which will consequentially influence the increase of competitiveness of the Republic of Croatia. The aims of the research are to explain the state of brain drain in Croatia, what are the main reasons highly educated people are leaving their countries, in what way and to what extent are the brain drain and competitiveness connected, and to specify the measures for reduction of this phenomenon. The method of linear regression is used to determine the connection between brain drain and competitiveness of economies of certain countries.

2. ECONOMIC IMPACTS OF BRAIN DRAIN

Migration is any form of temporary or permanent resettlement and is a population phenomenon that is most difficult to predict. The simplest economic models related to migration explain how the motivation for migration stems from the real differences between wages among countries. There are models which explain migration motivation more precisely, showing that migration is driven by expected differences in wages rather than real differences in wages. However, there are authors who believe that these simple economic models do not comprise all motivational factors of migration and therefore have limited success in explanation. Numerous studies show that wages and differences in employment are only partly statistically significant indicators of migration (Andrijević Matovac et al., 2010, p. 365). The causes of emigration can be summarized in the following two reasons: push factors, due to which the individual leaves the country, and pull factors, due to which the individual chooses another country (Šverko, 2005, p. 1150). The push factors are mostly connected to dissatisfaction with economic circumstances in the country of origin, unemployment, low wages, inability to advance in career, job instability, housing, corruption etc., while the pull factors are connected to better economic circumstances in other countries, such as better living conditions, higher wages, better employment possibilities etc. Migration is most commonly driven by demographic changes and developed countries' labor market needs, differences in wages and pressure of crises in developing counties, inter-state networks and other factors (Skupnjak-Kapić, 2008, p. 4). All these factors combined support and will continue to support international migrations in the future.

When analyzing the impact of migration, it is necessary to differentiate between the impact on countries which accept the migrants and impact on countries from which the migrants leave. The initial impacts on the host country are rather mixed and varied. The immigration increases the relevant supply of workforce; however, it depends what qualifications the migrants have and whether the host country has the demand for those qualifications. If there is an imbalance between supply and demand of certain skills in the host country, and if the migration impacts precisely on that imbalance, it is likely that the migration will be useful for both sides. Furthermore, migration can influence the fiscal balance of the host country depending on whether the migrants pay taxes and similar levies. The effect of migration is also the acceleration of technological progress of the economy in terms of migration of highly qualified persons (Andrijević Matovac, et al., 2010, p. 366). Host countries have benefits from highly qualified workers because they increase the potential for innovations in strategic sectors and bring diversity into work teams.

There are many negative impacts on the countries which the migrants leave; the most obvious one is the loss of highly educated workers i.e. human capital decrease, which can negatively

influence the economic growth of the country. More so, the loss of highly educated workers can deem the country as less attractive to local or foreign investors. Emigration can cause a lack of workforce, innovativity and creativity; therefore, all that can make the country less competitive on the world market. Furthermore, the brain drain theories were often connected to theories of human capital. According to the theory of human capital, it is best to invest in education which will create and develop new experts, so every person in whose education the country invests is the human capital of that country. Therefore, if highly educated people opt to leave their home country, it causes invaluable damage and loss of the most valuable segment of the working population, on whom the future economic growth depends (Horvat, 2004, p. 3). This is the case of most transition countries, including Croatia, where the brain drain slows down the economic growth, development and coming out of transition.

The brain drain problem has represented and still represents a global problem. Each day more countries become a part of the "global war for talent"; immigration laws are in many countries adjusted to favor highly qualified workers, while the unqualified are forbidden from entering (Andrijević Matovac et al., 2010, p. 367). As a result, the rates of migration of highly qualified workers have increased. Economic consequences of brain drain have recently shown certain positive aspects, such as remittances; however, to countries with prominent emigration of qualified workers, brain drain is a very negative occurrence. The decrease of human capital in whose education a country invested can deem the country less attractive to investors, which negatively impacts economic growth, making the country less competitive on the world market.

3. RELATIONSHIPS BETWEEN BRAIN DRAIN AND COMPETITIVENESS

Competitiveness is one of the most important prerequisites for a country's economic development, and human capital i.e. the level of knowledge and skills is a crucial factor of maintenance and growth of competitiveness. The quality of workforce creates an ability of a country to develop, expand and utilize knowledge and information in a way to make the country more competitive and increase the quality of life (Kersan-Škabić, 2007, p. 43). According to the most widely accepted definition, competitiveness is an ability to achieve market success, which leads to a highly productive economy and improved living standard of the whole population. The acceptance of the concept of competitiveness is a crucial question of the future development of Croatia, as numerous studies have demonstrated a strong connection between the indicators of competitiveness and dynamic of economic growth, which has a return impact on the dynamic of foreign investments, abatement of poverty and inequality, political stability etc. The importance of workforce competitiveness is particularly significant for the competitiveness of the whole economy. The most important factors of workforce competitiveness are educational structure, compatibility of supply and demand in terms of knowledge, expertise and ability, and costs of labor (Bejaković, Lowther, 2004, p. 1).

The long-term development of the Croatian economy, as well as any other economies in the world, mostly depends on the quality and expertise of human resources, which means that an investment in human potential, professional development and measures for keeping potential emigrants in the home country should be highly positioned on the priority list. Since knowledge is a generator of wealth from both, the aspect of a company and aspect of the national economy, it makes the intellectual capital the most valuable asset. Therefore, financial markets are being replaced with the knowledge market, where the global "battle for the brains" started, and which will intensify in the future (Sundać, Škalamera-Alilović, Babić, 2016, pp. 105-106). Education and knowledge have always had a great significance for the development of an economy, but in recent times that significance has increased. Economies are more than ever dependent on the creation, distribution and use of knowledge. In times of fast changes and uncertainties, the economies which continuously create and distribute new knowledge will be successful

(Mrnjavac, 2002, p. 209). However, if highly educated people want to make a contribution and work for the economic progress, they must be an active part of that economy. If an economy does not resort a certain profile of highly educated people, their competencies, knowledge and experience will not be utilized. Precisely in such cases brain drain often occurs.

The Croatian economy still doesn't recognize the importance of education and competencies, while the economies of other countries understand the importance of highly educated people and try to utilize their knowledge in the best possible way. Long-lasting and continuous investments in people and their potentials, as well as material assets, bring positive effects on the economic and social development of a country, along with the rates of return on investment into human capital which are higher than the rates of return on investment into physical capital. This was confirmed by many economists, such as Ante Lauc from the Faculty of Economics in Osijek, who claims that the rate of return on investment into human capital is significantly higher than the rate of return on funds invested into physical capital. In his research on the impact of education on GDP per capita, Barro proved that an increase of the rate of enrolled into primary education of 1% brings a 2.5% increase of the GDP growth rate, while an increase of the rate of enrolled into secondary education of 1% brings a 3% increase of the GDP growth rate. Levine and Renelt determined that primary education brings a 3.17%, secondary 2.5%, and tertiary 3.71% increase of the GDP growth rate, Hanushek and Kim for secondary education a 3.6% increase of the GDP growth rate, Gemmel for primary education a 2.68%, secondary education 1.09%, and tertiary education 5.89% increase of the GDP growth rate. Furthermore, Benhabib and Spiegel got the result that for tertiary education, the GDP growth rate increased by 12 to 17% (Mujić, Legčević, 2008, p. 200). The macroeconomic policy of any country should be focused on raising the level of human development, which will, with the indispensable development of infrastructure, lead to a greater and faster economic development (Požega, Crnković, 2008, p. 67).

3.1. Connection between brain drain and global competitiveness

According to the data from the Global Competitiveness Report 2015-2016, the most competitive countries are mostly ranked low in terms of brain drain. For example, Switzerland, which was the most competitive country in the world in 2015 (i.e. which had the highest competitiveness index of 5.76), was ranked last in terms of brain drain. This leads to the conclusion that brain drain and competitiveness are connected; the higher the competitiveness of a certain country, the lower the brain drain, which is the primary hypothesis of this scientific paper. To prove this hypothesis, the method of linear regression was used, with competitiveness being the dependant variable, and brain drain the independent variable. The data from the Global Competitiveness Report 2015-2016 were used on a sample of 100 countries. The obtained equation is: "*Copetitiveness = 6,4556 – 0,6138 Brain Drain*" which points to the fact that, if brain drain increases by 1, competitiveness will decrease by 0,6138, which confirms the hypothesis that competitiveness and brain drain are connected and that reduction of brain drain can influence the increase of competitiveness. The suitability for linear regression is shown in the following chart.

Chart following on the next page

$$y = -0{,}6138x + 6{,}4556$$
$$R^2 = 0{,}7498$$
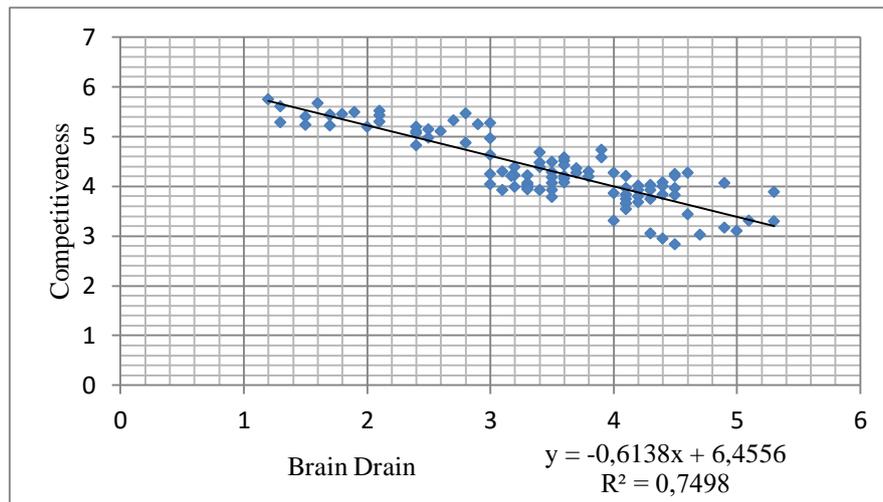
Chart 1: The Connection of Brain Drain and Competitiveness (author's analysis of data from Schwab, 2015-2016, p. 7, pp. 93-371)

The coefficient of determination (R^2) in the given calculation is 75%, which means that the method explained 75% of dependent variable variations. Furthermore, from the coefficient of determination it is possible to calculate the correlation coefficient which illustrates how the value of one variable can with a certain level of probability be predicted on the basis of the value of the other variable. The correlation coefficient (r) is 0.8659, which points to a high connection between competitiveness and brain drain. The Durbin-Watson statistic determined that there is no autocorrelation in the model, whereas the Durbin-Watson indicator was 1.762, which is within the critical values which are 1.742 and 2.258. The absence of autocorrelation in the model is a very good indicator, because autocorrelation oftentimes has negative effects on the model, making it unsuitable for prognosis.

3.2. Connection of brain drain and competitiveness of the Republic of Croatia
The Republic of Croatia is ranked relatively low on the scale of global competitiveness, while in relation to brain drain it is ranked high, which is demonstrated by the following table.

Table1: Global Competitiveness and Brain Drain of Croatia in the Period 2008 - 2015 (author's analysis of data from Schwab, 2015-2016, p. 7, pp. 93-371; Schwab, 2014-2015, p.13, pp. 105-391; Schwab, 2013-2014, p. 15, pp. 101-395; Schwab, 2012-2013., p. 13, p. 474; Schwab, 2011-2012, p. 15, p. 477; Schwab, 2010-2011, p. 15, p. 451; Schwab, 2009-2010, p. 13, p. 427; Schwab, 2008-2009, p. 10, p. 446)

Year	Ranking on the scale of global competitiveness	Brain drain ranking
2008	61st	60th
2009	72nd	36th
2010	77th	18th
2011	76.th	15th
2012	81st	19th
2013	75th	15th
2014	77th	8th
2015	77th	8th

The results of the Global Competitiveness Report in 2015 rank Croatia 77th out of 140 countries, which is a decline of 16 places compared to 2008. In terms of brain drain, in 2015 Croatia was ranked eighth, which demonstrates a distinct dissatisfaction of highly educated people with the circumstances in Croatia, and a decline of 52 places in only eight years. Brain drain is a powerful factor which has an influence on the decrease of Croatia's competitiveness and which slows the country's economic growth and development. For these reasons, it is necessary to implement measures and activities which will reduce this phenomenon.

4. PROPOSED MEASURES FOR PREVENTION OF BRAIN DRAIN

If Croatia wants to become a knowledge-based society, it must work on the measures for preventing brain drain, in order to completely utilize the knowledge and skills of highly educated people. Apart from the state and the private sector, non-governmental organizations must as well work on fighting the brain drain by inclusion into the process of connecting Croatian science with the global science, precisely through young and educated people (Horvat, 2004, p. 6). Young people should be encouraged and stimulated to emigrate professionally on short-term basis and at the same time conditioned to return in their home country (Horvat, 2004, p. 4). If they were to return to Croatia after spending a certain amount of time abroad acquiring new skills and knowledge, they would represent an advantage for the growth and development of the Croatian economy, and in that case the term would be "circulation of brains" which should be encouraged in the future.

Croatia should endeavor to improve the position of science by increasing investments into research and development which currently amount approximately 2,6 billion kunas (Croatian Bureau of Statistics, 2015, p. 535), encourage international scientific cooperation, creation and marinating contacts with scientists in the world for the purpose of creating active cooperation and attracting talents from the neighboring countries (Horvat, 2004, p. 6).

Croatia should work on developing a special programme for discovering young talents whose capabilities would be further developed and whose employment would be ensured. The gap between life expectations, demographic and economic structure, social conditions and political stability between less developed countries will still exist and stimulate the process of brain drain. However, it is to be expected that additional investments in science will manage to retain the most of young scientist population (Adamović, Mežnarić, 2003, p. 158).

A reform of the education system would help in reduction of the brain drain; a reform which would enable the utilisation of acquired skills and knowledge, improve the conditions for research, improve working conditions, ensure wages in the level of professional qualification and provide many other conditions which would have a positive impact on brain drain. Establishment of public–private partnerships and a flexible visa regime could have a positive impact on the stimulation of brain circulation rather than brain drain (Šćukanec, 2013). An increase of wages would surely be a great motive to stay for the potential candidates for brain drain. Furthermore, different incentives such as mortgage loans, improved job stability (stability of living conditions in general), assured kindergarten places and good quality education for children would have a positive impact on the reduction of migration of highly educated people.

Croatia should work on the reform of the pension system and change its labor laws. Industrialization in Croatia is at a very low level at the moment, and if it is successfully revived, Croatia will create more jobs and thusly reduce unemployment. Unemployment can also be reduced by generally increasing the GDP, which is something that should be worked on in the years to come.

5. CONCLUSION

The scientific paper was written with the intention to explain the term brain drain, to determine whether there is a connection between competitiveness and brain drain, to explore what are the main reasons why highly educated people move abroad and to see what measures could be implemented in the future to reduce this phenomenon. If there is a need to get to the bottom of the brain drain problem, it is necessary to view all causes which drive the emigration of highly educated people, and they are usually connected to economic issues such as low wages, unemployment and job instability. However, possible causes of emigration of highly educated people are the inability to advance, job instability, corruption etc. Highly educated professionals see the developed countries as an attractive destination which will give them better working and living conditions. Competitiveness is a very important prerequisite for the economic development of every country, and the level of people's knowledge and skills is a crucial factor in sustaining the growth of competitiveness. Investment in human capital, professional development and measures for keeping potential emigrants in the home country should be high on the list of priorities of every country. The method of linear regression was used on the data connected to the world competitiveness and brain drain to determine the connection between competitiveness and brain drain. It was proved the connection between these two phenomena exists, and that if competitiveness increases, the brain drain will decrease, and highly educated workforce will stay in the home country. If Croatia wants to become a knowledge-based society, it must work on the measures for preventing the brain drain, because this phenomenon has in recent years seized worrying proportions. The position of science in Croatia should be improved to keep the professionals in the home country and motivate them to achieve new scientific breakthroughs. Investments in research and development should be increased, international scientific cooperation should be encouraged, and contacts with scientists from all over the world should be maintained in order to create active cooperation and attract talents from the neighboring countries. The Republic of Croatia needs a reform of science which will enable the utilization of acquired knowledge and skills, improve the conditions for research work, improve working conditions, ensure wages in the level of professional qualification and provide many other conditions which would have a positive impact on brain drain. Higher wages, mortgage loans, job stability, increased industrialization which would open new jobs; those are all the factors which would motivate highly educated people to stay in Croatia.

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IMPACT OF SOCIAL MARKETING ON NATIONAL PROGRAMS FOR PREVENTION AND RESPONSE IN VUKOVAR

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ABSTRACT
Health is the most important resource that must be protected, nurtured and improved. Health promotion involves improving health and creating the potential for health rather than health problems or threats to health arise, and an important basis for the development of these activities is community involvement and intersectoral actions aimed at the prevention of risk factors and create an environment and conditions for the development of personal, social, economic healthy and productive life. Social marketing is a discipline that promotes community life and involves the application of marketing in the process of realization of social goals primarily aimed at satisfying general social needs, not profits. The principles and techniques of social marketing are most appropriate when the purpose of marketing efforts influence the behaviour with the intention to improve the state of health, prevent injury, protect the environment and to contribute to the life of the community, which is also one of the most difficult tasks of social marketing because people are asked change their previous habits. Prevention consists of activities, programs or political activities with the aim of creating opportunities for a healthy and productive life, and that the association encourages the promotion of health and changing those conditions which discharged directly to the individual's specific problem, which is related to health. Strengthening preventive activities is one of the objectives defined in the strategy of Croatian health care. This paper presents an overview of the impact of social marketing through responsiveness to national prevention programs as well as research results of implementation of the same in the town of Vukovar.
Keywords: health, prevention, promotion, social marketing

1. INTRODUCTION TO SOCIAL MARKETING

The purpose of social marketing is to improve the quality of life. Behaviours mean commitment that distinguishes social marketing of education. Ultimately, the goal of social marketing is to influence the behaviour and development of individuals and target groups in the realization of these benefits, which are related to health, education, general social welfare and more.

The concept of social marketing, according to Kotler (Kotler, 2006, p.17) assumes that the organization should determine the needs, wants and interests of target markets, to provide the desired satisfaction more effectively and efficiently than competitors in a way that maintains or enhances the welfare of consumers and society.

Changes in behaviour of the individual or target group comes at a time when it is caused by changes in the value system, when there is executed effect on personal motivation and education and awareness and willingness to change behaviour. The principles and techniques of social marketing are most appropriate when the purpose of marketing efforts influence the behaviour with the intention to improve the state of health, prevent injury and protect the environment and to contribute to the life of the communities.

Social marketing involves the use of marketing principles and techniques to influence the target audience to voluntarily accept, reject, modify or abandon behaviour in favour of an individual, group or society as a whole.

Marketing mix in the context of social marketing primarily seeks to affect the attitudes and motives of individuals in order to change them and to achieve the desired goal. Evaluation of the effectiveness of social marketing is carried out in the direction of determining the direction and intensity of the unfolding social change and their conformity with the goals of social marketing. Social marketing is conducted and evaluated continuously from the start of implementation on a particular area of social action to the end of certain stages with evaluation, in order to realize progress and achieved results.

2. NATIONAL PROGRAMS OF PREVENTION

National Health Development Strategy in the Republic of Croatia is a key document which defines the health care measures and activities for: maintaining and improving health, disease prevention, early diagnosis, timely treatment, care and rehabilitation. It was created as a result of recognizing problems related to health population, mechanisms to address them and improving quality of life.

National programs for early detection of colon cancer, cervical cancer and breast cancer were defined goals of public health campaigns which aim to reach the largest possible number of citizens and encourage them to review the response when you get a call for some of the three preventive programs, but also to motivate them to actively participate in the preservation and improvement of their health. Prevention and early diagnosis are one of the most successful methods in combating malignant diseases, but also contribute to reducing morbidity and mortality from cancer.

The Croatian Health Service Yearbook for 2014 is following the data of selected indicators of the World Health Organization in the framework of the "Health for All" in order to compare data and health status of the population among European countries. Croatia is among the countries that have a high rate of mortality, so earlier mentioned activities such as preventive examinations in the framework of national programs and their promotion, should indicate awareness of their health care in order to reduce these rates. The following table shows the standardized death rates for age 0-64 per 100 000 inhabitants for certain diseases for the period of 2009 - 2012 (2013 data were not published) in which it is clear that rates are falling. This we can connect with application of preventive examinations and early detection of certain types of diseases.

Table following on the next page

Name	Croatia (%)				EU (%)			
	2009	**2010**	**2011**	**2012**	**2009**	**2010**	**2011**	**2012**
Ischemic heart disease	31,59	32,48	30,47	30,43	19,48	18,84	18,56	0
Cerebrovascular disease	17,22	15,35	14,98	14,2	53,75	51,99	50,7	0
Malignant neoplasms	91,01	91,2	92,63	90,62	72,42	71,15	70,95	0
Cancer of the trachea, bronchus and lung	24,51	24,49	23,92	22,64	17,62	17,41	17,4	0
Cervical cancer	2,4	3,14	2,6	2,45	3,31	3,29	0	0
Breast cancer	12,69	14,57	11,93	14,05	13,23	12,85	12,92	0

Table 1 The standardized death rates for age 0-64 per 100000 inhabitants
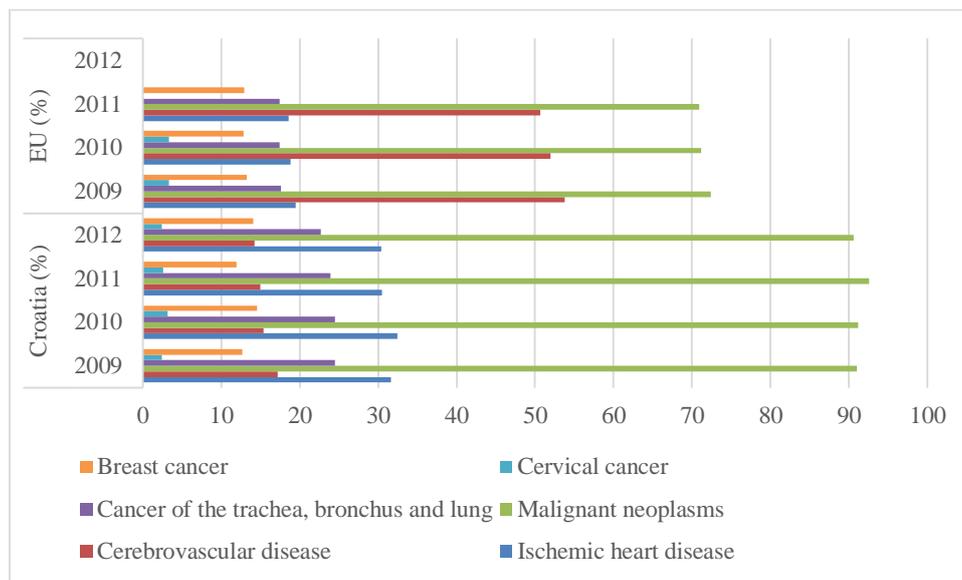
Chart 1 The standardized death rates for age 0-64 per 100000 inhabitants
(preparation of the author towards the Croatia Health Service Yearbook for 2014, p.67-70)

3. PROMOTING HELATH PREVENTION

A comprehensive model of health promotion focuses on good health, and is intended for the healthy and the sick.

Health promotion activities are different education, information, community development and organization, advocating for health and legislative support, the development of personal skills and public policies that support health and that are aimed at the prevention of risk factors.

The goal of promoting health is to enable individuals and communities increased control over the factors that influence health, highlighting the positive potential and the ability of individuals and communities to affect change in people's attitudes to health concerns and behavioural changes in lifestyle, and creating an environment that enables healthy living.

The effects of the change of attitude are achieved by the influence on the cognitive component of origin through communication and message content on the affective (emotional) component. The degree of emotional involvement enhances with the emotional appeals that are processed at a general level, with the holistic approach. Feelings play a key role in changing attitudes in certain situations. Persuasion aims to change the attitude or behaviour as a result of communication appeals to cognitive or affective part of the consumer's consciousness. Theory

of learning processes explains influences of persuasion on consumer behaviour (beneficiaries) (Kesić, 2003, p 146).

The concept of disease prevention means all procedures to prevent the disease or disable. Preventive medicine is a medical discipline that deals with the prevention of disease and the promotion and preservation of health. The goal of preventive medicine is a timely recognition of the disease and the implementation of treatment which prevent death, disability, injury and reducing the quality of life. The common goal of preventing disease and promoting health is preservation and improvement of health, which is related to positive human and environmental values.[1]

Health promotion is a comprehensive social and political process integrated in the concept of the new public health that supports efforts to focus from disease to health. The entire process is time-consuming as it relates to engagement and readiness of the Government and relevant ministries on the implementation of adopted policies and programs, monitoring, evaluation, development and campaigns that will affect the community and the development of awareness about caring for the health and recognizing the social, economic and environmental determinants of health certain community and the achievement of the set goals.

Health promotion is carried out with health actions (campaigns) that affect the expansion of health messages in the community and to encourage people to implement certain health tasks. The goal of health promotion is to enable individuals and communities increased control over the factors that determine health, highlighting the positive potential and the ability of individuals and communities to affect change in attitude of people to care for the health and behaviour change in lifestyle.

4. RESPONSES TO NATIONAL PREVENTION PROGRAMS – THE EXAMPLE OF THE CITY OF VUKOVAR

In this research about knowledge and response to national preventive examinations by questionnaire on the 405 respondents in the town of Vukovar, it was found that 76 % of female respondents are familiar with the national programs for health care (it is more than three-quarters) and only one quarter is not aware of them (24 %). In males the difference between those who know from those who don't isn't so pronounced. There are 53 % of those who know, but 47 % of those who are not familiar with the national programs for health care.

Knowledge of program	Gender		%	
	Male	Female	Male	Female
Yes	78	198	53	76
No	68	61	47	24
Total	146	259	100	100

Table 2 Knowledge of national programs for the prevention by gender

At response to the preventive examination there are only one-third of male respondents (37%) that responded to the preventive examination, and 63 % did not, in contrast to women who are 59 % responded to the preventive examination, and 41 % have not responded to the invitation obtained for preventive inspection.

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[1]Bočina, I. Prevencija bolesti i promicanje zdravlja; Bolje spriječiti nego liječiti retrived 28.04.2016. from http://www.zzjzpgz.hr/nzl/50/promicanje.htm
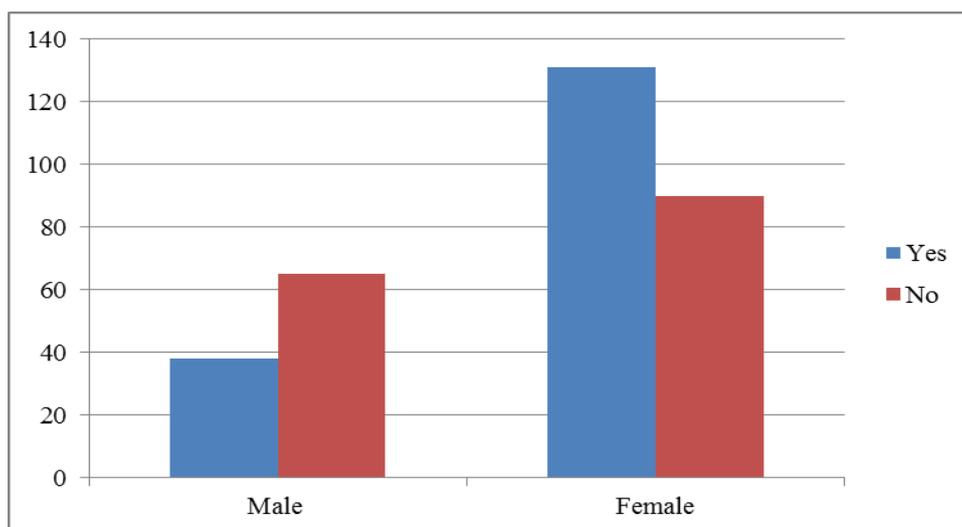
Chart 2 The response to preventive examination by gender

Analysing the response to preventive examinations by age group in Table 3 shows that as age increases, number of responded to invitation to preventive examinations is growing. The biggest difference in the number responded to invitation is between age groups 26-40 years and 41-55 years where the number responded to invitation raise from 29.59 % to 61.54 % .

Respons e	Age					% share of respondents				
	18-25	26-40	41-55	56-65	66 and more	18-25	26-40	41-55	56-65	66 and more
Yes	4	29	72	53	11	14,29	29,59	61,54	82,81	68,75
No	24	69	45	11	5	85,71	70,41	38,46	17,19	31,25
Total	28	98	117	64	16	100,00	100,00	100,00	100,00	100,00

Table 3 The response to preventive examinations by age group

When asked about the reasons for not responding to the preventive examination these answers were offered:
a) You are not familiar with the national program of preventive examinations
b) Lack of information on the same
c) You've done already this examination on your own initiative
d) You do not care; you will go on examination according to your needs
e) Other

22 % of male respondents indicated that they are not familiar with the national programs, which is 16 % more than women. 31 % of women have not responded to the preventive examination because they performed the examination on their own initiative unlike men which only 12 % performed the examination on their own initiative. 24 % of men and 16 % of women cited as the reason that they do not care because they will go to preventive examinations according to their needs.

211
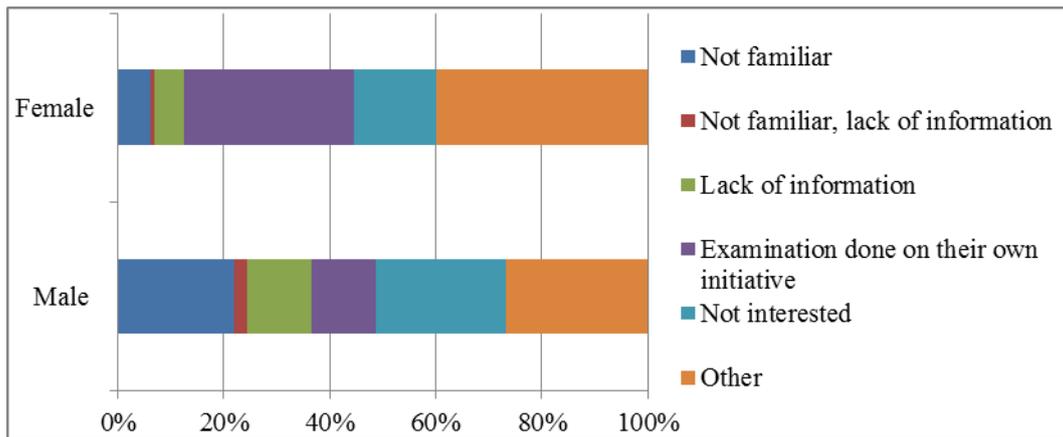
Chart 3 Reasons for not responding to preventive examinations by gender

The reasons for not responding vary and by the age groups of respondents. In the age group 18-25 years, 27, 27% of respondents said that they do not care and that they will go according to their needs. In the age group of 26-40 years 16, 28% of respondents say they are not familiar with the national programs of preventive examinations, 22.09% of them said that they performed the examination on their own initiative, and 19.77% of them stated that they did not care and they will go according to their needs. The age group of 41-55 years is the most familiar with the national programs of preventive examinations. Only 3% of respondents are not familiar with the program. 35, 82% of them done preventive examination on their own initiative. In the age group of 56-65 years, 24% are not familiar with preventive examinations, 16% performed already this examination on their own initiative and 16% do not care and will go according to their needs In the age group 66 years and over, 20% of respondents said that they are not familiar with the national programs of preventive examinations, 30% did it on its own initiative and 30% do not care and will go according to their needs.

5. CONCLUSION
People want and expect to affect their health and health determinants in its political, social, economic and physical environment. Such influence is developing communities and improving health.
Activities of social marketing in the area of education and awareness about prevention programs and actions as well as all activities related to the improvement and quality of life is necessary to intensify and implement in order to raise the level of concern for the health and the timely detection and treatment of certain diseases. They all affect the quality of life.
Organized, planned and ongoing activities from the different systems, work preventively to certain problems in society. The effects of these actions are not immediately visible, but all the effort is an investment in the health and well-being of present and future generations at the same time.

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APPLICATION OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT IN THE ARCTIC PROJECTS

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ABSTRACT

The main features of sustainable manufacturing projects in the Arctic Region are their strategic character, social orientation and focus on forming long-lasting competitive advantages; therefore, these projects acquire special meaning in conditions of high market risk. In these cases, the standard methods of evaluating project effectiveness are rendered inoperable, while prerequisites exist for use of the real option method (ROV). The ROV method factors in the value of managerial flexibility, which determines the possibility of changing project parameters at any stage. This makes it possible to overcome the risks associated with sustainable manufacturing projects the in Arctic Region and increase their efficiency. As the main efficiency criterion, we propose using the economic value added (EVA) indicator, which consists of the value of related investment decisions and the present value of the real option created by the Arctic Region project.

Keywords: *evaluation method of real options, Arctic Region, Sustainable Manufacturing Projects, risks, economic value added*

1. INTRODUCTION

The main aspects of sustainable development projects are classified as follows: strategic nature, social orientation and focus on the formation of stable competitive advantages. All of these aspects concern projects involving development of the Arctic Region, as its potential acquires special meaning for sustainable development of the Arctic Region and the global economy as a whole. The unique conditions of the Arctic Region in terms of political, climatic, ecological, social, geological and other considerations are viewed as presuppositions for the critical risks associated with area development projects. Moreover, a significant source of risk and uncertainty clouding Arctic Region development projects is the involvement of global technological chains and the protectionism of participating countries, whose interests are often at odds. Therein lie the complications associated with evaluating the risks of Arctic projects and their effectiveness. In such cases, standard evaluation methods of the effectiveness of such projects are rendered inoperable, whereas prerequisites exist for use of the Real Option Method (ROV).

Usage of the ROV method makes it possible to take into account the value of managerial flexibility, which, in turn, determines the possibility of changing the parameters of the project at any stage.

2. SUSTAINABLE ARCTIC-DEVELOPMENT PROJECTS OF RUSSIAN COMPANIES

2.1 Development targets

The following problems are already existent and could easily be faced in the intermediate and long-term perspective of projects involving the exploration and development of the Arctic Region:

— international legal problems — entailing the presentation of satisfactory geological proof and securing the sanction of other interested participants for the development of several fields;

— geological and ecological problems — the exploration level of the Arctic bottom is quite poor, whereas the ecological risks of Arctic Region development projects have not been sufficiently elaborated;

— technological problems — elaboration of new, and mobilization of existing, technologies involving the drilling, production and transportation of hydrocarbons from deep wells that require resource provision and the participation of various profile companies from different countries;

— military problems — mandatory measures to ensure the safety of the Arctic Region;

— significant financial investments: essential to development of the Arctic Region;

— problems of the social and economic development of the Arctic Region in the context of improving the quality of life of the local population;

— essential environmental development — utilization of the Northern Sea Route will make it possible to solve the problem of cargo transportation and guarantee reliable connections between the Eastern and Western parts of the territory at minimum cost, provided the appropriate logistical solutions;

— problems of interrelations in the coupled human-environmental system;

- contradiction of intentions among parties interested in the development of the Arctic Region (stakeholders).

Consequently, the risks associated with Arctic Region development projects at the present stage continue to grow, thereby diminishing their sustainability prospects.

2.2. Risks of Arctic Region development projects

In modern scientific studies, the classification of risk is often considered from the perspective of the operational (functional) approach and mostly applies to investments.

The risks of human interaction, technological factors and the environment in the Arctic are to a certain degree considered in [1, 2 et al], and considered in the context of sustainable development [3, 4, 5, 6, 7 et al]. We think that the risks of Arctic development is much broader and offer the results of our own research.

This is connected with the fact that in today's conditions, existing risks grow but modify as new kinds of risks appear. This must be taken into account during the development of Arctic projects in order to increase the attraction for stakeholders.

The specificities of the risks entailed in Arctic projects of significant strategic value are assumed to be considered in a few main contexts.

Firstly, in the context of the integration process of Arctic Region project participants, the risks can be observed in different operational aspects:

1) Organizational risks. Integration is a means of reducing risks for individual participants by means of their redistribution among other participants of integration, including government. Thus, integration is a method of managing the risks associated with the development of Arctic Region hydrocarbons. In this case, the issue of clarification of the list of such integration participants arises due to geopolitical problems.

2) Economic risks. The process of integration of Arctic Regional development participants is in and of itself is a source of risk, as the non-achievement of integration goals is one of the possible risks of integration (for example, the incorrect choice of integration participants; lost profits i.e. extra profit deficiency).

3) Synergy risks. The approach of Arctic Region development integration participants differs from other organizational methods by the possibility of receiving an synergetic effect. This effect may be positive as well as negative, which indicates the appearance of new kinds of integration risks – the risk of receiving a negative synergetic effect.

4) Political risks. The integration of Arctic Region development participants is influenced by political forces. This presupposes the presence of political risks, also associated with the participation of government in the activities of global technological chains.

5) Social and budgeting risks. The non-achievement of goal objectives in the Arctic Region may have a negative impact on the employment market and meeting the different budget targets to which integration participants are bound.

Secondly, geological and climatic complexities create additional operational risks: ecological, scientific and technological. The risks as per standard classification with regard to the item under study be defined as follows:

1. Strategic risks (non-achievement of goal objectives).
2. Economic risks (non-achievement of global level effect).
3. Financial risks, including investment risks (currency, liquidity, solvency, credit and other kinds of risks).
4. Operational risks (risk associated with the production and transportation of hydrocarbons).
5. Ecological risks (environmental damage, requirement for the compensation of losses and expenditures for ensuring ecological safety).
6. Social risks (losses for companies or the government at the social level).
7. Organizational managerial risks (losses associated with negative global level effect, the irrational management system and organizational structure of participant cooperation, loss of management resulting in the non-ratification of participant interest).
8. National economy risks (public, regional, economic sector risks etc.).
9. Political risks (negative factors of industrial policy influence).
10. Commercial risks (irrational cooperation with partners and customers).
11. Technological risks (technological obsolescence).
12. Scientific and technological risks (lag in technology, slow innovations, non-conformity of innovation quality to regulatory standards, technical and administrative barriers, brain-drain etc.).
13. Informational risks (information leakage).
14. Risk of force-majeure and emergency situations (due to environmental damage and technologically-related disasters). According to the RF Ministry of Emergency Situations, more than 100 environmental and technological emergency cases take place every year on average in the Arctic Region of Russia; in addition, a stable increase in the number of technology-related

emergency cases has been observed, in which transport accidents (30%) and equipment explosion-fires (24%) dominate[1].

15. Environmental risks (lack of possibilities for trade within Arctic routes in order to optimize transportation costs). No ship uses a direct route. To optimize costs, ships are forced to dock at transit ports to load and unload cargo. In the Arctic Region, such possibilities are very much limited.

16. Synergetic risks (negative synergetic effect).

In the third place, research indicates that the risks of Arctic Region hydrocarbon development should be widened and considered not only according to description but also in line with occurrence level:

- site risks: product risks, risks for individual and global companies, branch and regional risks, country-wide and international risks.

- risks for parties: risks for suppliers, partners, investors, consumers, risks for federal, regional and local authorities.

In the fourth place, the integration of participants in Arctic Region development projects constitutes a separate macroregional market, in which the role of government is significant, while each individual participant has its own interests and objectives, which are often contradicting, thereby resulting in increased risk.

Consequently, the market risks associated with Arctic Region development projects should be considered in terms of the following aspects: risks associated with the internal activities of individual participants of the macroregional market; risks within the internal macroregional market; risks associated with cooperation between individual participants of the macroregional market or general macroregional market with the global market.

The role of the economic policy conducted by authorities of different countries and levels: federal, regional, local or their combination – is particularly to be noted. The problem is that the goal objectives of the whole economic policy related to Arctic Regional development may not match the objectives of individual participants, which comprises additional risks within the framework of a targeted approach.

So, for Arctic Region development projects, the risk is the probability of their decreasing sustainability, which affects the attractiveness of these projects due to the influence of different factors: geological, organizational, managerial, technological, technical, ecological, social, scientific, environmental, economic, innovational, etc. and their interrelations.

The author's classification of the risks of the loss of sustainability of Arctic Region development projects per risk group in line with level, market and targeted approach in operational profile is indicated in Table 1.

The sheer variety of risk necessitates carrying out an additional study of the peculiarities of evaluating the sustainability of Arctic Region development projects.

2.3   Development target

The sustainable development approach suggests a model of balanced economic progress, whereby not only modern human demands are satisfied, but future generations' interests are protected as well in terms of securing a healthy and safe environment. In our opinion, the

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[1] Arctic Russia's prospects. Electronic resource. http://ru.apircenter.org/archives/3089

necessity of accepting this approach, while preparing and implementing development projects, concerns existing economic units as well as new ones.

Table. 1. Risk classification.

Classification criteria	Risk type
Level approach	
Risks for sites	product, risks for the company, risks for global companies and technological chains, branch and regional risks, country-wide and global risks.
Risks for parties	risks for suppliers, risks for partners, investors, consumers, country risks
Risks related to activities in the Arctic macroregional market	external risks, risks related to the internal markets of the Arctic Region, risks related to the internal activities of participants, risks associated with cooperation between Arctic Region development-projects- participants, risks associated with the overall macroregional market
Risks per management level	strategic risks, tactical risks, operational risks
Market (integration) approach	
In respect of markets	risks of external and internal markets, risks related to cooperation between the Arctic macroregional market and other regions
External risks	strategic, political, social and ecological risks, risks of loss of safety, national-economy-related risks
Risks for internal markets	organizational – managerial risks, risk of market concentration, political and social risks, environmental risks
Inter-organizational risks	currency, operational financial, investment, credit, technological, innovation and organizational risks
Inter-company cooperation risks	informational and social risks (conflict of interests), environmental risks
Risks on the macroregional market	strategic, synergetic, geological and organizational (loss of flexibility in solution-making)
Targeted approach	
Risks of the negative impact due to stakeholders' interest's contradictions	risks of the non-achievement of stakeholder goal objectives, risk of the loss of the influence of different participants in the region, risk of the loss of safety of individual participants
Risks of contradiction between the objectives of industrial policy and the objectives of stakeholders	risks of the non-achievement of the goal objectives of industrial policy at different levels, budget and social risks

The sustainability of economic development projects acquires special meaning in conditions of a high level of constant uncertainty (market risk) and remarkable discrete uncertainty (strategic

solutions and risks) [8]. While the Arctic is one of the least-developed regions of the world, it possesses tremendous potential for development of the global economy.

Moreover, exhaustible resources are located in the Arctic Region, whose utilization must be rational. Consequently, projects involving the exploration and development of the Arctic Region are highly-suitable for application of the sustainable development approach.

Investigation of the stability of the socio-economic system implemented in the works [3, 7 et al.], socio-ecological systems [5, 7], technical and ecological systems [9]. That said, important research aspects of system totality have not been revealed.

On the basis of existing studies [4, 7, 10 et al], we propose the definition of sustainable development in the Arctic – balanced on various aspects (social, environmental, economic, environmental, technological, innovation, organizational, etc. and their interrelations). Development of the region in which the rational use of its mineral resources raises the standard of living of its people and the environment is not disturbed. This is ensured by realization projects of sustainable development by stakeholders in the region to self-preservation and reproduction of its internal environment by harmonizing the relationship with the external environment.

Using the definition of sustainability, for example, [4, 10, 11, 12], we propose sustainable development projects in the Arctic to understand the ability of companies to achieve the strategic objectives in the changing conditions of the project in compliance with the principle of balanced development of the region. In this project, sustainability is considered by us in relation to the risks of the projects described in the preceding paragraph.

Evaluation of the Sustainable Development of the Arctic must be carried out in various directions, as we identified risks. For example, it is possible to assess the sustainability of: the foreign and domestic, market, financial, ecological, social, economic, environmental, etc. This set of indicators to assess the sustainability of each area is different by their nature, logic and method of calculation. [3, 4, 6, 11, 12, 13 …]. Thus, the sustainability of projects involving Arctic Region development shall be examined versus risk type, whereas their strategic sustainability shall be considered in general. Administration of the strategic sustainability of Arctic projects shall be determined as a choice of administrative solutions, which will allow for execution of the following condition (Formula 1):

$$K = \sum_{i=1}^{n} \sum_{p=1}^{m} (K_p - K_{ps}) \to \max \qquad (1)$$

whereas n — number of directions, for which sustainability evaluation is executed;
m — number of strategic projects;
K_p — value of sustainability indicator evaluated;
K_{ps} — allowed value of sustainability indicator (for kinds of risk).
The bigger excess of K_p indicator versus allowed value K_{ps}, the bigger is sustainability.
In order to administrate strategic sustainability, the following points are to be considered:
1) possibility of changing project parameters: scope, timing, financial etc.; that, for example, assumes a change in the time of project implementation, list of participants, scope of financing, etc.;
2) form at the stage of planning cooperation of projects participants with stakeholders in order to be able to diversify from failed project to another;
3) monitor and make corrections of parameters of the most sustainable projects on a timely basis including the list of participants;

4) participants in Arctic Region development projects are to move part of permanent expenditures to other projects with a better sustainability level in case of any delay in existing projects;

5) projects implemented to be effective as per different parameters: economic, ecological, social, technical and others as complex approach promotes sustainability increase.

Use of recommendations as specified above guarantees flexibility of Arctic projects and, consequently, their sustainability. In order to achieve this it is required to define an appropriate method for the evaluation of such projects. We believe that the construction of the integral index of assessing the sustainability of projects is not correct. We agree with [4], that all kinds of efficiency can be measured in monetary terms. According [4] Sustainable Value Added measures the surplus value adjusted for changes in eco- and social effectiveness and has thus been expressed in monetary. Later, in this article, we prove that sustainability should be evaluated using the method of ROV.

2.4. Selection of the method of evaluation of Arctic Region sustainability development projects

Many approaches for the evaluation of strategic projects exist, which can be divided into two groups: qualitative and quantitative methods. These methods have their own peculiarities, subject to evaluation purpose and applied tools. Let`s characterize the main methods per the groups as follows [3, 4, 6, 11, 12, 14, 15, 16]:

1) Expert methods of evaluation. This category includes methods of making solutions (brainstorming, Delphi method and others), check lists, scoring models and others. The constraining factor for using these methods is their subjectivity as well as limitation in evaluation of influence of certain projects and their participants on each other and influence on effectiveness of strategy in general.

2) Financial (economic) methods. The main insufficiency of the methods specified above is the limitation of reliable financial data on the project. Economic valuation is controversial largely because its purpose has not been clearly conveyed to non-economists, says David Pearce [17]. And we agree with him.

3) Presumable methods. As a rule, the following methods of this group are specially marked. The advantage of these methods is the possibility of evaluation of potential risk appearance and evaluation of new possibilities (managerial flexibility is evaluated).

4) Portfolio methods. These methods consider all projects of a company as a whole and allow to evaluate accumulated (integral) value of projects portfolio in general. Portfolio methods are not tools for evaluation of each individual project, but they can be used together with financial methods and techniques of expert evaluation of project advantages.

For high risk projects of the Arctic Region, development strategic sustainability can be achieved only on condition of proper managerial solution and appropriate level of managerial flexibility (capability to suspend, alter, abandon, increase investments or to speed up terms of disposal of investments). Consequently, presumable methods, and method ROV in particular, are viable to be used as a tool to prove projects of Arctic Region development [12, 14]. Measuring the contribution of stakeholders in the value of the project, we offer using the method of EVA further.

3.2. Usage of methods of evaluation of real options for the Projects of Arctic Region development

As constraints for attractiveness of the project for development of Arctic Region for private investors the following factors (except for the ones pointed in this article) can be specified:

1. low attractiveness of these projects due to their long payback period;

2. not sufficient experience of usage of modern methods for feasibility evaluation of projects effectiveness.

Currently for projects feasibility evaluation UNIDO methodology and discounted cash flow (DCF) method in particular is popular to be used but it doesn't always reflect properly effectiveness of strategic projects due to the range of limitations of this method. The authors offer to use Economic Value Added (EVA) and ROV methods additionally.

We assume that attractiveness of projects of Arctic Region development for stakeholders is to be considered in tactical and strategic aspects.

In tactical aspect, evaluation of attractiveness of projects of Arctic Region development is estimation of cooperation effectiveness within the process of current and operational activities in line with existing and planned agreements, contracts, liabilities and responsibilities. It's role is to ensure strategic attractiveness. DCF method can be used here.

In strategic aspect: strategic attractiveness of projects of Arctic Region development for stakeholders is their strategic sustainability, i.e. potential effectiveness of forming cooperation relations, development of integration processes, planning new markets under condition of maintenance balance of regional development (otherwise stated it is flexibility of managerial solutions). Method ROV can be used in this case.

With that, sustainability is considered operational wise (investment, financial, organizational, economic. ecologic and others) as well as at level representation (objects and parties involved in projects).

The attractiveness evaluation methods are oriented mostly at evaluation of one of components: tactical or investment. Therefore, evaluation of sustainability and general attractiveness of Arctic Region development projects can be executed by usage of methods DCF and ROV in combination.

Study of peculiarities and directions of usage of method ROV for evaluation of sustainability and attractiveness of development projects for stakeholders is represented by Vetrova E.N. [12, 18].

For evaluation of strategic attractiveness of projects, the option for growth method can be used. As per the option theory, this kind offers perspectives of remarkable growth in future. This kind of option is applied to development of high technological industrial branches, Research and Advanced Development feasibility studies, acquisition of strategically devises; all these are features of Arctic Region development projects.

The strategic projects that can be evaluated using real options method are as follows:
- project of field development;
- project of hydrocarbons production and transportation;
- project of exhaustible resources processing;
- project of enterprises integration for Arctic Region development.

Evaluation of flexibility allows to increase value and strategic attractiveness of a project from one side and from the other side allows to create sustainability which will allow to be secured from some kinds of risks that may bring to the partial loss of sustainability. Value of Arctic Region projects is combination of project results harmonized with complex of values for

stakeholders. This complex is more completely and consistently realized through projects portfolio in which projects are defined as per purposes and kinds of effectiveness – economic, social, ecological and others.

Use of proposed methodological approach will allow to promote attractiveness of Arctic Region development projects and, consequently, to limit some kinds of risks for stakeholders and to increase sustainability of these projects.

As stated above in this article, attractiveness and sustainability of a project can be evaluated by using methods ROV and DCF in combination. We assume that indicator EVA, which is calculated on the basis of NPV and ROV, can be criteria for project value estimation. In this case estimation algorithm will be as follows

1. Value of company solutions taken, NPV, is calculated. If NPV≥0, then calculations are completed and a project proved to be non-high risk one and can be accepted. If NPV≤0, whereas value of a project is high, we proceed to the following step.

2. To define parameters of real option on the basis of binomial model – present value of the real option [19], PVRO, which allows evaluation of project sustainability.

3. To calculate indicator EVA, which consists of value of company investment solutions taken (net present value, NPV) and value of project sustainability:

$$EVA=NPV+PVRO$$

In this case option is reasonable to be executed (i.e. PVRO>0) on condition that S>K, where S is current value of underlying asset (financial flow that appears in case of execution of strategic solution), K — expenses for option execution (initial investments for execution of strategic solution).

Consequently, EVA indicator is criteria of project effectiveness allowing to evaluate value and sustainability of a project. It promotes increase of attractiveness of Arctic Region projects for stakeholders.

As an example of the proposed method is considered a strategic evaluation the attractiveness of the project of primary processing of hydrocarbons in the Arkhangelsk Region. Stakeholders identified as the main asset of the option planned cost of the project equal to estimated without taking into account the risk of RUB 59,861,000. Options binomial model presented in Table 2.

Table 2. Parameters of binomial model

Standard deviation of the value asset, σ	0.35
The time interval (years), *h*	1
Real risk-free rate, r_f	0.1
Calculated value, *u*	1.4190675
Calculated value, *d*	0.7046881
Calculated value, *p*	0.56

The calculations have shown the value of EVA = 188 347 th. rub. (Table 3). This indicates a higher attractiveness of the project as compared to the traditional method of calculation (DCF).

Table 3. Project of the enterprise primary processing of hydrocarbons, th. rub.

methods	basic parameter	Calculated value
DCF	NPV	59,861
ROV	PVRO	128,474
EVA	EVA	188,347

4. CONSLUSION

In the present article the idea of use of sustainable manufacturing concept for development and execution of Arctic Region projects was proved. We defined the meaning and concept of projects sustainability as well as tasks and directions to be used to manage sustainability.

Researches carried out revealed high risks of Arctic Region development projects which decrease their sustainability. It is necessary to monitor risks in order to increase sustainability of projects. The management will be effective if objects of risks and their characteristics are defined. Therefore, we identified and classified risks of Arctic Region development projects, which limit projects sustainability.

In the process of research, we revealed existence of some problems with attractiveness of Arctic Region development projects for stakeholders, which are linked to environment factors as well as to evaluation methods used.

The critical analysis of existing project evaluation methods allowed to define the main methods of evaluation: method DCF – for evaluation of current attractiveness, method ROV – for sustainability evaluation and method EVA – for evaluation of complex value of Arctic region development projects. Combined use of these methods will allow to prove attractiveness of Arctic projects for stakeholders and consequently to attract additional resources for rational development of Arctic Region.

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CRITICAL SUCCESFUL FACTORS FOR PUBLIC PRIVATE PARTNERSHIPS IMPLEMENTATION IN ALBANIA

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ABSTRACT
Public private partnerships are increasingly becoming a popular tool worldwide, seen by the governments as means of providing infrastructure projects. PPP-s are an alternative for realization of the infrastructure projects that could not be undertaken otherwise due to the insufficient government budgets. PPP-s are complex and involve different parties, therefore their implementation is not easy. Therefore, the identification of the key success factors for the successful implementation of these projects is very important. Questionnaire survey research examined the relative importance of eighteen critical successful factors (CSF) in PPP implementation in Albania. Factor analysis revealed that appropriate factor groupings for eighteen CSF-s are: Project implementation, Effective procurement, Favorable economic conditions and Legal and Social Factors. This study aims at developing a new practical framework to help decision makers both in public and private sectors in selecting the optimum public private partnerships in Albania taking the most important CSFs into account.
Keywords: Public Private Partnerships, Key success factors, Public infrastructure projects

1. INTRODUCTION

Many countries in the world are trying to find newer ways of managing and financing the public assets and services such as roads, airports, telecommunication and power. The traditional way of providing these services to the citizens has been through the use of government, which, in most cases, used to be the sole supplier of these public goods and services (Farlam, P.2005). However, due to limited resources and increased financial obligations faced by national governments, another alternative way is emerging and is through the use of and involvement of the private sector in the financing and management of public goods and services (European Commission, 2003). These arrangements can take various forms ranging from full private participation to semi or quasi participation of the private sector. The latter gives rise to an arrangement called Public-Private-Partnerships (PPPs). PPP s are defined as arrangements where the private sector supplies infrastructure assets and infrastructure-based services that traditionally have been provided by the state (Hemming, 2006). Since the early 1990s, PPP s have become an important tool in the infrastructure service delivery in both developed and developing countries. In fact, the PPP process means that both the public sector and the private sector have certain advantages relative to each other in the performance of specific tasks (World Bank, 1994). It has also been observed that through a partnership arrangement, the public and private sector can merge to provide qualified public services and infrastructure in the most economically efficient manner where the government transfers all responsibilities, risks and rewards for service delivery to the private sector (NASCIO, 2006). With these advantages inherent in the PPP s, governments are turning to public private partnerships as vehicles for delivering high quality services to the consumers (Eurostat, 2004). PPP s are also seen as a way of involving the private sector in infrastructure investment in order to utilize the new technology and expertise, shifting some of the risks to the private sector and gaining access to increased capital, and thus contributing to higher operating efficiencies (Polockova, 1999). As

Abadie, R. and Howcroft, A. (2004) point out, PPP s have become intertwined in the design, financing, operation and maintenance of public goods and services. The primary aim for the private sector involvement in the infrastructure programs is to give the taxpayers better value for the money they pay. According to De Bettignies, J. and Ross, T. (2004), there are several secondary aims that are served and may include such things as increasing the operating efficiency by benefiting from the private sector management, expertise and the new technology. Another advantage is to gain access to increased capital provided by the private sector as well as to increase the service quality through innovation (Gray, P. 2001). In this situation the government plays the role of the market regulator and buyer of the goods and services which now are managed and delivered by the private sector at the same cost or probably at a lower cost (Estache, A 2001). Public private partnership (PPP) is becoming a favorable choice for policymakers in implementing important public works projects, especially due to the shortage of government financial resources and where it is necessary to counter public inefficiency (Terry, 1996; Alfen et al., 2009). PPP enables governments to utilize alternative private sector sources of finance while simultaneously gaining the benefits that the private sector can bring in terms of skills and management. Ultimately PPP can bring greater value for money from public sector resources (EBRD, 2007). With the recent successes with the PPP model in other countries, PPP has become also common in Albania. This paper focuses on the results obtained from a recent survey of PPP projects in Albania concerning the factors that are considered critical to the success of PPP project implementation.

2. METHODOLOGY
Collection of Research Data
An empirical questionnaire survey was undertaken in Albania to analyze the CSFs that contribute to the success of PPP projects in Albania. In this study, the target survey respondents of the questionnaire included agents from both sectors, from the public and the private. Out of 490 questionnaires, only 145 questionnaires returned, 94 from private businesses and 54 from the public institutions. These respondents were requested to rate their degree of agreement against each of the identified CSFs according to a seven-point Likert scale _1=least important and 7=most important_. In addition to these questions, the interviewed persons were asked to answer the following questions as well:
- Which sector you represent
- Public?
- Private?
- Which investment form you think is more efficient
- Traditional procurement?
- Public private partnership?

3. AIM OF THE STUDY
The aim of this study is to identify which are the key success factors for the successful implementation of Public private partnerships in Albania. This works aims at developing a new practical framework to help decision makers both in public and private sectors in selecting the optimum public private partnerships in Albania taking the most important CSFs into account.

4. FACTOR ANALYSIS TECHNIQUE
Factor analysis _FA_ is a statistical technique used to identify a relatively small number of individual factors that can be used to represent relationships among sets of many interrelated variables (Norusis 2008). This technique is powerful to reduce and regroup the individual

factors identified from a larger number to a smaller and more critical one by scores of the responses (Lam et al. 2008). Due to the large number of CSFs considered in this study it was important to define a set of commonalities. The number of individual factors would be required to represent that set of data was determined by examining the total percentage of variance explained by each individual factor (Garson 2008). In this investigation, principal components analysis _PCA_ was used to identify the underlying grouped factors because of its simplicity and distinctive characteristic of data-reduction capacity for extraction. In order to obtain a clearer image, extraction with Promax rotation and Kaiser normalization was conducted through the Statistical Package for Social Sciences _SPSS_ FACTOR program.

Appropriateness of the Analysis Technique

Various tests were required to examine the appropriateness of FA for the extraction. The KMO measure of sampling adequacy and Barlett's test of sphericity for the extraction individual factors were conducted in this research. The KMO value of this research is 0.801 which shows a good degree of common variance _Table 5_. The value of the test statistic for Barlett's sphericity is large _chi-square value=742.799_ and the associated significance level is small _p- lue=0.000_, implying that the population correlation matrix is not an identity matrix. The Cronbach _ is a model for checking internal consistency _reliability_ between 0 and 1, based on the average interitem correlation. The standard rule is that _ must be greater than approximately 0.70 to conclude that the scale is reliable _SPSS 2003_. The overall _ value for the 18 CSFs is 0.750, indicating that there is good internal consistency

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Treguesi i pershtatshmerise se mostres.		.750
Bartlett's Test of Sphericity	Approx. Chi-Square	867.818
	Df	153
	Sig.	.000

The figure confirms that a 4-factor model should be sufficient for the research model.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.785	26.581	26.581	4.785	26.581	26.581	3.094	17.188	17.188
2	2.302	12.791	39.372	2.302	12.791	39.372	2.648	14.712	31.900
3	1.859	10.326	49.698	1.859	10.326	49.698	2.472	13.733	45.633
4	1.220	6.776	56.474	1.220	6.776	56.474	1.951	10.841	56.474
5	1.056	5.868	62.341						
6	1.033	5.738	68.080						
...	...	...	...						
18	.223	1.237	100.000						

Extraction Method: Principal Component Analysis.

As per the above diagram shows that the 4 group factors created explain 56.47% of the total factors.

Project Implementation (Factor 1)

This underlying group consists of five CSFs including:

- Competitive procurement process
- Project technical feasibility
- Appropriate risk allocation and risk sharing
- Well organised and committed public agency
- Commitment and responsibility of private sector

Level of Macroeconomic Conditions (Factor 2)

This underlying group consists of four CSFs including:

1. Fiscal policy
2. Sound economic policy
3. Favorable macroeconomic conditions
4. Government involvement by providing guarantee

Effective procurement (Factor 3)

This underlying group consists of five CSFs including:

1. Good management of PPP
2. PPP Contract monitoring
3. Good governance
4. Transparancy in the procurement process
5. Commitment of the private sector

Legal and Social Factors (Factor 4)

This underlying group consists of four CSFs including:

1. Adequat Legal Framework
2. Corruption Level
3. Private sector potential
4. Social support from the society

Regression Analysis Results

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
	Project Implementation	1.186	.271	19.162	1	.000	3.275
	Appropriate economic conditions	1.172	.300	15.244	1	.000	3.230
Step 1[a]	Procurement efficiency	1.018	.302	11.360	1	.001	2.767
	Legal and Social factors	.303	.270	1.262	1	.261	1.354
	Agent	-.451	.521	.750	1	.386	.637
	Constant	.992	.298	11.050	1	.001	2.697

a. Variable(s) entered on step 1: "Project Implementation", "Stable Macroeconomic Environment", "Efektiv procurement", "Ligjor & social factor", and "Agent".

The model is:

$$P(for\ inve_{0;1})^n = \frac{1}{1 + e^{-(\beta 0 + \beta 1\ impl_{proj} + \beta 2 app_{cond} + \beta 3 proc_{-effic} + \beta 4\ fac\ leg_{-soc} + \beta 5\ agent}}$$

Which represents the independent variables *imp_proj* or "Project Implementation", *kusht_persh* or "Stable Macroeconomic Environment", *efekt_prok* or "Efektiv procurement", *fac_leg_soc* or "Legal & social factor", *agent* or "Agent" and the constant.

- 1.186 represents the coefficient β_1 in the above regression. The positive sign shows the positive relation between the project implementation and the investment form. This indicates that as the degree of the project implementation increases, so does the probability to choose PPP as an investment form. In other words, if the "project imlepentation" increases by one degree, the chances to invest through PPP is 3.275 times higher than the investment through traditional procurement, other factors being constant. This factor is considered important with a confidence level of 99% for choosing the investment form.

- 1.172 represents the coefficient β_2 in the above regression. The positive sign shows the positive relation between the "Level of macroeconomic conditions" and the investment form. This indicates that as the degree of the "Level of macroeconomic conditions" increases, so does the probability to choose PPP as an investment form. In other words, if the "Level of macroeconomic conditions" increases by one degree, the chances to invest through PPP is 1.172 times higher than the investment through traditional procurement, other factors being constant. This factor is considered important with a confidence level of 99% for choosing the investment form.

- 1.018 represents the coefficient β_3 in the above regression. The positive sign shows the positive relation between the "Effective procurement" and the investment form. This indicates that as the degree of the "Effective procurement" increases, so does the probability to choose PPP as an investment form. In other words, if the "Effective procurement" increases by one degree, the chances to invest through PPP is 1.018 times higher than the investment through traditional procurement, other factors being constant. This factor is considered important with a confidence level of 99% for choosing the investment form.

- 0.303 represents the coefficient β_4 in the above regression. The positive sign shows the positive relation between the "Legal and Social factors" and the investment form. This indicates that as the degree of the "Legal and Social factors" increases, so does the probability to choose PPP as an investment form. In other words, if the "Legal and Social factors" increases by one degree, the chances to invest through PPP is 0.303 times higher than the investment through traditional procurement, other factors being constant. Considering this probability (0.303) this factor is not statistically important to choose the investment form.

- Coefficient -0.451 is referred to the impact of th factor "agent" which is public or privat, thus β_5. Since the sign is negative, the relativeprobability will be below 1. This indicates that when the agent is privat, the chances to choose PPP as an investment form are lower than if the agent was public. Considering this probability (0.451) this factor is not statistically important to choose the investment form.

- $\beta_0 = 0.992$ is the constant. The sign of the constant is positive. However, in general this term is not explained.

If the above information we insert it in the regression equation, the equation will now take this shape:

$$P(for\ inv0_{;1})$$
$$= \frac{1}{1 + e^{-(0.992 + 1.186\ impl_{proj} + 1.172 app_{cond} + 1.018 proc_{-effic} + 0.303\ fac\ leg\ _{soc} - 0.451\ agent}}$$

5. CONCLUSION

As a conclusion, the logit model analysis shows that "Project Implementation", Level of Macroeconomic conditions" and Effective procurement" are statistically important to define the investment form while "Legal & social Factors" and the "Agent" are statistically not important.

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ECONOMIC EMPOWERMENT OF WOMEN IN KOSOVO AND FACTORS THAT DIRECTLY INFLUENCE WOMEN'S ECONOMIC EMPOWERMENT

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ABSTRACT
The empowerment of women in economy is considered a key and driving factor of family welfare in the first place, and sustainable economic development in our country – Kosovo. Economic empowerment generally refers to the ability of a woman to be successful, to achieve her goals and to advance her position, in a word, to become a part of economic decisions. This paper will generally discuss women's economic independence; we will present the current position of women and the efforts that public and private institutions are making to lighten somewhat the situation, which is still depicting women as economically weak. The purpose of this paper is to identify the factors that directly affect the economic empowerment of women in Kosovo, highlighting all difficulties that women face in their way toward economic independence, coming up with a conclusion followed by a list of recommendations that will help in faster emancipation of women in Kosovo.
***Keywords**: women's economic empowerment, gender equality, women's emancipation, gender discrimination*

1. INTRODUCTION
Women's economic independence is a necessity for a healthy society. Sustainable economic and social development is closely connected with women's empowerment in business, which results in resolving specific economic, political, and social problems. The development and emancipation of women in today's modern society gives an idea of the state in terms of the stage of culture they have reached as a nation. A healthy family is the result of an emancipated woman, and we cannot have healthy families in a society where women are trampled on and not supported. The economic empowerment of women is empowerment of the society as a whole; it is an investment in the future, an effort for a better today and tomorrow. Given the extent of the influence of women's care in the family, in addition to their role in childcare, they have also contributed quite a bit in many processes that have moved our country forward. However, with all that dedication and contribution, gender barriers are still not overcome. Women in Kosovo are still not entitled to family inheritance as a key factor that we will discuss, since unfortunately, the division of property in our country is still done according to tradition and in most cases, and only male family members have the right to that property. This is considered a handicap in our society since the economic independence of women is closely linked to the family emancipation, and we must work hard since there is still much work to be done in improving the position of women and their economic empowerment.

2. FACTORS THAT DIRECTLY INFLUENCE WOMEN'S ECONOMIC EMPOWERMENT
The key factor that directly influences women's economic empowerment is undoubtedly gender inequality, which involves a number of factors:
- Education;

- Gender equality in the labor market;
- Participation of women in the family inheritance;
- Women's access to property.
- Education and "truncated" education

Kosovo has been making great efforts recently to promote gender equality; the Kosovo Constitution has a consolidated legal framework, which guarantees and protects women's rights, but apparently, it is not being implemented as it should, especially in rural areas where women are far from any information.

"Truncated" education or dropping out of high school, which is as high as 29% (Gender Equality Framework Report, Kosovo 2014), directly affects women's oppression. Those women think that they were born to create a family, take care of children, and they never think that they could also earn income for the family just like their husbands.
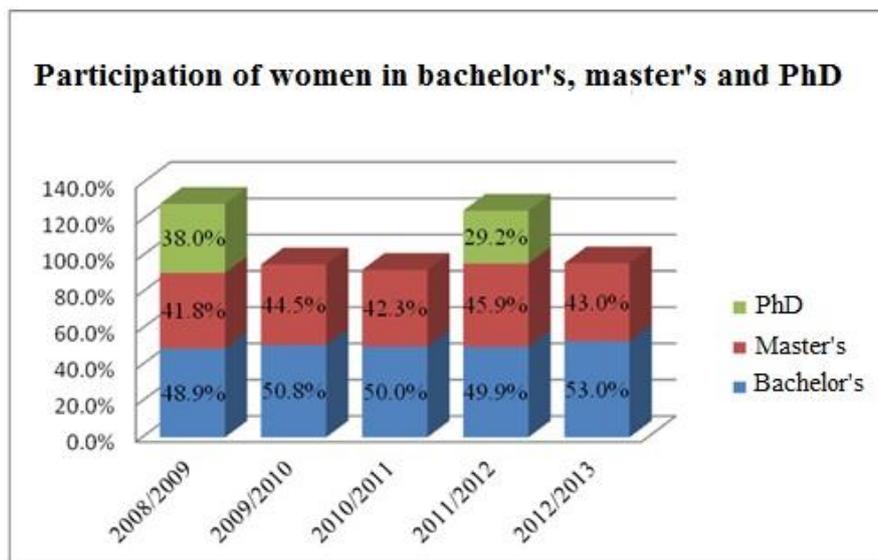
Chart 1 : Participation of women in bachelor's master's and PhD level
Source: MEST, Education Statistics 2004-2013, elaborated by the author

As for university education, we can see that over the majority of years, women lead compared to men. The lead is greater in 2012/2013 where women were 20% more educated on university level compared to men. As for bachelor's level participation, the greatest percentage is in 2012/2013 with 53%, and women's participation in master's level was higher in 2011/2012 with 45.9%. There is little information on women's participation in the PhD level where in 2008/2009, their participation was 38%, while in 2011/2012 it was only 29.2% (Ministry of Education, Science, and Technology, 2004-2014). The main causes for such low participation in PhD level studies are considered the few opportunities that our country gives, as well as limitations in the selection of courses of study.

3. PARTICIPATION OF WOMEN IN FAMILY INHERITANCE

Kosovo is a territory with specific cultural and historic traditions where the fact of parallel existence between tradition and inherited customs is evident.[1]

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[1] Valbona Begolli: Women's Position in Kosovo with Specific Emphasis on Customary Law, pp 8, Prishtina

In most cases, women in Kosovo do not have the right to family inheritance since the family property is divided equally only among the family men. Although there is a law that enables women to have the right to family inheritance, this law is not applicable in practice.

According to Kosovo Inheritance Law: "Inheritance is the transfer of a person's property based on the law or on a will (inheritance) from a deceased person (decedent) to one or several persons (heirs or legatees), according to the provisions set out in the present Law. All natural persons under the same conditions are equal in inheritance."[2]

The Inheritance Law also stipulates that persons that wish to renounce the property may do so by signing it out. Apparently, in our country, the signing of property renouncement is being used the most since it remained a custom for a girl not to inherit any property from her family, otherwise, if she does not sign the renouncement from that property, all ties with the family will be cut. However, the fact that a woman does not inherit any property after the death of the decedent (father) even if she has no brother is still disconcerting.

In 2014, women owned only 15.2% of properties including land ownership (the gender of 10% of owners is unknown). Therefore, women's ownership is estimated at 8%. Although the legislation ensures equal rights to inheritance and extra-marital children, during the dissolution of marriage, women often waive their inheritance rights in courts, giving their share of family property to their brothers. In 2011, the NGO "Norma" reported that of 4,994 court cases monitored in the five regions of Kosovo, there were only 487 cases (9.75%) where women and men inherited property equally. Women sometimes waive their right to inheritance to continue having the protection of their brothers or family.

To change this "miserable" condition, cooperation between several stakeholders, such as governmental institutions, civil society, and most importantly women's self-confidence is required. Therefore, this long road and it requires much dedication.

How is it possible for a woman to start a personal business when she does not have anything in her name? Women must have access to property rights and inheritance to have access to loans. Women own 5-11% of businesses in Kosovo. 99.9% of businesses owned by women are microenterprises that have from 1-9 employees; women's businesses have an average of 3.07 employees compared to businesses run by men, which have 5.27 employees. Women cannot have access to loans like men do because they lack collateral. Thus, men own about 92% of property used as collateral in Kosovo. Only 3% of commercial bank loans are given to women. Women also have a higher percentage of loans rejected. (Gender Equality Framework Report, Kosovo 2014)

4. GENDER EQUALITY IN THE LABOR MARKET

The concept of gender equality is an essential concept that can be used to measure and assess the level of emancipation of a society. Gender equality at work is an important issue that has an impact on both the individual perception about professional achievements and the perception of an organization.

According to gender studies, there is a gender imbalance in employment in Kosovo. The chart below shows the percentage of employment by gender and age. As can be seen, only 28.4% or 338,364 of the total Kosovo population of working age are employed. Only 12.9% of them are

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[2] Kosovo Inheritance Law 2004/26

women and 44% are men, thus leading to a gender imbalance in the labor sector in Kosovo. (ASK 2013)
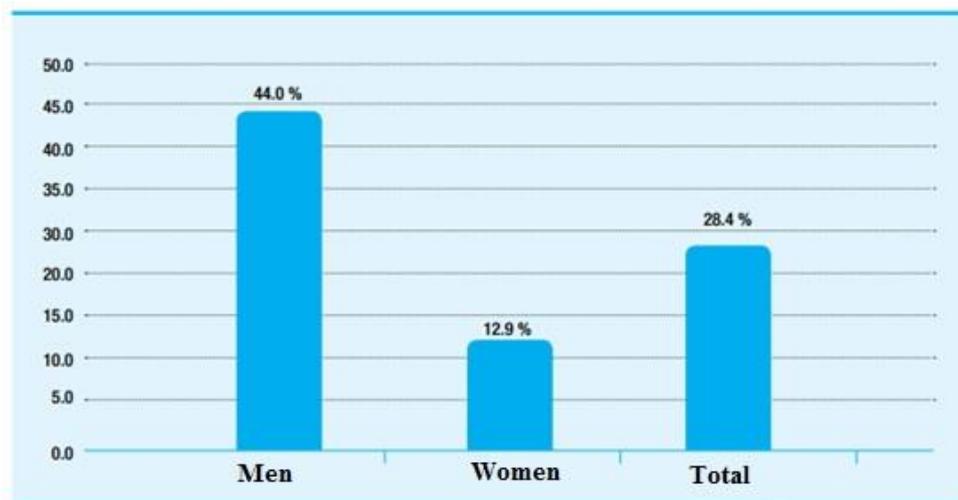
Chart 2. Report .Labour force questionaire, 2013

Gender equality is one of the core values of a democratic society. A society that invests in gender equality not only leads toward improving the lives of girls and women, but also to positive transformation of the of boys' and men's way of life. Therefore, in the short term, by promoting equality for several underrepresented groups such as women, we manage to make the community and society stronger and richer, thus contributing to long-term benefit of all members.

Therefore, by working toward gender equality, we can also challenge the traditional gender roles. Consequently, we not only help in creating equal opportunities for both sexes, but also improve relations between men and women. Moreover, gender roles that are not based on gender stereotypes create a wide range of options for men and women, as it is known that in a country like ours, gender segregation is still a strong characteristic also in the labor market. This is then also reflected in education and upbringing, thus limiting both sexes in their options and choices.

Gender equality as one of the main goals of a country's development should be achieved through the implementation of several measures, such as adopting several legislative changes, promoting positive discrimination measures in sectors where women are underrepresented, support of businesses, access to loans, etc.

5. INTEGRATION OF WOMEN IN THE SOCIETY

The integration of women in the society affects the economic growth and building a sustainable democracy in Kosovo. Kosovo Women's Chamber of Commerce G7 was established in Prishtina, which aims to strengthen the role of women and economic development across the country. It is too soon to talk about how much it will be possible for this Chamber to soften the economic position of women across the country. However, according to research and analysis that we have conducted, we need a lot of support and a lot of work, because we should start from the foundation, from the key factors that make this process much more difficult than it seems at first glance.

Women's empowerment is a process through which disadvantaged women increase their access to information, local decision-making resources, and their awareness regarding their participation in the community life, in order to reach a certain level of control over the environment where they live. Here's an example, "In India, a major move aiming to empower women and as a measure against poverty, Amendments 73 and 74 of the Constitution (Panchayat Raj Act) of 1993 ensured a minimum of 1/3 of seats for women in all state positions, i.e. 250,000 women employed at the local level."[3]

6. INSTITUTIONAL SUPPORT TO PROMOTE WOMEN IN DECISION-MAKING POSITIONS

Women's groups have played a crucial role to convince the United Nations Security Council to adopt Resolution 1325 on Women, Peace, and Security.

Resolution 1325 is the first Security Council's Resolution linking women's experiences with conflicts and maintaining peace and international security. This Resolution highlights women's leadership and their role in conflict resolution during peace and recovery talks; it requires strengthening the response with gender sensitivity in peacekeeping missions and gender equality training for all those involved in maintaining peace and security.

Kosovo legislation has adopted laws that indirectly affect the gender equality domain in the public life and work relationships. These laws are intended to encourage women to become a part of public life and to provide their contribution to social development by protecting their basic rights. Although several laws in favor of women have been enacted, such as the Law on Gender Equality, Law on Inheritance, Law on Reproductive Health, and several other regulations, apparently they are still not fully implemented, considering that women's participation in decision-making positions leaves much to be desired.[4]

In the context of domestic and international efforts aimed at inclusive and democratic governance, women's access to all areas is considered to be essential. Kosovo ranks first among the countries in the region in terms of women's participation in higher levels of decision-making. We must emphasize the fact that in the period 2011-2016, the President of the Republic of Kosovo was a woman, Mrs. Atifete Jahjaga. Women in the Parliament hold 33.3% of seats and 20-30% of seats in Municipal Assemblies. This was achieved thanks to election reforms and the determined participation quota of 30%.[5]

7. INCENTIVE POLICIES FOR WOMEN ENTREPRENEURS

Women are in an undesirable position in terms of economic opportunities, employment, education and training, access to finances, property ownership, and many others.

Until now, despite institutional rhetoric, there was a lack of incentive policies for women entrepreneurs and institutional approach regarding investments in women's entrepreneurial initiatives. Experiences in the country and the world have already demonstrated that returns in investments in women's businesses are manifold either by encouraging economic development or by creating social stability in the country, and sustainable economic development.

In most cases, women run small businesses compared to men. Kosovo has very little diversity in the legal organization of businesses owned by women. Most of them, around 99% of women's businesses are individual businesses. Partnerships and joint stock companies among

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[3] Gender Definitions and Concepts, Office of the Prime Minister, Prishtina, October 2012, Reprint

[4] Report on "Women in the Work and Decision-Making Process in Kosovo" Research, Prishtina, 2011

[5] Action Plan for the Implementation of Resolution 1325 "Women, Peace, and Security," 2013-2015

women are scarce, rare, and unusual. On the other hand, 89% of men's businesses are individual, while others feed the organizational business diversity. This means that the lack of partnership cooperation in business organizations in women is evident, which paradoxically should be minor.

Disproportionality between businesses run by women and men is evident in every comparable area, and to understand the source of disproportionality, we should explore the barriers that enable Kosovo businesses and the differences that occur between those who are led by women and men. The difference is relevant when it comes to the ways of obtaining funding, whether to expand the business or to keep it "alive," as it is well known that women do not have inherited capital from family property, unlike men.

Kosovo has still not developed a strategic plan, which would provide incentive policies for women entrepreneurs, or even a more favorable climate for doing business, but it seems that even the few opportunities offered by donors in cooperation with the Kosovo government are weighed by multiple barriers that considerably exacerbate doing business and create an unfavorable climate.

8. CONCLUSION

The economic empowerment of women is a necessity for a healthy state and a developed economy. Kosovo's progress in the empowerment of women in business has not moved with the appropriate steps, despite the tendencies of the Government in cooperation with many donors, since there are many barriers that inhibit this process. Women continue to face barriers ranging from limited education, gender equality, institutional support, and many others, which hinder women in their economic advancement.

A strategic plan or a specific model is much needed to help the country to achieve an inspiration resulting in women's empowerment or economic independence.

Women should be dealt with, not talked about. This paper discussed key factors that hinder the realization of this challenge soon. The fact that women do not inherit any property from their families is one of key barriers and factors that prevent the advancement of women in economy, then limited education, etc. Experiences in the country and the world have proved that returns on investments in women's businesses are manifold either by encouraging economic development or by creating social stability in the country, and sustainable economic development. return multiple businesses if women by stimulating economic development in the country and setting up social welfare and creating social stability in the country.

9. RECOMMENDATIONS

1. *Modify and adjust the Law on Family Heritage, specifically Article 5, paragraph 5.3,* which states, "The right to inheritance is acquired upon the death moment of the decedent. The person with the right to inheritance can give up his right based on the provisions of this law, which will imply that this right has never been acquired."[6]

At this point, the following is *recommended,* "the person with the right to inheritance can in no way waive their right to inheritance based on the provisions of this law."

2. Serious institutional support that directly affects women's economic strengthening by undertaking a multitude of activities, such as:

- Plan, select, and identify areas where women are far from access to information;

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[6] Law on Family Inheritance, Article 5, 5.3

- Collect and analyze evidence relying on physical, deposited, and documented evidence;
- Research on how much are women in our society enjoying their rights to property gaining;
- Monitor national institutions to analyze if they are implementing facilitations that women are entitled to, so as to facilitate their access to financial independence;
- Organize and hold training courses on business plan development;
- Organize and hold training courses for women to acquire accounting skills;
- Different training courses that would directly impact building self-confidence and appreciate innovative features that a woman possesses;
- Training on registration and operation of a business.

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VOLUNTEER CENTERS AS NONPROFIT PERSONAL AGENCIES FOR MAKING GOOD – LESSONS FROM THE CZECH REPUBLIC

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ABSTRACT

Our societies are facing several challenges in 21ˢᵗ century such as international terrorism, natural disasters, economic crises, migrant crisis, etc. In this turbulent environment, unpaid, non-compulsory work for others, the volunteering, is performed. Almost unnoticed by many, but with significant economic value. Volunteers can be recruited to perform their volunteer work by a special non-governmental organization (NGO) – volunteer center. Their purpose is basically the recruitment of volunteers on behalf of needed community services. However, what is the exact role of the volunteer centers in volunteer human resource management? The role of the volunteer centers were explored in this paper on the example of the Czech Republic, the country with o long volunteering tradition, where the role of the volunteer centers are defined by the law on volunteering. The initial data was acquired from the law. The additional data was provided by ADRA (Adventist Development and Relief Agency) Czech Republic, one of the Czech biggest NGOs with a large network of volunteer centers across the country. The aim of the paper was to identify the role of the volunteer centers in the Czech Republic in managing volunteer human resources. The following role was found: 1) volunteer HR management, 2) communication with receiving organization, 3) fundraising activities and 4) administrative agenda. Moreover, ADRA is coordinating more than 1,800 regular volunteers in 50 fifty Czech cities, which is about 8 % of all accredited volunteers in the Czech Republic. The economic value ADRA volunteers is in hundreds of thousands EUR annually, with a guaranteed minimal standard given by the accreditation of the Czech Ministry of Interior. Thus the volunteer centers in the Czech Republic can be called, with a little exaggeration, as nonprofit agencies for making good, based on its mission, its goal and the condition of volunteer work given by law.
Keywords: Fundraising, Human resource management, Volunteering, Volunteer Agencies, Volunteer Centers

1. INTRODUCTION

There are several challenges which the world of 21ˢᵗ century is facing such as international terrorism, natural disasters, economic crises, migrant crisis, etc. In this turbulent environment, almost unnoticed by many, another strong power partially counterworks these challenges decreasing the quality of life in our societies. Unpaid, non-compulsory work for others also called the volunteering.

Volunteering happened to be a worldwide phenomenon, according Salamon, Sokolowski and Haddock (2011, p. 219), nearly 1 billion people throughout the world volunteer their time through public, nonprofit, or for-profit organizations, or directly for friends or neighbors. It is largely believed that the scale of volunteer work is enormous and the contribution it makes to the quality of life in countries everywhere is greater still (ILO, 2011, p. 1). Interesting estimates of the economic value of volunteering were performed by Salamon, Sokolowski and Haddock (2011, p. 239). They stated that if all volunteers were living in one country, hypothetical country called Volunteerland, it would be the country with a seventh largest economy in the world, behind the US, Japan, Germany, China, the UK, and France, but ahead of Canada, Spain, Italy.

There are many studies on the values and the benefits of volunteering, however less of studies are focused on the specific non-governmental organization working with volunteers – the volunteer centers. Volunteer center is in general an organization operating as a mediator between volunteers and organizations connecting supply and demand of volunteer work (Frič and Pospíšilová, 2010, p. 113). Hustinx, and Lammertyn (2003, p. 177) are using the term volunteer agencies instead of volunteer centers, while mention that volunteer agencies purposively search for the optimal tune between specific demands of volunteers and activities offered by organizations. The volunteer centers are also dealing with public relations, fundraising and cooperation with governmental agencies and companies (Sozanská 2008, p. 22). As it has been emphazied by Hustinx, and Lammertyn (2003, p. 177) there are considerable cross-national differences in the position and role of volunteer agencies. These coordinating agencies embody a ‚program management model‘ where a limited and clearly defined contribution to a specific goal is demanded. They also mentioned that whereas program volunteering is very common in the United States, program management model is relatively new in the European context, while volunteerism traditionally has been embedded in a membership paradigm here.

The paper focus on the role of the volunteer centers in the Czech Republic, the country which made significant progress in this field in its post-communist history. According Frič and Pospíšilová (2010, p. 48) new decentralized organization infrastructure of volunteering evolved with a new type of volunteer management. This new type of volunteer management is based on professionalism and the consequences were increased number of volunteers and drawing the national volunteer sector to the western models. Therefore the aim of the paper was to identify the role of the volunteer centers in the Czech Republic in managing volunteer human resources.

2. MATERIALS AND METHODS

The role of the volunteer centers was analyzed on the example of the Czech Republic, country with o long volunteering tradition, where are role of the volunteer centers is defined by the law on volunteering.

The paper objectives were: first, identify the role of the volunteer centers in managing volunteer human resources according the Czech law on volunteering. However, the law is not defining all related aspects of volunteer Human resource (HR) management, e.g. where do the co-financing come from etc. Therefore second objective was to identify the role of volunteer HR on the example of one prominent volunteer center network in the Czech Republic.

The criteria for choosing volunteer center network were:

- At least 5 years old experience as a deploying organization
- Working in at least half of the Czech Regions
- Deploying volunteers according the Czech law on volunteering
- Data accessibility

Based on these criteria, ADRA Czech Republic volunteer center network was chosen. the decisive criterion appeared to be the data accessibility. 11 ADRA volunteer centers were administrated 18 of 187 projects financially supported by the Ministry of Interior of the Czech Republic. The financial support of ADRA volunteer centers was about 60,000 EUR of total 370,000 EUR total financial support of the ministry to all NGOs for volunteer service. Which means ADRA volunteer centers operate 9.6 % of all volunteer service projects and 16% of total financial support of the Ministry.

The Czech law on volunteering was analyzed with the focus on the role of the volunteer centers in managing volunteer HR. Then the role of the ADRA Czech Republic volunteer centers network was analyzed, with the same focus. The sources for the second analysis were ADRA Czech Republic annual report, ADRA Czech Republic methodic and internal evidence of the data of the scope of volunteering. The economic value of volunteering was calculated according the current methodic of Czech statistical office, with the median replacement wage. The median replacement wage was taken from the Average Earnings Information System (Ministry of Labour and Social Affairs (2016, p. 15).

3. RESULTS AND DISCUSSION

This chapter is dividet into two parts, the former part is focused on the role of the volunteer centers in managing volunteer HR according Czech law on volunteering. The latter part is focused on the role of the ADRA Czech Republic volunteers center network in managing volunteer HR.

3.1 The role of the volunteer centers in managing volunteer HR according the Czech law on volunteering

The role of the volunteer centers is stated in Czech law on volunteer service, however the law is not working with the term volunteer center, but with terms deploying and receiving organization. Deploying the volunteers is one of the basic functions of volunteer center. Even the importance of the law is obvious because of defining the standards of volunteer centers, NGO can deploy the volunteers even without meeting the requirements of the law. Meeting the conditions of the law is obligatory for receiving the accreditation and subsequently also the financial support from Czech Ministry of Interior. In all other cases the NGO is not obliged to obey the law on volunteer service. However such a volunteering cannot be considered as an illegal, because the purpose of the Czech law on volunteering is not to regulate the volunteer sector.

According Czech law on volunteering the deploying organization is a legal person located in the Czech Republic, which selects volunteers, maintains their registers, prepares them for the service, and, should it be accredited to do so, concludes volunteer service contracts with volunteers. The volunteer organization is also making all necessary administrative work regarding the volunteer program

The law is defining the areas of deploying volunteers, while there are mentioned three groups of volunteer activity:

1. Social services (help to the unemployes, social vulnerable people, old people, immigrants, etc.)
2. Cultural-enviromental area, including disaster management (emergency management, protecting the nature, sustaining national heritage, etc.).
3. Development cooperation

Based on the analysis of the law there are the dimensions to be founds concerning the role of the deploying volunteer organizations in managing Fundraising. Each of these roles will be defined in the further text.

Several dimensions of volunteer HR management are mentioned in Czech law on volunteering. First dimension is recruitment and selection. The obligatory entry-level training for the

volunteers should include informing about the potential risks. The law also states that the obligation is based on the nature of the service. The second dimension is learning and training, including the supervisions of the volunteers.

Some administrative agenda for the volunteer centers is implied by the law on the volunteering, especially writing and administrating the accredation and the project proposal, sign and administrating the contrants and agreements with the recieving organizations and the volunteers, cooperate on the random controls from the Ministry, organizing the insurance for the volunteers, and in some cases to provide the accomodation.

The Ministry may subsidize the deploying organizations to cover insurance cost, selected costs to maintain databases of volunteers and their preparation for volunteer service as well as costs of administration of volunteer service. However, it usually covers only the part of the cost for deploying the volunteers, which implies the necessity of other fundraising. Ministry of interior is also evaluating the personal capacities of the deploying NGO, it they are capable of managing given volunteer program which means that volunteer center have to be prepared to the volunteer program even before start of the program.

3.2 The role of the ADRA volunteer center network in managing volunteer HR
In 2015, 11 ADRA volunteer centers were coordinating 1832 volunteers in 149 recieving organization in more than 50 Czech municipalities. The volunteers made 35,160 visits and spent 68,200 volunteer hours with the clients. The volunteers are visiting clients of retirement homes, hospitals, hospices, children's homes, socially excluded people, and they are also working in ADRA volunteer centers' charity shops. The economic value of their volunteer work is about 10 millions CZK (about 380,000 EUR). The concrete activities of the volunteers differ regarding the needs of the clients and receiving organizations. However volunteer are spending free time with the clients, whereas they are not replacing the professional stuff. The most common volunteer activities are talking and listening, reading the books, playing games, drawing, singing, walking etc. The volunteers usually visit their clients on a weekly basis for a hour or two. Different character has a volunteering in charity shops where the volunteers are helping with things such as sorting the goods and also spend a more time there.

3.2.1 volunteer HR management
ADRA volunteer centers is searching, training, leading and coordinating volunteer with the purpose of enabling them to help those who are in need or those who are in difficult life situation or those whose psychosocial need are not fulfilled. They are cooperating with receiving organizations and share the ideas of volunteering (ADRA methodic, 2016, p. 3). These roles stated in the ADRA methodic are implying several findings.

ADRA volunteer centers are working as a mediator between volunteers (including the potential ones) and the receiving organizations who demand volunteers (including potential ones). The volunteer centers are guarantying the quality of volunteer service, both to the Ministry and to the receiving organization, let alone to the public due to the goodwill. It implies that volunteer centers are motivated to make a good-quality volunteer recruitment.

The recruitment process has basically three stages. First stage is individual interview of the person interested in volunteering with the volunteer coordinator. The interview has several goals: find out the motivation of the volunteer and its vision of the volunteer service, and there is also possibility for asking the questions about the volunteering by the person interested in volunteering and get more idea about the character of the volunteering.

Second stage of the recruitment process is also the core part of volunteer training is initial seminar which last several hours. The seminar is lectured by the ADRA volunteer coordinator and the contact person from receiving organization. There is a focus in volunteer training for understanding of the specifics of the volunteer service and the specifics of the psychosocial conditions of the clients. The seminar is aimed to provide relevant information to the volunteers and prepare them for the risky situation and prevent them from leaving the program.

After the seminar there is a entrance interview taking place with the participation of the ADRA volunteer coordinator and contact person from the receiving organization. This is the third stage when the decision if the agreement about the volunteer service is sign between the person interested in volunteering and ADRA.

Volunteer coordinators are communicating with the volunteers whenever there is a need from each of the parts. However, important part of the volunteer leadership is supervision, which take part three times in a year for a group of volunteers. If necessary, individual supervision can also be done for the volunteers. There is a three elements of the supervision, support, control and education of the volunteers (Šik, 2012, p. 14), while all of them are present in the ADRA volunteer supervision, however the supporting function of supervision is emphasized.

Books of volunteers evidence is placed in each of the receiving organizations where every volunteer visit are evidenced. This data is registered by the volunteer coordinator and is subsequently aggregated. Moreover the volunteer coordinator has a time line of volunteer work of each of the volunteer and can monitor the frequency of the volunteering of each of the volunteers. Which means that has also the quantitative indicator of volunteering in addition to the consultation with the contact person of the receiving organization and the communication with the volunteers.

3.2.2 Cooperation with recieving organizaton (or directly with the clients in case of direct volunteering)

In the beginning of the cooperation between volunteer center and receiving organization there is the initial contact made by of them. The person responsible for the establishing of the cooperation is the head of the volunteer center. There are several topics to be discussed such as the activities of the volunteers, scale and scope of the volunteering, choosing of the contact person from the employees of the receiving organization and their responsibility, presentation of the volunteer center to the stuff, etc. After initial negotiations about the cooperation the contract between volunteer center and receiving organization is signed.

There is a regular communication between contact person of the receiving organization and volunteer coordinator, and the contacts persons usually attend the volunteer supervsions. Moreover the receiving organization is informed about the scale and scope of the program annually.

3.2.3 Fundraising activities

The information about the financial support from the public finance can be found in next table. The data in the table is not including the governmental support of charity shops about 4 millions CZK (about 150,000 EUR). There are three reasons why the estimates of economic value of ADRA volunteer centers should be taken seriously. First reason is fact that ADRA volunteer centers are meeting minimal standards requirements to receive the accreditation from the Ministry of Interior. Second reason is that each of the receiving organization signed the contract

with one of the ADRA volunteer centers and chose one of its employees to be a contact person for the volunteer program. This implies that the volunteer work is desirable for the receiving organization and therefore using the replacement wage make sense. Third reason is that the ADRA volunteering is significantly financially supported from the government, because almost one half of total costs is covered by the governments.

The structure of the financial support from the government in 2015 was following:

Table1: Structure of the financial support from the governmental bodies in 2015 (ADRA, 2016, pp. 50-52)

Name of the governmental body	Number of gov. bodies	Number of projects	CZK	EUR	% of total costs
Ministries	3	24	2,426,866	89,784	13.00%
Regional offices	4	8	519,500	19,219	2.78%
Municipal offices	22	30	1,489,092	55,090	7.98%
Municipal district office	1	1	40,000	1,480	0.21%
Unemployment office	1	1	4,106,047	151,907	22.00%
Total financial support	31	64	8,581,505	317,481	45.97%
Total costs of volunteer network			18,668,000	690,640	100.00%

Several findings can be done based on the table. First, the governmental financial support is provided through 30 institutions, specificaly 3 ministries (Ministry of interior, Ministry of labour and social affairs and Ministry of health), 4 regional offices (South Bohemia, South Moravia, Moravian Silesian and Zlín regional office), 22 municipal offices (including big cities like Ostrava and midle and small municipalities) and one municipal district office (Prague 1). Second, almost half of total costs of ADRA volunteer center nerwork is provided from public finance. Rest is donations from the companies, individuals, private foundations and from the Adventist church, which founder of ADRA. Third, the ADRA is providing more than the half of total costs for ADRA volunteer centers network from other resources (private foundations, donations and, most importantly charity shops). It can be said that every CZK which is invested by the government is multiplied due to the work of ADRA volunteer centers network. Fourth, there was relatively small share of financial of support from Ministry of interior, even though the Ministry is often viewed as the main governmental donor. The financial support of Ministry of Interior was 8.58% of total costs of ADRA volunteer centers network and 18.66% of total governmental financial support (Ministry of Interior, 2015; ADRA Annual Report, 2015, pp. 50-52). Last but not least, the governmental financial support is provided through more than 60 projects, which mean that more than 60 project proposals or project request (including big projects to Ministry of Labour and social affairs and Unemployment office) was necessary in 2015 to receive the financial support, let alone the accounting work and reporting. The interesting conclusion can be done from this data, ADRA volunteer network has to maintain more than 60 little projects from the various forms of governments annually (based on 2015), including separate accounting. Moreover, ADRA volunteer centers are sending project proposals also to private foundation or governmental institution where they were not successful in 2015. It implies that some of the ADRA volunteer center network HR has to be invested into this administrative agenda. However, the capacity of ADRA volunteer center for guaranteeing minimal required standard of volunteering is enabled in this way. In other words, the volunteer centers need to provide large administrative agenda to gain all these financial support and allocate them to the final clients.

3.2.4 Administrative agenda and other activities

There is a large administrative agenda need to be done be the volunteer center, which is connected with all of the above mentions areas: volunteer HR management, cooperation with the receiving organizations and fundraising activities.

Concerning the volunteer recruitment, the volunteer have to bring a certificate of no criminal record, confirmation from the general practitioner that the person interested in volunteering in sufficient health and psychological conditions. There are the agreements about the volunteer service which need to be signed with each of the volunteers. The volunteer coordinator is also organizing the seminars and the supervisions. All of ADRA volunteers also have the insurance for the volunteer work which is organized and financed by the volunteer center.

Under the certain conditions the volunteer centers are repaying the traveling costs to the volunteers.

The volunteer centers have also large evidence of all the documents (accreditations to the Ministry, contracts for financial supports, contracts with the receiving organizations, agreements with the volunteers about the volunteer work, etc.). It also has an electronic evidence and database of volunteers, which is secure by the password known only by the head of the volunteer center and the volunteer coordinator. The printed contracts, agreements and documents are locked in the volunteer center, while the head of the volunteer center is guaranteeing the security of the documents.

Concerning the fundraising activities there is also large accounting agenda, because more than 60 projects from the public finance and numerous donations from the individuals and companies need to be accounted. Part of the ADRA volunteer center network are also 13 charity shops which are generated additional financial resources for volunteer programs. These shops are operated by the people sent there from the unemployment agencies, whose salaries are covered by the government, and by the volunteers.

The volunteer centers are also doing some public relations activities, which are informing the public about the work of volunteer centers. This is important both for the supply of volunteer work and for the willingness of public authorities and private donors to support their work financially. The methodic for ADRA volunteer program (2016, p. 5) mentions publishing offer of volunteer programs in local newspaper, radio, TV, social networks, website etc.

3.3 Volunteer centers as a nonprofit personal agencies?

Due to the findings described above, there are several remarks which can be made about the situation in the Czech Republic, and particularly in ADRA volunteer center network.

Volunteer centers have become the mediators between the supply and demand of volunteer work in their regions. There is something like not-for-profit market of volunteer work, which could be possibly described by the supply and demand curves and with the market equilibrium. Apart from this non-for-profit market where nothing is sold or bought, there is another real markets. Market of philanthropic donations of individuals and companies and also the market of governmental financial support with given rules, competition and financial flows. The volunteer centers also works are a multiplier of the invested financial support, both private and public. We can assume that donors both private and public would not be able to train and deploy about 1,800 volunteers annually with generating necessary total financial costs and provide all the administrative work. The important part of ADRA volunteer centers network is sharing the knowledge and the procedures and improving it altogether.

One of the major roles of volunteer centers is to stimulate the recruitment of volunteers to fill the many available assignments (Ellis, 1989, p. 38). Regarding the evidence from the ADRA volunteer centers network we can, with a little exaggeration, conclude that it can be classified as nonprofit personal agencies for making the good. The good in the thesis represents public

benefit expressed by the willingness of the public authorities to support the volunteer centers network financially, and by the willingness of all of the receiving organizations to sign the contracts about the volunteer program.

4. CONCLUSION

The volunteering has become the worldwide phenomenon with significant economic value. There is also one specific type of organization working with volunteers – the volunteer centers. The role of the volunteer center differs in various parts of the world. This paper is focused on the role of the volunteer centers in the Czech Republic, on the example of ADRA Czech Republic volunteer centers network, which represent significant part of the Czech volunteering according the law on the volunteer service. Therefore the aim of the paper was to identify the role of the volunteer centers in the Czech Republic in managing volunteer human resources.

In the beginning of the research the Czech law on volunteering was analyzed concerning the role of the volunteer centers. Subsequently there was the analysis of ADRA volunteer centers network with the same focus with following findings. There are at least four areas of activities which is necessary to be performed by the volunteer centers for being able to connect the supply and demand of volunteer work through deploying the volunteers 1) volunteer HR management which is the core, because it is the volunteer who is spending time with the client, which is the final product of volunteer center; 2) Cooperation with receiving organization (or directly with the clients in case of direct volunteering) which is crucial for a daily-bases operating of the volunteering; 3) Fundraising activities which is necessary for providing volunteer HR management, cooperation with receiving organization and administrative agenda; 4) Administrative agenda which is necessary for administrating the previous three areas.

Several interesting points were found out. The government is covering about half of the total costs of the ADRA Czech Republic volunteer centers network (including charity shops), however through more than 60 projects from 31 governmental bodies, which is connected with enormous administrative burden both at government and ADRA side.

The volunteer centers in the Czech Republic are serving as a mediator between the supply and demand of volunteer work, with the eventual partial financial support of the government. However the volunteer center has to be able to fundraise also the additional financial resources, therefore the volunteer centers are multiplying the governmental financial support of volunteering. Concerning ADRA Czech Republic, about 1,800 trained volunteers annually are deployed and coordinated by the ADRA network. There are also minimum standard of quality guaranteed by the Ministry of the Interior by the accreditation of each of the volunteer project. Each of the 149 receiving organization are signing the contract with one of the ADRA volunteer centers which implies the desirability of the ADRA volunteer work, and also represent the demand for the volunteer work. We can interpret the significant financial support of the government as the other sign of declaring the existence of the demand for the ADRA volunteer work. The supply of volunteer work which ADRA is recruiting and coordinating is represent by the total number of applicants and volunteers.

Therefore, as it was stated above, the volunteer centers can be viewed, with a little exaggeration, as nonprofit personal agencies for making good, based on its mission, its goal and the condition of volunteer work given by law.

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WOULD BE OR WOULD NOT BE: PROBABILITY OF ENTREPRENEURIAL BEHAVIOR AMONG BUSINESS AND NON-BUSINESS GRADUATES

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ABSTRACT

This study aims to measure the probability of business and non-business graduates of Sukkur IBA to become an entrepreneur with their family business background. By using the snow ball non-probability sampling technique, data was collected through emails and social media from the Alumni of Sukkur IBA who had business education and non-business education. Sample of 73 respondents was assessed by applying the logistic regression technique at the mean scores of the variables – average intention, business graduate and family business background. Findings suggest that there is high probability for business graduates to become entrepreneur than that of non-business graduates, for business graduates with family business background than that of business graduates with no family- business background and for non-business graduates with family background than that of non-business graduates with no family business background.
Keywords: Entrepreneurial Intention, Entrepreneurial Behavior, Business Graduate, Family Business Background

1. INTRODUCTION

Entrepreneurship contributes to every nation and economy by promoting competitive environment, increasing innovation, job creation and most importantly purchasing and wealth of economy (Guasch et al., 2002; Holmgren & From, 2005). It is believed that entrepreneurship is an organized and planned activity (Ajzen, 1985; Krueger & Carsrud, 1993). Entrepreneurship is a representation of planning behavior of entrepreneurs to do any task (Douglas, 2013). According to Bird (1989), entrepreneurship is a conscious state of person's mind which intends him to do a specific task and achieve a specific goal and its pathway.

Entrepreneurial intention is a very hot topic in research world which has grabbed a lot attention of many researchers in this field (Fayolle & Liñán, 2014). According to Nabi and Holden (2008), it has been encouraged globally that a large proportion of students show intention in venture creation in their career. Ajzen (1991) and Shapero (1982) discussed different aspects like cost conscious, with increased generalizability of results and coherent in nature and

consistent theoretical background for understanding and prediction phenomenon in their models which explains entrepreneurial intentions.

In Pakistan limited studies are found as per available literature who studied the entrepreneurial intention and behavior in various dimensions (Ahmed et al., 2010; Ali et al, 2011a; Ali et al. 2010b; Ali et al, 2012c) but no study is found in which entrepreneurial intention and behavior of business and non-business graduates' in Pakistan has measured or compared. So, present study is an extension of previous studies in this context which contributes in the terms of literature as well as empirically in context of Pakistan. Although researchers have given a lot of attention on entrepreneurial intentions and behaviors but still some room for research is open for various regional and international contexts (Nabi & Holn, 2008). Present study aims to measure the entrepreneurial intention of business and non business students of Sukkur IBA that whether business graduates are more entrepreneurial than non-business students or not and to investigate the effects of several control variables on the entrepreneurial intention and behavior of Alumnus.

2. LITERATURE REVIEW

Various studies have been conducted to study the entrepreneurial intention and entrepreneurial behavior based on theories such as psychological career theory, entrepreneurship theory, theory of planned behavior (Ajzen, 1991) theory for implementing entrepreneurial ideas (B. Bird, 1988) and model for events occurring in entrepreneurship (Shapero & Sokol, 1982).

According to Kolvereid and Moen (1997), psychological career theory helps people to comprehend the challenges and conflicts when they begin to adopt new organizational roles. Whereas Entrepreneurship research is used to determine the motivational factors for someone to be self-employed rather than career development.

Ajzen (1991) presented his theory of planned behavior in which he claimed that intentions are considered as best predictors of actual behavior. Moreover intentions are determined by the attitudes people form for a particular behavior, subjective norms people believe in the opinions of their close beings and perceived behavioral control people believe they have control in upcoming situations. So the intentions can lead people to make entrepreneurship as a tool to pursue their future career (Gibb Dyer, 1994).

As that actual behavior can be predicted by the single most predictor that is intention (Souitaris, Zerbinati, & Al-Laham, 2007). In many recent studies researchers showed the significant attention on the entrepreneurial intention and behavior of university students (Lüthje & Franke, 2003; Souitaris et al., 2007). According to Prediger Vansickle (1992), employment status is most probably to be influenced by the education, such as business and non-business education. Furthermore,(Schein, 1990)conducted a study and explored eight career anchors such as abilities, requirements and standards, showing deep and broad minded aspects of persons and their motives, people develop early in their career. Education has got the influence when such anchors develop early in the career.

Souitaris et al. (2007) surveyed 124 students, belonged to science and engineering disciplines, of one British and one French university. Students were admitted in an entrepreneurship certifications or programs at those universities. They found that the students had raised some entrepreneurial intentions after going through the program.

Mohamed et al. (2012) interviewed local university graduates in Malaysia who went through

basic student entrepreneurial program (BESP) to measure the intention towards agri-entrepreneurship and found that participants agreed upon the effectiveness of the BESP, and also found the significant relationship between three variables (origin of participants, family background and education) and entrepreneurial intention. Some other studies also found that educational background played very important role in shaping the entrepreneurial intentions and behavior (Murphy, 2005; Vojak *et al.,* 2006). Rosti and Chelli (2009) interviewed graduates and non-graduates and found that education significantly increase the probability to enter into the entrepreneurial behavior. The entrepreneurial behavior is also influenced by the family business background (Basu & Goswami, 1999; Duchesneau & Gartner, 1990). By participating in the family, graduates can attain business ideas and specific skills to begin their own business or carry on their family business. Studies suggest that graduates with family business background have stronger intentions to become entrepreneur (Basu & Virick, 2008; Liñán, Rodriguez-Cohard, & Rueda-Cantuche, 2005). Few studies were conducted in the context of Pakistan. Ali et al. (2011a) surveyed the MBAs from six public universities to measure their attitude towards entrepreneurship and found positive relationship between them. Ali et al. (2010b) surveyed 550 students across different universities and found the negative effect of governance variables on entrepreneurial intention. Further, Ahmed et al. (2010) measured the entrepreneurial intention of business graduates and found that innovativeness had strong relation with entrepreneurial intention.

From the available literature in Pakistan context there is hardly any study that has been conducted to measure the difference in the probability of business and non-business graduates to become entrepreneur. To fill that gap this study three hypothesis statements are to be proposed;

H1: The probability of business graduate to be self-employed is more than that of non-business graduates.

H2: The probability of business graduates with family business background to be self-employed is more than that of business graduates with no family business background.

H3: The probability of non-business graduates with family business background to be self-employed is more than that of non-business graduates with no family business background.

3. DATA AND METHODOLOGY

Research setting

Alumni of Sukkur IBA including business and non-business students were the population for the study. For sampling, snow ball non probability sampling technique was used. Online questionnaire was sent to the Alumni through e-mails and social media. Total 76 responses were recorded, 3 of those were excluded because they were not filled completely. Therefore the analysis was performed on 73 responses.

Dependent Variable

To measure the dummy dependent variable that is entrepreneurial behavior, respondents were asked to answer whether they had started their own business since they graduated from Sukkur IBA or not. If respondents had started they were coded as 1 and if not were coded as 0.

Independent Variable

In order to measure the independent variable entrepreneurial intention, three questions were structured which were further averaged to get an index for intention. First they were asked, "What was the probability that you ever would start a new business at the time of graduation? (Brenner et al, 1991) with (0-100 percent). Second item was taken from (Ajzen, 1991)"What would you prefer if you have choice either to be employed by someone or self-employed?" (1= would prefer to be employed by someone, 5=would prefer to be self-employed). The last question to measure intention was "What is the probability that you during your working life will pursue a career as self-employed rather than being employed by someone?" (0-100 percent).

Another independent dummy variable was included as business or non-business graduate. If the respondents were business graduates were coded 1 and if respondent was non-business were coded 0.

Control Variables

To control the effects of different variables, control variables were adopted and included from (Kolvereid & Moen, 1997; Whitely et al, 1991). They were further sub divided into eight categories i.e. history of respondents career, current status of job position or level, annual income, daily working hours at work, education level, pre and post education work experience, gender and number of dependents of respondents.

While controlling the effect of respondents' past history of work, number of years as an employee with employer were asked, their continuity of work since they graduated (0 = no and 1 = yes) and total number of changing employer in job history. Job position in the organization or own business was also asked to the respondents to in three levels like senior position, junior position and frontline or staff position (0 = no and 1 = yes). Another controlling variable was introduced as total annual income of the respondent. Daily working hours were asked to measure the work motivation level of respondents as control variable. Another controlling variable that whether respondents had any specialized additional certification for business education (0 = no and 1 = yes). Respondents were also asked about their pre and post work experience and their year of graduation completed. Gender was also included if respondent was male it was recorded as 1 on other hand 0 for female. Same like that marital status was also used as control variable in which four categories was made i.e. single = 1, married =2, divorced =3 and widow =4 respectively. Finally the hypothesis was tested that whether the probability of entrepreneurship in business graduates is high or not rather than in non-business graduate. And the logit model will be estimated from the formula;

$$\frac{1}{1+e^{-(\beta o + \beta 1\,(ave.\text{int}) + \beta 2\,(b.graduate) + \beta 3\,(family\ bus\text{iness})}}$$

So the overall model equation becomes,

$$Y = \alpha + \beta_1(X_1) + \beta_2(D_1) + \beta_3(D_2) + \varepsilon$$

Where Y= Entrepreneur X_1= Aveg. Intention D_1= Business Graduate D_2= Family

Business.

Results and Discussion:

The results of logistic regression for first hypothesis are as follows,

$$Y = \alpha + \beta_1(X_1) + \beta_2(D_1) + \beta_3(D_2) + \varepsilon$$

Entrepreneur = -0.048 + 0.005 (Av:Intention)+ 0.182 (Business Graduate)+ 0.167 (Family

Business) + ε

H1: The probability of business graduate to be self-employed is more than that of non-business graduates. There is 15.8 percentage of probability to become an entrepreneur for alumni who had business education. On the other hand alumni with non business education are having less probability to become an entrepreneur which is 6.12 percent. So according to the results probability to become an entrepreneur of business graduates is 9.7 percent more than that of non business graduates. Hence our first hypothesis of the study is supported.

H2: The probability of business graduates with family business background to be self-employed is more than that of business graduates with no family business background. There is 29.2 percentage of probability of business graduates with family business background to be self-employed. On the other hand alumni with business education and having no family business background have less probability to become an entrepreneur which is 15.8 percent from the total. So according to the results probability to become an entrepreneur of business graduates with family business background is 13.3 percent more than that of alumni with business education and having no family business background. Hence our second hypothesis of the study is supported.

H3: The probability of non-business graduates with family business background to be self-employed is more than that of non-business graduates with no family business background. There is 12.5 percentage of probability of non-business graduates with family business background to be self-employed. On the other hand alumni with non-business education and having no family business background have less probability to become an entrepreneur which is 6.12 percent from the total. So according to the results probability to become an entrepreneur of non-business graduates with family business background is 6.41 percent more than that of alumnus with non business education and having no family business background. Hence our third hypothesis of the study is supported.

4. CONCLUSION

The current study measures the probability for business and non-business graduates to become entrepreneur and also with their family business background. Based on the available literature and theory of planned behavior of Ajzen (1991), three hypotheses were proposed to be tested. After receiving the 73 responses from the alumni of Sukkur IBA, logistic regression was run on the mean scores of variables-average intention, business graduate and family business background, to get the probability. Results suggested that all three proposed hypotheses were supported. In addition, intention remained the most important predictor of actual behaviour as claimed by Ajzen's theory of planned behavior.

The sample taken in our study was the alumnus of Sukkur IBA only. Future researchers are suggested to increase the sample size of alumnus with incorporation of other universities of all over Pakistan which will help to obtain results with increase of their generalizability.

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WHAT IT MEANS TO BE A SOCIAL RESPONSIBLE UNIVERSITY?

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ABSTRACT

As institutions responsible for the creation and dissemination of knowledge, universities need to ensure that this knowledge is in line with the current needs and future requirements of the society. The knowledge they offer needs to correspond to both economic (preparing students for the labour market) and social (solving various social problems) development of their communities. Although universities have three mission, the third one, also known as civil mission, is very often neglected by many of them. For far too long universities believed that, since they are public institutions, they do not have to put more effort in building a stronger cooperation with their community and developing a stronger sense of social responsibility among their students. However, in order to become socially aware and responsible students need guidance and there is no better guidance than by setting an example. Universities that support sustainable economic and social development of their community prove to their environment that they too are entrepreneurial, proactive and more socially responsible. This paper gives an overview of the university social responsibility model (USR model) analysing two of the four core components of the model: social and educational impact. These two components are an essential part of entrepreneurial university that manifests social responsibility through its autonomy and its entrepreneurial culture. The USR model, presented in this paper, points out to the responsibility of universities to anticipate and recognize the needs of society. Universities must become a platform for exchange of ideas, experiences, resources and information and thus help young people to become active participants in creating positive social change. By applying the USR model on the example of J.J. Strossmayer University of Osijek, Croatia, this paper provides an overview of what J.J. Strossmayer University of Osijek University has and what it miss in order to be called socially responsible university.

***Keywords**: economic and social development, social responsible students, university social responsibility*

1. INTRODUCTION

The success of an organization depends no more solely on economic viability and the business performances at the market place. Organizations are realizing that taking care of their stakeholder and the community in which they operate can be much significant image and success booster. Universities, especially the public ones, are to some extent, starting to look like a business organizations. Beside the fact that there is a growing number of private universities taking their share of a market, globalisation, the knowledge society, innovation and technology significantly influence the universities' mission, organization and the way they operate and deliver the knowledge. (Vasilescu et al., 2010) Universities need to respond and adapt to change in order to be able to meet the challenges of modern society. Universities are not and should not be seen only as educational service providers but rather as organizations that build a platform for active participation in economic and social development of its community as well as for development of social responsibility of their students.

2. WHAT DOES IT MEAN TO BE A SOCIALLY RESPONSIBLE UNIVERSITY?

Universities make an increasingly important part in creation of society's sustainable development by following trends, developing programs that meet the demands of communities and participating in development of entrepreneurial society that supports cross-sectoral collaboration and joint problem solving. According to Etzkowitz (2002) this interaction between universities and the society presents university's third mission, very often neglected in comparison with the first two, education and research. Realization of the third mission depends on universities ability to be socially conscious and to put the interest of its community among its highest priorities and strategic objectives. Ledić (2007, referenced by Ledić et al., 2008) states that university's third mission is visible in its effort to actively participate in improving the life of its community and in educating students to become active and socially responsible citizens.

Dima et al. (2013) emphasize the reasons for extension of the social responsibility concept towards universities:

- Universities form forthcoming employees in both public and private companies;

- Universities play a major educational and research role within the communities in which companies operate;

- Universities help people find a balance between their personal and social needs and wants;

- As the higher education market changes, universities need to build stronger strategic relationships with their stakeholders (e.g. students, employers, state, society etc.) in order to stay competitive;

- Universities contribute to regional lifelong learning and employability;

- The corporate involvement in universities has increased due to the broader marketization of higher education services;

- The rising of the collective awareness of students and professors creates the need for implementing initiatives related to social responsibility;

- Universities are urged to play an important role in meeting the environmental challenges by integrating the sustainability concept in their curricula

Jimenez de la Jara (2007) defines social responsibility of universities as the capacity to disseminate and put into practice a series of principles and values, by means of four key processes: management, teaching, research and extension activities. Universities should, as suggested by the author, base their academic and organizational responsibilities on ethical concepts, which means that the social responsibility of universities is not an extracurricular activity but rather a part of universities' essence, their ethos and their way of being. According to Vasilescu et al. (2010) universities need to strengthen civic commitment and active citizenship through volunteering, an ethical approach and developing a sense of civil citizenship. Universities must understand that they have responsibility to encourage the students and the academic staff to provide social services to their local community as well as to promote ecological and environmental commitment for local and global sustainable development. Reiser (2008, referenced by Vasilescu et al., 2010) also emphasizes an ethical dimension of university's social responsibility that manifests in promotion of sustainable

human development through responsible management of the educational, cognitive, labor and environmental impacts produced by the university, in an interaction with its society. Association of American Colleges and Universities in its national Report "Greater Expectation: A New Vision for Learning as a Nation Goes to College" points out that higher education has a significant impact on the community outside the university campus, however, it is challenged with numerous pressures to make the process of education more effective (as seen in table 1)

Table 1: Pressures on Higher Education
(Association of American Colleges and Universities, 2002) – Continues on the next page

Changing demographics of college attendance	▪ Higher proportion of high school graduates ▪ Students lacking recommended college preparatory curricula ▪ Greater percentage of non-traditional students ▪ More cultural diversity with higher minority participation
New enrolment pattern	▪ Increased part-time enrolment ▪ Multiple-institution attendance ▪ Online and distance courses
The information explosion	▪ Huge and rapidly increasing quantity of information widely available ▪ Looser review and control of information quality ▪ Shift from remembering facts to finding and evaluating information
The technological revolution	▪ New types of jobs for graduates ▪ Changed nature of the classroom because of online learning
A stricter regulatory environment	▪ Greater call for accountability ▪ More intrusive state regulation of the curriculum ▪ In many states, the potential to expand from K-12 to college the strict standard and mandate that stress factual recall in testing

	▪ Accreditation emphasis on effectiveness and assessment
New education sites and formats	▪ Rapid growth in the for-profit higher education sector with little regulation and accreditation ▪ Rise of the corporate university ▪ More flexible learning formats
The changing nature of the workplace	▪ Emphasis on creative problem solving, team work and adaptability ▪ Need for high-level intellectual skills ▪ Demand for large numbers of technologically and quantitatively literate employees ▪ Interaction with greater diversity of people
The global nature of major problems, requiring enhanced international cooperation	▪ Porosity of national boundaries ▪ Worldwide environmental impacts ▪ Multinational corporations ▪ Post 9/11/1 awareness of global interdependency
Renewed emphasis on civic responsibility and the development of communal values	▪ Rise in student volunteerism ▪ Cyclical student activism ▪ Increased pressure on colleges and universities to join the community in resolving local problems

The pressures placed in front of universities show that theoretical academic education is not enough. Universities must create programs that will help students build the skills needed for their active participation in community development. Weber (2005) emphasize that the higher education and research sector have entered into a period of rapid change with arrival of new providers, increasing differentiation between different types of institutions, challenging of well-established traditions, necessity to become accountable to society at large and challenging of the model of shared governance. According to Weber there is a several reason why higher education should be a responsible public institution such as the gaps in information, the necessity to secure and promote quality and the necessity to make higher education open to all those who have the ability, whatever their social origin.

257

The challenge for the higher education sector is not to find another master economic or management theory, but rather to use entrepreneurial skills to provide higher education programs that will encourage all people to learn how to participate and contribute to their regional and global communities' values and economic outputs. (Mconachie and Simpson, 2003)

Goossen (2009, referenced by Mehta, 2011) suggests that universities can either choose to be followers in the initiatives of corporations or "seize the opportunity to be leaders and adopt CSR as a vital aspect of their competitive advantage". According to Vanasupa et al. (2006) socially responsible activities requires three key attributes: the ability to act, a willingness to act, and the awareness of needs. Those three attributes show that universities can hear, understand and implement request of their stakeholders and their communities and thus are ready to be actively involved in leading positive social changes.

Leitão and Silva (2007) state that there are two fundamental dimensions of CSR that should be "exported" to the framework of Universities. The first dimension relates to the promotion of social responsibility of the University and the second relates to ability of universities to communicate and interact with its community through the development of social marketing actions. Authors suggest several sequential activities that will confirm university's social responsibility, but in order to be successfully implemented university must communicate its corporate social responsible mission to their institutional and social network:

- the creation of a responsible team by CSR and Social Marketing;

- the identification of social and environmental needs;

- the creation of an indicator of Social Responsibility;

- the internal and external communication of the results;

- the definition of strategic aims; and

- the design of a strategic action plan for CSR

Cohen and March (2000, reference by Atkinson and Gilleland, 2006) state that universities should be an integral part of their communities, move away from closed, rational and bureaucratical way of thinking and spend more time on complex problems and persisting through to better understanding and better solutions.

3. MODELS OF UNIVERSITY SOCIAL RESPONSIBILITY

By emphasizing the importance of incorporating social responsibility in their performance, building a social awareness and encouraging young people to become active and responsible citizens, universities directly influence the creation of democratic society. Vallaeys (2014) lists four fundamental impact that universities can have:

- **Organizational impact -** Like any other employer, the university has an impact on the lives of its community, including its administrative staff, academics and students. The way in which it organizes its routine tasks also has environmental impacts, in the form of waste, deforestation, energy costs, transport costs, and so on. Organizational impacts affect both people and the environment, and the responsible university is concerned with its social and environmental footprint. What are the values that we live by from day to day on the campus? How can we live in the university in a responsible way, caring for nature and for the dignity and well-being of the university?

- **Educational impact** – The university provides education to young people and professionals and has a bearing on their ethics and values and their way of interpreting the world and behaving in it. It also has an impact on codes of ethics and, consciously or otherwise, guides the definition of the professional ethics and social roles of individual disciplines. Responsible universities ask what kind of professionals and citizens they are shaping and also reflect on the proper organization of education that ensures socially responsible students. What kind of professionals and people are we educating? How should we structure our educational system to build citizens who care for sustainable human development? Will our graduates be able and willing to redirect the currently unstable and unjust course of global development or will they siply want to find a job.

- **Cognitive impact** – Universities guide the production of knowledge and have a bearing on the definition of what we socially call truth, science, rationality, legitimacy, utility, education, and so on. They incentivize (or not) the fragmentation and separation of knowledge by delimiting the scope of each specialism or course. They consolidate the relationship between techno science and society, enabling (or not) social control and the appropriation of knowledge. They influence the definition and selection of problems to be placed on the scientific agenda. Responsible universities ask about the kind of knowledge they produce, its social relevance and its beneficiaries. What kind of knowledge are we producing, why and for whom? What kind of science do we foster – a democratic science or a science in the hands of the elite? What knowledge should we produce, and how can we disseminate it to meet the cognitive deficits that hinder sustainable development

- **Social impact** – The university is a social referent that may (or may not) foster progress, build social capital, prepare students for outside realities, provide access to knowledge, and so on. A university may close in on itself and act as an 'academic cloister' in imparting knowledge unrelated to its immediate context. It may want to just imitate what is done internationally and be unconcerned for its immediate surroundings. Alternatively, it may be anchored and deeply bound to its surroundings and wish to help solve its specific problems. The responsible university asks how it can contribute to societal development and to resolving its fundamental problems: What role can it play in the development of society, with whom and why? How can the university, given its function and specific expertise, participate in social progress and promote education and knowledge for territorial social responsibility? With whom should universities associate to achieve territorial social responsibility?

Zaffaroni (2007, referenced by Jimenez de la Jara, 2007) complements this list by adding **environmental impact** as equally important for the implementation and development of social responsibility of universities. Universities can raise students' awareness of the environmental problems and support their effort to overcome them.
As stated by Vallaeys (2014), universities educate future professionals and leaders and that makes them accountable and responsible for the outcome of their performance. These four fundamental impact result in four socially responsible management areas for the universities (as seen in figure 1)
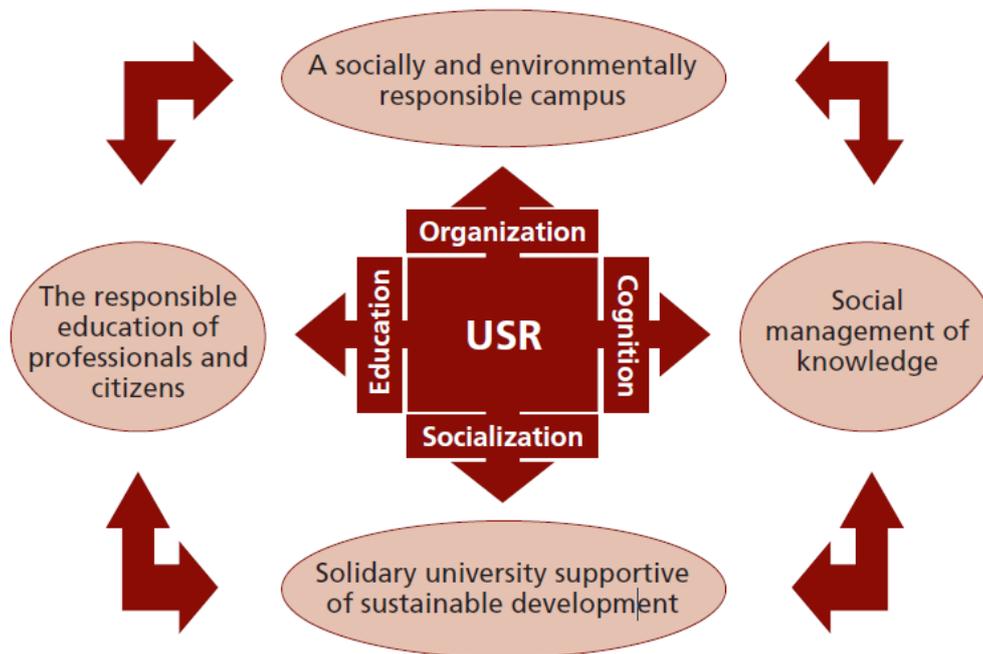
Figure 1: Four areas of social responsibility in universities (Vallaeys, 2014)

Universities, as any other institutions must take into account their role in a society. In contrary, according to Vallaeys they can be faced with negative image caused by, among others, lack of democracy and transparency, ethical incongruences, education focused only on employability, knowledge fragmentation, poor environmental practice and indifference to social problem. By promoting its ethical behavior, supporting cross-sectoral collaboration and developing the social responsibility of its students, universities acknowledge that their primarily goal is not merely transfer of knowledge and information. By being socially responsible, universities acknowledge that they do listen to their communities and that they are aware of their influence on decision-making process regarding economic, social and cultural problems of their communities.

4. IS J.J. STROSSMAYER UNIVERSITY OF OSIJEK, CROATIA A SOCIALLY RESPONSIBLE UNIVERSITY?

J.J. Strossmayer university of Osijek (UNIOS) is located in eastern part of Croatia and it was founded in 1975. It is a public higher education institution with around 20 000 student, 11 faculties, five university departments and one Academy of art. UNIOS organizes studies in natural science, social science, technical science, medicine and humanities at all levels from undergraduate to postgraduate.

Although, according to the article 4 of its Statute, UNIOS performs its activities in accordance with the needs of the community in which it operates there is significant difference among its faculties in a level of collaboration with the local community. Empirical research conducted in 2008 has shown that some faculties have very close collaboration with its stakeholders thorough internship of students and different project, and others do not know how would they connected or what they can offer (Oberman Peterka, 2008:209). The research has shown that UNIOS generally lacks the initiative that encourage the development of its social responsibility

and social responsibility of its students. Since then some improvements are made but it is still moving in a slow pace.

By applying the two components of USR model – social and educational impacts - on the example of J.J. Strossmayer University of Osijek, Croatia an overview is given see what UNIOS has and what it miss in order to be called socially responsible university. The social impact of UNIOS can be seen in individual attempts and initiatives of some academic staff of some faculties. Those individual initiatives usually manifest in enabling students to participate in real life projects project exchanging theoretical and practical knowledge. However these projects are usually developed through the partnership with a business sector only. The creation of social capital should not be based solely on the cooperation with business sector. The community in which universities operates seeks for a stronger relationship with a civil society organizations whose development largely depends on young educated people that are aware of their responsibility and role in the process of improvement the quality of life in their own communities. In order to have such youth universities must move beyond individual initiatives and regulate its social responsibility on an institutional level, something that UNIOS is still missing.

Educational impact, as second component of USR model refers to education of students that helps them to become aware that they too can make a difference in their community. Young people very often neglect the strength of their ideas, energy and entrepreneurial skills believing that they cannot change their surroundings. Universities have the responsibility to change that. Socially responsible university must develop a curriculum that will be in accordance with the needs of economic and social community and focused on enabling students to gain experience in solving problems in the real world, learn how to recognize opportunities and be proactive members of their community. Such curriculum prepares students for increasingly complex and demanding society. Universities, need to support their departments to have program that will raise the sense of belonging to its community among students and help them not only to recognize social problems but to take the responsibility and apply acquired skills to solve them. Such programs are known as *"service learning programs"*. This model has proven to be a successful educational method that encourages students to take advantage of the acquired academic knowledge to solve real social problems and needs of the community. They are developing the sense of civic responsibility and integrating student volunteering in formal education. At UNIOS, this component is also lacking an institutional support. As for the previous component, there are only individual initiatives. More and more professors are aware of the need for interdisciplinarity, collaboration and entrepreneurial behavior what have led to integration of voluntarism, contribution to the community projects and consultancy projects such as Law-economic Clinique into their curricula. However, although those kind of activities within faculties are recognized and praised by the University, it is not enough. If it wants to be recognized as socially responsible UNIOS needs to promote the need for cross-sectoral collaboration as well as to make the integration of the society's requests and needs part of its strategic objectives.

5. CONCLUSION
Universities exist in order to serve their communities and educate young people to become an important part of economic and social development. Socially responsible universities can predict the needs of the society, actively participate in its development, enable the development of key competences and personal growth of its students and motivate them for a civil activism that has a meaning and can influence on solving real problems of their communities. UNIOS has all predispositions to direct the activities of its faculties hand departments towards the achievement of its third mission. UNIOS needs to encourage young people to become active and responsible citizens, support the development of programs that meet the demands of the

environment and initiate and encourage the cross-sectoral cooperation and joint problem solving. In order to do that UNIOS should transform the individual initiatives of its departments into strategic decisions, create a platform for cross-sectoral collaboration and embrace their social responsibility.

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MBA KNOWLEDGE TRANSFER IN CONSTRUCTION

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ABSTRACT
In 2002, at the Faculty of Civil Engineering, with the support of TEMPUS CD-JEP - Curriculum development project the International MBA in Construction programme was launched specially designed and adapted to the construction industry's specific needs. Specialisation in business management, known as MBA, is today probably the most highly respected qualification in the business world today. It is a form of additional higher education in management, because it provides knowledge and skills that enable students to master business processes more easily, and to adapt to globalisation processes (more) quickly and painlessly. Managers run companies and projects with the purpose of achieving maximum business results through the direct control of labour performance and considerable financial resources. For someone to become a good manager or project manager it is not enough to be "talented" for the job or to have a wish to do it. Those are no more than good motivations for a person to embark on the challenging journey of acquiring the variety of knowledge and skills without which they cannot expect to do the demanding and responsible managerial work successfully. Problems that have emerged during the execution of the programme, as well as suggestions for the further improvements through new teaching methods and a new approach to knowledge transfer adopted to the construction industry's needs will be discussed in this paper. How to maintain the continuity of good quality while taking into account the reality of the lack of time for education is a problem that faced not by only students and their employers, but primarily by their teachers who are expected to pass on the knowledge as they are supposed to be the bearers of knowledge.
Keywords: *Construction sector, MBA, Postgraduate course*

1. INTRODUCTION

The objective of an MBA course, according to Kempner (as cited in Kretovics, 1999), is "to develop managers who will run efficient, profitable enterprises in a competitive world for the creation of wealth in society". Boyatzis (et al., 2002) sees the objective of graduate management education as preparing people to be outstanding managers and leaders.

But according to Mintzberg (2004) the market value of an "MBA" is diminishing as the title is only as good as the "worst MBA" that is being employed. This may be true as today more and more providers offer the MBA title, many of them without any kind of accreditation or formal institutional evaluation. According to Carnall (1992), one dean of a North American school spoke about the third-generation idiot syndrome. This is an experience common in North America (but could be also found in Europe) in which a 25-year-old graduate student is taught by a 28-year-old faculty member (who graduated from the MBA programme only two years prior, and on which he now teaches). The 28-year-old is meanwhile writing a PhD dissertation supervised by a 32-year-old professor. The combined experience of all three in industry and commerce might only be five or six years or even none at all. Things like that can happen, and we are sure that they do happen, but we firmly believe they are not the norm, rather, just "a sad case".

Over hundred years ago, in 1908, the Harvard Business School was established as the first school for business administration. For decades, the MBA qualification was offered only in the US. Later, from the 60-ties, European business schools also started to offer MBAs and MBA programs and curricula have gone a long way and are today taught all around the world. The last fifteen years have seen a massive expansion of Master of Business Administration (MBA) degrees around the world, with virtually every university-level business school providing one, and some having more than one.

In 2011 Application Trends Survey[1] presented the statistics of trends in different MBA studies and specialist programmes. In total, 649 programmes were analysed from 331 business schools and universities in 42 countries - 467 being MBA programs and 158 master programmes. Moreover, here are just two, for us the most important conclusions:

- Specialist master programs had a rise in students numbers – particularly in the finances (83%) and in management (69%)
- Programs with smaller groups (less than 50 students) are more attractive than those with huge number of enrolled students

The MBA in Construction given at the University of Zagreb is a program that focuses on construction with the purpose of providing present and future construction managers with knowledge in various non-engineering fields necessary to understand and master complex management processes. Educating civil engineers to be successful managers, as proposed in our program, widens the circle of knowledge "consumers" by providing engineers with new multidisciplinary and interdisciplinary competencies and knowledge. The program is intended for all participants in the building process (such as investors, designers, builders, consultants, project managers) as well as for those from corporate management (future managers and/or construction company owners). It targets professionals who want to improve their knowledge, gain access to new information and to master skills that improve their professional efficiency. Knowing all this, one may wonder if it makes any sense to have yet another specialised MBA program at the University of Zagreb which, despite its long history of university education (founded 1669), is not a "prestigious" business school from the UK or the USA. To paraphrase Kathawala et al. (2002), should we have a dilemma? Are we in fact doing students a disservice by offering them an MBA in Construction? Is the MBA a global qualification? Does one size fit all? Should an MBA be offered as a specialization, like our MBA in Construction for example, addressing certain niche markets (e.g. MBA in Health Sector Management, or MBA in Marketing), or should it remain focused on a generalised, all-round curriculum supposedly applicable to everyone? MBA programs are needed and their task is very clear - to prepare their graduates for managerial roles, help them gain a better understanding of the industrial and business world and its needs, enrich their skills and provide them with competences relevant to their careers. In Croatian construction sector such knowledge is much needed thus we decided to continue our efforts and to modernise the MBA in Construction (MBACon) delivered at the Faculty of Civil Engineering University of Zagreb.

2. THE MBACon / MBA IN CONSTRUCTION

At the Faculty of Civil Engineering University of Zagreb we support the opinion that "management education is a vital component in the training process for all building professionals and increasing emphasis should be placed on inculcating an effective management ability in addition to specialist technical skills" (Briffett, 1994).

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[1] Graduate Management Admission Council (GMAC), 2011, www.gmac.com/surveys, downloaded in 2012.

In 2002 we applied for TEMPUS grant and our first cohort of students enrolled to the International MBA in Construction program in February 2003. Teachers from Dundee University, Reading University, Salford University, Technische Universität München, American College of Management and Technology from Dubrovnik and University of Ljubljana taught together with colleagues from the University of Zagreb, creating an environment of different business and cultural approaches. In June 2003 the University of Zagreb Senate approved the work program proposed, making MBA in Construction one of the two academically verified business management studies in Croatia and was recognizing as an international post-graduate study course. The program was based on 120 ECTS credits, lasted three teaching semesters and a fourth was for writing a master's thesis (Katavić and Matić, 2005).

The program consisted of three groups of subjects (Katavić et al., 2006):
- general business-management subjects (organisational behaviour and organisation design, business strategy, business ethics, human resource management, decision-making theory, negotiating and business protocol)
- economic subjects with a special emphasis on construction (business statistics, marketing strategy, international marketing, accountancy and finances)
- construction subjects (project planning and control, project management, legal regulations in construction, building maintenance, environmental protection management).

Two teachers taught each subject, one of them Croatian and the other from a European institution, creating a synergy of knowledge and experience as they demonstrate recent national and international practice. When lecturing "general business management subjects" teaching was adapted to the specific requirements of the construction industry.

First two generations had lectures in the Centre for Advanced Accademic Studies in Dubrovnik and at the Faculty of Civil Engineering in Zagreb, but long and continuous absence from work greatly increases study costs (expenses of travelling, accommodation and food) and it was a kind of drawback for studies planned in this way (especially from employer's point of view)

These problems may be related and formulated as a classical managerial assignment –realising a planned objective (studying efficiently and achieving a high quality of excellence) under conditions of limited resources (time and money). But when discussing limited resources, the following must be borne in mind:

- minimising study costs is a trivial but understandable common goal for all the groups in the process (both students and study management),
- another limiting resource is the availability of quality teachers who successfully combine a university and a professional career,
- the number of students who comply with the conditions of enrolment and later also with the demands of the studies is also limited,
- analysing the resource of time is more complex and requires examining not only the time spent immediately on lectures but also the total time that all the participants use until the student passes the examination or writes the final paper,
- and last but not least, postgraduate studies for further scientific training have been abolished and specialist post-graduate studies introduced as a key element of lifelong education.

This inter-relationship of quality, time and money should be crucial in harmonizing study effectiveness and efficiency. Obviously, a correlation must be established between the efficiency of a specific study such as MBA in Construction and the choice of methodology for knowledge transfer. To conclude, there was no doubt that MBA education for engineers is needed but the best method of delivering knowledge to the students had to be developed.

3. KNOWLEDGE TRANSFER MODES

The "MBA market" is flooded with a range of MBA programs offering different modes of delivery (there are one-year and two-year degrees, full-time and part-time degrees, campus-based versus distance learning MBAs, general MBA versus "specialized") and, what is even more important, with different quality of knowledge offered to the students.

One "extreme" is a traditional two-year full time course and on the other extreme is entirely e-learning mode as an extremely flexible method of knowledge transfer, which is a radical structural change "from above" requiring the complete re-engineering of classical studies.

The most usual reason for structural changes in the system is re-engineering resulting from the introduction of information technology. When studies are re-engineered to accommodate information technologies, then it is not the exchange of information in itself that is decisive but the synergy of contacts and the interactive work and relationships between the participants in the process. However, it is not yet quite clear what is the "best way". Professional circles do not yet agree about the desirability of *e-learning*. The SWOT-analysis of *e-learning* as demonstrated by Kathawala et al. (2002) is presented below. We have compared traditional MBA study methods and *e-learning* as a new method (Katavić and Bošković, 2008). Many elements of the analysis can be generally applied to all *e-learning* methods because they are not specific to MBA programs only.

S – Strengths - comparative advantages of *e-learning* vs. traditional methods

- the global increase in the use of *e-learning* for MBA programs – the main advantage of introducing the new technologies is considered to be the possibility for the mass dissemination of knowledge to dislocated students, combined with rationalisation of absence from work;
- rationalization of teachers' time, who do not have to take frequent trips but can transfer knowledge from any place where they dispose of the necessary equipment;
- easier adaptation to the specific needs of every student.

W – Weaknesses – comparative disadvantages of *e-learning* vs. traditional methods

- terms of enrolment: the possibility that some universities may change enrolment requirements (will they still require GMAT or will some other kinds of knowledge be necessary for enrolment, e.g. knowledge of IT);
- financial aspect: *e-learning* is as a rule cheaper than classical studies, but not in institutions that insist on high-quality programs and teachers;
- institutions that want a top program must invest a lot in equipment (fast computers, necessary software, technical support for the entire system and, of course, especially for teachers and students);
- quality: one of the main arguments against *e-learning* is the somewhat lower quality of the existing distance MBA studies, because they are not on the quality level of the recognised traditional-method MBA studies.

O - Opportunities – what can institutions do to emphasise the advantages of *e-learning*

- according to some sources, world companies and governments spend about US$40 billion a year on the education of their employees, with growing *e-learning* participation (from US$1.8 billion and 700,000 students in 2000 it grew to US$5.5 billion and 2.2 million students is 2002);
- universities with a weaker tradition have the opportunity of securing a larger part of the MBA *e-learning* market from the peak universities, which decide to introduce new methods only sporadically.

T -Threats - are the warnings that must be taken into account less they become shortcomings that can completely "destroy" the MBA program that uses *e-learning*

- changes in the teaching form: there is a great difference between the traditional and virtual teaching of students. The American university teachers' association finds teaching by *e-learning* more time-consuming and intensive for the teacher because an unavoidable and mandatory part of the teaching process includes individual written communication with each student;
- change of data base: traditional data bases, such as books, will give way to new combined data bases, which provide teachers with incomparably greater possibilities of creating coherent study courses;
- change of teaching place: it is a great change to replace a classical classroom with a virtual class in which people communicate by *e-mail* and similar communication tools;
- changes in student characteristics: greater emphasis is placed on ethics (plagiarizing, having others write papers), personal motivation (no one and nothing forces the student to fulfil certain obligations and tasks), self-discipline, organisational and analytical abilities.

One of the main objections to *e-learning* is the lack of personal student-teacher contacts and the non-existence of personal contacts among students. In this sense the research of Ponzurik et al. (2000) shows that various methodological forms can be used to achieve a consistent structure of lectures, however, some educational adaptations are necessary in the case of *e-learning*. It is not unimportant to point out that other specialist university studies show no intention of introducing *e-learning*, so classical teaching should not be rejected without careful consideration. Technology means nothing without a "brain" – it is not possible to teach a computer to lecture well, only a good teacher can do this. Lectures in the form of direct communication are the quintessence of studies; they are their most creative part, the personalisation of knowledge in the creative choice of material, manner of presentation, synthesis of experience and standpoints which can be influenced and which therefore have a motivating and inspiring effect on both associates and students. This effect cannot be achieved in a mechanically based relationship in a virtual environment.

Though the computer greatly enhances a student's learning experience, personal teacher-student interaction is necessary. So far, a computer cannot detect learning frustrations, personal problems, unforeseen questions or the changes in direction the class discussion might take, that do typically occur in the learning cycle, so we have a great challenge when doing team-teaching, using technology, and distance learning (Nixon et al.,1997).

When applying the SWOT analysis to our MBA in Construction program several other specific problems/weaknesses appeared. Given that making studies cheaper is an objective acceptable to the students, this will be difficult to realise. On the overall, effects of a price reduction would

be negligible but work quality might suffer. It is therefore certain that the use of *"pure e-learning"* for MBA in Constriction under Croatian conditions would not answer its purpose as it might bring the existing quality into question. However the future of our program definitely depends on the possibility of finding new ways of knowledge transfer that will require less absence from work. MBACon target market is small, consisting of young ambitious managers who desire new knowledge and are ready to invest in fulfilling their wishes and needs. Their greatest problem in realising this goal is lack of time, so management studies are facing the task of finding optimal solutions that will retain and even advance study quality and at the same time shorten the time of absence from work.

4. THE NEW HYBRID KNOWLEDGE TRANSFER MODE FOR THE MBACon FROM THE UNIVERSITY OF ZAGREB

For years civil engineers all over the world have been successfully heading building and construction companies and various large-scale projects (dams, nuclear plants, ports, etc). They proved their technical knowledge, skills and expertise while working in different economic and political environments., but had problems in efficiently managing time and costs/finances, as they had no formal knowledge or training in management and/or project management. The basic philosophy behind the idea of the MBA in Construction was Fayol's correlation between technical and other managerial jobs and position in the management hierarchy. As early as 1949 the founder of modern management Henri Fayol (1949), speaking generally about the knowledge necessary for managerial work, established the correlation between technical and other general (economic, sociological, managerial and other) knowledge for various job positions in the management hierarchy. As one climbs up the managerial ladder, the required level of "general knowledge" grows. Every manager knows well that the higher his/her position in the managerial structure is, the less he/she has "to do" with solving technical/professional problems and the more time and energy he/she spends in solving "all the other" problems in the company.

When the 2008 global crisis hit the world economy, construction sector worldwide was most affected (in Croatia the consequences were particularly hard as lot of companies collapsed or faced hard times). For three years we were trying to enrol the new cohort, the fourth MBACon generation but with no result, sharing in this way the "destiny" of the construction sector. Thus the conclusion was simple – if we want to continue with the MBACon programme, we have to do some significant changes in order to make the program more appealing /attractive to our target group. We firmly believe that educating civil engineers to manage companies and projects successfully is an extremely important task, and that it should be a form of additional high education. It provides knowledge and skills that enable students to master business processes more easily, and to adapt to globalisation processes more quickly and painlessly. As a result, we decided to introduce a so-called hybrid mode of study and go on-line.

Many world universities have already introduced a hybrid mode of study at some post-graduate level courses (especially specialist studies as our), which combine traditional methods (direct contacts between students and teachers) and *e- learning*. Direct communication between each individual student and teacher, among students and between the students as a group and the teacher must be possible and simple. That gives communication using information technologies a synergic effect of creating a group intelligence, if not as a substitute, then as a supplement and catalyst for the original communication directly realised during lectures and the formal and informal personal communication between teachers and students.

The actual MBACon programme is delivered as a hybrid mode of study and has three modules (former semesters). First two are covering mandatory courses and the third one is consisting of elective subjects. Each and every course is delivered in three parts - pre-module, core-module and post-module.

PRE-MODULE	CORE-MODULE	POST-MODULE
e-learning	in-class	e-learning
Preparation of topic › Readings › Online tutorials › Case studies › Presentations › Other	**In-class time** › Benchmarking and lecture sessions › Individual and/or group case work and presentations › Business simulations › Breakout sessions › Case discussions › Other	**Application of newly gained knowledge** › Evaluation of theories › Case studies › Papers › Other

Figure 1: The MBACon module design

Pre-module is delivered on-line and students are provided with all the necessary teaching materials including books (mostly in English but also in Croatian when available) two months prior the beginning of the core module. The teaching material (especially in the group of economic subjects) has been modified to make it easier for students with technical background and profession, and to help them to follow and understand the non-engineering issues.

The core module (lasting 9 days) is delivered in a congress resort Tuhelj Spa where students meet live their teachers. But they must attend lectures already prepared i.e. familiar with course content, having mastered given pre-reading material and having prepared a case study. Our experience from previous generation was that the idea to dislocate students from their every day working environment and "force" them to entirely devote themselves to their studies and focus on the problems taught, was very good (although the employers were not always to enthusiastic).

Furthermore they establishes their own network (students with other students but also with their teachers) which can result in so called peer-coaching – students sharing the experience and discussing problems an also helping each other to achieve better results. Being in a small group (this year we have only 9 students), staying together for 9 days and working all day in a classroom , as well as in their free time results in the synergy effect of the group.

Although the employers were not enthusiastic, the students accepted it with enthusiasm because they realised the advantages of intensive every day and daylong work and association with colleagues and teachers. After the core module the students separates and continue to communicate on- line (for further clarification, exams etc.)) with their teachers as well as with the group as a post-module.

Technology is an important part of the new MBA programme. The course syllabuses, handouts, problems and some solutions are on our platform called Merlin and can be retrieved by students whenever their need or like it. Students also have class handouts available from the course site for each syllabus. IT is a helping tool for hybrid mode and teachers do less ex cathedra lectures because the materials of the world's best teachers on almost every subject may be added to the instructor's own presentations.

5. CONCLUSION

Managers run companies and projects with the purpose of achieving maximum business results through the direct control of labour performance and considerable financial resources. For someone to become a good manager or project manager it is not enough to be "talented" for the job or to have a wish to do it. These are no more than good motivations for a person to embark on the challenging journey of acquiring the variety of knowledge and skills without which he or she cannot expect to do the demanding and responsible managerial work

successfully. More and more civil engineers and other technical graduates are aware that they need additional education in the "management field" and the demand for multidisciplinary and interdisciplinary knowledge is progressively increasing.

Modern education implies contemporary teaching programmes, methods and competencies of knowledge transfer as an essential precondition for the development not only of Croatian higher education, but also of society in general. How to maintain the continuity of quality university education and at the same time take into account the reality of the lack of time for education is a problem that faces not only students and their future employers, but in the first place university teachers who are expected to be the bearers of knowledge transfer. The need for a different and more flexible approach to learning is especially shown after the completion of regular education. Technologies and knowledge change very quickly, and the world is becoming a "global village" where information is exchanged in real time. This is especially so in engineering professions such as construction. The solution for this problem requires a different and more flexible approach to learning which places the student, his needs, wishes and possibilities, in the foreground.

Thus, we should conclude our paper by answering questions raised in the introduction. We need MBA programs. But we need good MBA's. The aims of MBA programmes in general and MBA in Construction in particular are very clear - to prepare their graduates for managerial roles, help them gain a better understanding of the industrial and business world and its needs, enrich their skills and provide them with competences relevant to their careers.

New technologies have become an inevitable part of everyday life, which has led to increasing pressure to integrate them more efficiently in education processes, because new media enable the lifelong and continuous learning of people in the information society environment. The on-line education is a fast growing business and its growth is supported by the competitive advantages the on-line education has, and the potential opportunities for students, professors and universities. However, universities have to be careful in offering these programs, as it requires a substantial up-front investment and continuous technical support and lot of efforts from the teaching staff to maintain the required quality of delivered MBA programme. Croatia has become part of the European market and there is a huge need for the additional education of civil engineers, especially in business management, which also includes project management. Being aware of all treats and opportunities of on-line learning, we decide to introduce a hybrid transfer knowledge mode in our MBACon programme hoping that the results will prove us being right.

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A MULTIDIMENSIONAL POVERTY INDEX WITH ALKIRE-FOSTER METHODOLOGY FOR NUTS-1 REGIONS IN TURKEY

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ABSTRACT

This study investigates the poverty status of the households in a multidimensional perspective by selecting relevant capabilities. A multidimensional index will be constituted by using the methodology of Alkire and Foster (2009) with the inclusion of three main dimensions that are education and health, economic condition and assets, and dwelling and living conditions. Alkire and Foster's methodology is considerably important in literature of poverty measurement that it focuses the actual deprivations of the households. The research primarily concentrates to Turkish households and it then will interest with the NUTS-1 regions of Turkey to understand the regional difference between households. Turkish Statistical Institute (TurkStat) has provided cross-sectional data of income and living conditions of the households since 2006 and the study will use this data set for 2010 to constitute multidimensional poverty index. Initial analyses have found that multidimensional approach to poverty measurement is far more comprehensive than the traditional methods and there are significant differences between regions of Turkey in a multidimensional perspective.
Keywords: Alkire-Foster methodogy, multidimensional poverty, poverty status, regions

1. INTRODUCTION

Poverty is a complex concept in its nature. In most of the studies, poverty is generally described in different senses such as income or expenditure poverty, lack of basic needs, relative deprivation, lack of capabilities and functionings, social exclusion, human underdevelopment or vulnerability. Thus, it does not cover any universal description. Maxwell (1999) also notes that there is no single right definition of poverty. But, one can presume the approach of the researcher with the measurement exercise of poverty. However, poverty measurement is far more difficult. Until 1970s, poverty is defined as an economic term and measured mostly based on the level of minimum income. The emergence of non-monetary indicators in the mid-1970s, with basic needs approach, expanded the meaning of development and poverty. However, main progress occurred as a result of Amartya Sen's works on capability approach, which defines poverty as "the failure of basic capabilities to reach certain minimally acceptable levels" (Sen, 1992), so there is a growing concern for a new methodology to measure poverty in current studies. As Sen (1976) noted, there are two distinct problems on measuring poverty. The first one concerns the identification of the poor and the second involves a selection of an aggregation methodology to establish an overall index. The first step includes the acceptance of a poverty definition, then adoption of a poverty threshold. There could be at least three categories on defining poverty. The first one accepts that poverty is having less than an objectively defined, absolute minimum (Rowntree, 1901; Orshanksy, 1965). The second one considers poverty as having less than others in the society (Runciman, 1966; Townsend, 1979). And finally, poverty may regard as a feeling you do not have enough to get along (Goedhart et al., 1977). The latter one defines poverty subjectively, while the first and second define it to be an objective situation (Hagenaars and De Vos, 1988, p. 212). Identifying the poor and their minimum needs, Sen (1979a) offers two alternative methods which are income method and direct method. Historically, the initial efforts on measuring poverty use an income method and involve a unidimensional nature which measures poverty in a monetary context by using an income or an expenditure threshold. These thresholds, or the poverty lines, represent the level of income

that divides the families of a particular size, place, and time into the poor and the non-poor (Watts, 1968). However, poverty is far broader concept and deprivation from income or expenditure is its only one dimension. Using income or expenditure as an only indicator of poverty involves some restrictions itself that it does not include substantial dimensions such as life expectancy, literacy, freedom and security. Then, direct method considers poverty from a multidimensional perspective. If direct information on different attributes is not available, one can adopt the income method, so it is at most a second best (Sen, 1979a, p. 290). Thus, influential Indian economist Amartya Sen's capability approach which considers the functioning of persons and the capabilities of a person reflects the various combinations of functionings he can achieve, enlarged our understanding on human development process since its discovery. With this view, it is now common to assert that poverty is a multidimensional phenomenon. But, Sen (1979a, 1979b, 1985, 1992) has not addressed any list of capabilities and he has mainly stood up against any proposal of fixed list of capabilities which is applicable for all societies. He argues that "insisting on a 'fixed forever' list of capabilities would deny the possibility of progress in social understanding, and also go against the productive role of public discussion, social agitation, and open debates" (Sen, 2005). However, it is necessary to identify a list of specific indicators while measuring multidimensional poverty. There are some attempts on choosing basic capabilities (or dimensions) such as Qizilbash (1996), Nussbaum (2000), Robeyns (2003) and finally UNDP (2010). The Multidimensional Poverty Index, which is first published in UNDP's Human Development Report 2010 (UNDP, 2010), is mostly constructed based on the studies of Alkire and Foster (2009, 2011) and Alkire and Santos (2010). In the following section, we will mention about basic capabilities and then we will offer a multidimensional poverty index on a regional level.

Finally the second problem of Sen (1976)'s involves constructing a poverty index. In unidimensional poverty measurement, since Sen's (1976) own index which is suggested as a rejection of widely used head count ratio and poverty gap ratio, there are huge attempts on generalizing this index or constructing new one that they are all derived with some axiomatic requirements, such as Kakwani (1980)'s index which is sensitive to transfer or Foster, Greer and Thorbecke (1984)'s famous class of indices which are subgroup decomposable. Most of the multidimensional poverty indices accepting this methodology use some basic generalizations of these unidimensional indices and basic axioms with offering new properties as a result of the multifaceted nature of the poverty measurement.

2. MANY DIMENSIONS OF POVERTY AND THE CAPABILITY APPROACH

It is now agreed that the concept of multidimensional poverty is a richer concept than the unidimensional approach (Deaton, 2006, Thorbecke, 2007). This understanding of poverty takes it roots from the capability approach which is suggested by Sen (1979b) while he was concentrating the three types of equality for a new framework on human equality. In his paper, Sen (1979b, p.220) argues that none of the three types of equality -utilitarian, total utility and Rawlsian- views (and even their combinations) provide a sufficient basis for the equality aspect of morality and then he suggests using basic capabilities approach which is a way moral approach. Thus, the capability approach is indeed a challenge to traditional approaches and the approach in fact has very deep roots itself. As Clark (2006) noted, it "has a strong connections with Adam Smith's analysis of necessities and living conditions and Karl Marx's concern with human freedom and emancipation, but the most powerful conceptual connections relate to Aristotle's theory of political distribution and his analysis of *eudaimonia* -human flourishing (Sen, 1993, p.46). According to Sen (1993, p.30), the capabilities represent the alternative combinations of the various 'functionings' a person can achieve and the functionings represent the various things that he or she manages to do or be in leading a life. It includes a positive freedom idea in itself.

However, as mentioned earlier, Sen intends the approach to operate as a general framework which makes it available for normative assessments about the quality of life, so he intentionally leaves the idea of defining list of capabilities incomplete which makes the approach open-ended. In the following year, there are major studies which are aimed to operationalize the capability approach. Human Development Index of UNDP (1990) can be accepted as a first attempt on doing this by measuring real conditions of life with three basic dimensions. Nussbaum (2000) has expanded the approach by defining a set of capabilities which she called them as *central human capabilities*. The well-known list includes ten dimensions which are life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment. Robeyns (2003) has also constituted a capabilities list for comparing gender inequalities. Her list of basic capabilities for gender inequality assessment is crucial to make a comparison between genders. The list includes fourteen basic capabilities that they are; life and physical health; mental well-being; bodily integrity and safety; social relations; political empowerment; education and knowledge; domestic work and non-market care; paid work and other projects; shelter and environment; mobility; leisure activities; time-autonomy; respect and; religion (Robeyns 2003, p.71-72)[1]. Alkire (2007, p. 6-12) defines five selection methods in practice; i) selecting dimensions mostly on existing data or convention, ii) considering implicit or explicit assumptions with respect to what people do value or should value, iii) selecting a list of dimensions that has achieved a degree of legitimacy as a result of public consensus (the Millennium Development Goals), iv) deciding dimensions on the basis of ongoing purposive participatory exercises and lastly v) choosing dimensions as a result of expert analyses of people's values from empirical data.

Finally, one latest and mostly interested approach is UNDP's Multidimensional Poverty Index, which is constructed based on three main dimensions. Health, education and standard of livings are the main three dimensions of this index. These three dimensions are measured by ten indicators which are nutrition and child mortality (for health), years of schooling and children enrolled (for education), cooking fuel, toilet, water, electricity, floor and assets (for standard of living) (UNDP, 2010). One of the most basic characteristics of this approach is its dependency to joint deprivations of the poor. The joint deprivations of the poor include the cases where achievements for different dimensions are drawn from same data sources and same reference groups within a population, thus it crucially requires micro data (Alkire et al., 2015). This approach also satisfies basic axiomatic requirements and follows the Sen (1976)'s steps of identification and aggregation, with allowing some additional steps.

3. METHODOLOGY FOR THE MULTIDIMENSIONAL POVERTY INDEX

Considering actual living conditions of poor is the main advantage of a multi-dimensional approach. We will adopt an axiomatic "counting" approach which is suggested by Alkire and Foster (2009, 2011). The counting approach in multidimensional poverty measurement involves, as Atkinson (2003, p. 51) notes, "counting the number of dimensions in which people suffer deprivation" and this method is frequently used in axiomatic measures.

Axiomatic measures are generally defined as the measures which satisfies some basic properties. There are numerous studies (Takayama, 1979; Kakwani, 1980; Clark, Hemming and Ulph, 1981; Foster, Greer and Thorbecke, 1984, among others) on axiomatic measures in unidimensional poverty measurement since Sen (1976)'s paper where he also introduced three main axioms that they are focus, monotonicity and transfer[2]. However, Chakravarty, Mukherjee and Ranade (1998) were the first to attempt to develop an axiomatic derivation of

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[1] For a survey of other list of capabilities and dimensions of poverty, see Alkire (2007).

[2] See Zheng (1997) for a comprehensive survey of these axioms.

multidimensional poverty indices. In their paper, they identify a class of multidimensional poverty indices which satisfies basic properties (symmetry, focus, monotonicity, principle of population, continuity, non-poverty growth, non-decreasingness in subsistence levels of basic needs, scale invariance, normalization, transfer) and two related properties that they are subgroup and factor decomposability. Tsui (2002) also proposes a class of multidimensional poverty indices which satisfy subgroup consistency requirements. In these studies, a multidimensional poverty index is a numerical representation of shortfalls of basic needs from some pre-specified minimum levels. Bourguignon and Chakravarty (2003), Alkire and Foster (2009, 2011), Chakravarty and Silber (2008) and Chakravarty and D'Ambrosio (2013) are some of the other main studies on deriving a multidimensional poverty index that satisfies some basic properties. In these studies, the indices are generally described as multidimensional generalization of some basic unidimensional indices.

A counting approach in multidimensional poverty measurement basically involves counting the number of observable deprivations in core indicators. The methodology, as its nature, involves that value judgments and normative assessments, such as arbitrary threshold levels and selection of dimensions. In Alkire-Foster multidimensional poverty measurement methodology which is also an extension of Foster, Greer and Thorbecke class of measures, also includes identification and aggregation steps, after defining the unit of analysis. Identification step entails six components (Alkire et al, 2015, p. 145). The first one includes defining the set of indicators considered in the measure which is probably selected arbitrarily. On this issue, it is generally argued how to define the dimensions of poverty (Grusky and Kanbur, 2006), and Alkire (2007) offers for researchers to understand the basis of their choices by "explicitly explaining the rational for the particular dimensions they do choose". It means, it is necessary to justify the selected dimensions. The second step on identification involves setting the deprivation cutoff for each indicator which is the sufficient level of achievement in order to be non-deprived in each indicator. Then, the methodology applies the cutoffs to determine whether each person is deprived or not in each indicator, as a third step. The fourth step includes selecting the relative weight of each indicator. This issue is also important that it is arguable whether the dimensions are equally important or not. Although, the common exercise in the multidimensional measurement is to give equal weights to all dimensions, there are some studies (Esposito and Chiappero-Martinetti, 2008, for instance) to investigate the hierarchy between dimensions. The fifth step is to create the weighted sum of deprivations for each person and then the last step involves determining the poverty cutoff which is "the proportion of weighted deprivations a person needs to experience in order to be considered multidimensional poor". This obviously means that the methodology implies a dual cutoff. Thus it specifies the difference between the deprived and poor. In this methodology, a person may be deprived in one dimension, but may not be poor, according to poverty cutoff. The determination of the poverty cutoff also may be considered arbitrary. In poverty studies, there are three main approaches about the poverty cutoff to describe a person as multidimensional poor which are union, intersection and intermediate approaches (Atkinson, 2003; Duclos, Sahn ve Younger, 2006). The union approach assumes a person as multidimensional poor if the person is deprived at least in one dimension. In contrast, the intersection approach accepts a person as multidimensional poor if the person is deprived in all dimensions. However, there is a middle-ground alternative called intermediate approach which defines a specific number of deprivations to be considered multidimensional poor.

Finally, aggregation step of the multidimensional measurement involves three main components (Alkire et al., 2015, p. 146) which they describe three different measures about multidimensional poverty. The first one involves censoring deprivations of the non-poor and computing the headcount ratio of multidimensional poverty (H). Censoring deprivations step means considering only deprived achievements and ignoring the achievements about the

deprivation cutoff. This censoring methodology takes it roots from Hamada and Takayama (1977) and Takayama (1979, p. 750-2)'s censored income distribution logic which equalize the income of people above threshold to the threshold level; $y_i^* = \begin{cases} y_i, & if \ y_i < z \\ z, & if \ y_i \geq z \end{cases}$ where yi, yi* and z are actual income distribution, censored income distribution and pre-determined poverty line, respectively. Second aggregation component is average intensity of multidimensional poverty (A) which is derived by computing the average share of weighted indicators in which poor people are deprived. The final component is computing the multidimensional poverty measure M_0 by multiplying the two previous components, H and A. Thus, our methodology also will follow the same steps on identification and aggregation to derive a multidimensional poverty measure at a region level. Because Alkire-Foster measure satisfies subgroup consistency and decomposability properties as a class of FGT measure, it makes possible partitioning the population to subgroups which will be a useful feature for our analysis.

4. DATA AND RESULTS

It is now agreed that monetary poverty measurement does not reflect actual human well-being. Thus, multidimensional measures are very common in poverty studies. The first application of Alkire-Foster methodology shows itself as Multidimensional Poverty Index which is suggested in UNDP's annual Human Development Reports. This index uses micro data which are obtained from household surveys to determine the existing deprivations in health, education and living standards. Then, each person in a given household is classified as poor or non-poor due to the numbers of deprivations to be aggregated into the national measure of poverty (UNDP, 2010, p. 221). As a result of this development, many countries construct their own multidimensional poverty measurement, such as Mexico (CONEVAL, 2010; Hernandez-Licona, 2014), Republic of Colombia, Bhutan (NSB, 2014) and South Africa (Statistics South Africa, 2014). Thus, in this study, we will also construct a multidimensional poverty measure by using 2010 cross-sectional data of Survey of Income and Living Conditions of TurkStat and by accepting households as a unit of analysis. In this context, we choose 14 indicators to identify three main dimensions which are education and health, economic condition and assets, dwelling and living conditions and then, deprivation cutoffs for each indicators are determined[3]. Education and health, as Sen (1992) noted, are "part of centrally important beings and doings that are crucial to well-being". Also, five of eight Millennium Development Goals are directly related to education and health dimensions (UN, 2013). Thus, they have a key role for multidimensional poverty. On the other hand, dwelling and living conditions indicators are basic means which are closely related to the ends. For example, unhealthy water system or leaking roof problems may cause households to have ill health; or an individual who lives in an environment with violence and crime may have ill mental health. Finally, economic condition and assets are basic means; they are proxies to reach the minimum acceptable levels of well-being.

Table following on the next page

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[3] On determination of deprivation cutoffs, each person is assigned a deprivation score according to his or her deprivations which lies between 0 and 1. For example, if there is no indoor flushing toilet in the dwelling, and each person is accepted as deprived, her score is 1. Full description is available upon request.

Table 1. H and Censored H Levels of Indicators and Their Contributions to M_0.

Dimension	Indicators	Uncensored H	Censored H (k=0,5)	Contribution to M_0 (%)
Education & Health (1/3)	Highest education level attained	0.2966062	0.22394	22.07022
	Suffer from any a chronic (long-standing) illness or condition	0.6014063	0.2618382	25.80526
Economic Condition & Assets (1/3)	Capacity to afford paying for one week whole household annual holiday away from home if needed	0.8663044	0.2814238	9.245166
	Capacity to face unexpected financial expenses	0.6430697	0.250108	8.216398
	Capacity to buy new clothes	0.3582544	0.1824723	5.99447
	Color TV possession of the household	0.0137399	0.0092224	0.3029681
	Refrigerator possession of the household	0.0158228	0.0116862	0.3839087
	Dishwasher possession of the household	0.5810715	0.2509437	8.24385
Dwelling & Living Standards (1/3)	Indoor flushing toilet in dwelling	0.1187508	0.086182	2.831198
	Piped water system in the dwelling	0.0217433	0.018709	0.6146179
	Leaking roof, damp walls or rot in window frames problems	0.4223822	0.1973221	6.482307
	Problems such as darkness of rooms or lack of day-light	0.2633954	0.1170553	3.84543
	Shortage of space in the dwelling	0.3088386	0.1440916	4.733612
	Crime, violence, vandalism around.	0.1053992	0.0374591	1.230585

In our multidimensional poverty index, all dimensions are equally weighted. Each indicators are also equally weighted in each dimensions. In table 1, H, censored H level and contributions of each indicators to overall index level are given. According to uncensored head count ratio level, the main deprivation occurs in "capacity to afford paying for one week annual holiday if needed" dimension, following by another economic condition indicator and then the health indicator. Similar results are applicable for uncensored H levels which accept households both deprived in relevant dimension and multidimensional poor according to k=0,5 poverty cutoff. Poverty cutoff is defined as k=0,5 which means that if the households are deprived at half of dimensions, they are multi-dimensionally poor. One main result shows that there is a little difference between uncensored and censored H for education indicator which means that a majority of the individuals (%75) who are deprived from education are also multi-dimensional poor. Table 1 also shows that education and health indicators are the main contributors to overall index which is around %47,88 at all. Health indicator, alone, contributes %25,8 to M_0. Economic condition and assets dimension also contributes to M_0 about %32. Dwelling and living standards dimension achieves the smallest contribution which is about %20. Thus, we can observe that education and health indicators are vital on measuring multidimensional poverty. Determining the poverty cutoff is also important and then results may vary. For instance, table 2 shows three aggregated components of multidimensional measure for different poverty cutoffs. It is seen that H, A and M_0 levels vary due to different k levels.

Table following on the next page

Table 2. H, A and M_0 Values for Different Poverty Cutoff Levels

Poverty Cutoff (k)	H	A	M_0
0.1	.92239	.3834805	.3537186
0.2	.7766089	.4285313	.3328012
0.3	.5778064	.4897208	.2829638
0.4	.3735027	.5602499	.2092549
0.5	**.2831806**	**.5971867**	**.1691117**
0.6	.1363925	.6726471	.091744
0.7	.043284	.7560307	.032724
0.8	.0047482	.8469932	.0040217
0.9	.0002908	.9444447	.0002746
1.0	0	n.a.	0

Regions may be classified due to available data and the characteristic of the measure. In this study, we will investigate Nomenclature of Territorial Units for Statistics (NUTS)-1 level of Turkey at table 3 which includes 12 regions. The results show that multidimensional poverty (for k=0.5) are at most in the Southeast Anatolia Region (%37,4) of Turkey. The lowest value (%9,7) is seen in Istanbul region which means that, in Istanbul region, multidimensional poverty is the lowest of Turkey. East Marmara and Aegean regions appear as second and third lowest values, respectively. According to the multidimensional poverty measure value (%16,9) for our poverty cutoff, the results indicate that five out of twelve regions are above this threshold.

Table 3. Multidimensional Poverty in Regions for NUTS-1 Level of Turkey

Regions	H, *100	A, *100	M_0, *100
TR1- İstanbul (İstanbul)	0.1726958	0.5644142	0.0974719
TR2- West Marmara (Tekirdag-Balikesir)	0.245494	0.6202685	0.1522722
TR3- Aegean (İzmir-Aydin-Manisa)	0.1839366	0.5881576	0.1081837
TR4- East Marmara (Bursa-Kocaeli)	0.1803816	0.5667335	0.1022283
TR5- West Anatolia (Ankara-Konya)	0.1985126	0.5691065	0.1129748
TR6- Mediterranean (Antalya-Adana-Hatay)	0.2923329	0.5928415	0.1733071
TR7- Central Anatolia (Kirikkale-Kayseri)	0.3132749	0.5791783	0.1814421
TR8- West Black Sea (Zonguldak-Kastamonu-Samsun)	0.354353	0.5793413	0.2052913
TR9- East Black Sea (Trabzon)	0.3433245	0.5841557	0.2005549
TRA- Northeast Anatolia (Erzurum-Ağrı)	0.5666168	0.6264186	0.3549393
TRB- Central East Anatolia (Malatya-Van)	0.5127183	0.6283807	0.3221823
TRC- Southeast Anatolia (Antep-Urfa-Mardin)	0.5890142	0.6350364	0.3740455

5. CONCLUDING REMARKS

Poverty is a multidimensional problem which can be seen as a deprivation from basic capabilities. Using a multidimensional view such as capabilities approach removes the restrictions of a monetary view which does not include substantial dimensions such as education, health and living standards. Traditional measures of poverty and multidimensional measurements widely differ and the multidimensional approaches generally define the actual conditions of the poor more accurately and they are more comprehensive than monetary measures. Thus, a multidimensional poverty measure states the actual deprivations of the unit of analysis. In this study, a multidimensional poverty measure of fourteen indicators is computed. Then, the final value of this measure for selected poverty cutoff is compared between regions in NUTS-1 level of Turkey. The findings show that there are considerable differences between regions in Turkey and thus, it may be stated that the poverty of people involves some dimensions other than economic indicators, such as education and health.

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THE POSSIBILITES OF HEALTH TOURISM DEVELOPMENT IN THE CONTINENTAL REGION OF CROATIA

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ABSTRACT

The paper studies the possibilities of health tourism development in the Continental region of Croatia. Health tourism in Croatia, especially on its continental part, is based on natural healing resources that are mostly combined in the medical, preventive and wellness programs. They are not being used well enough, even though they are the key factor for positioning Croatia as a recognizable health tourism destination, which can generate economic growth and income. On the other hand, the trends in the world tourism predict a further growth of health tourism, mostly due to the changes in people's lifestyle. Health tourism is hence being recognized in the National Strategy of Tourism Development 2020 as a primary product in the central part of Croatia. In order to make health tourism more intensive, it is important to found it on the high quality medical staff and on attractive natural and healing resources. Further more, it is neccesary to work on the legislation, branding, introducing quality standards, to form the strategic alliances, as well as to create the institutional and operative support in order to succesfully implement a strategy for the development of health tourism in the Continental region of Croatia.
Keywords: health tourism, medical tourism, the Continental region of Croatia, tourism development, wellness tourism

1. INTRODUCTION AND METHOD

Health torism is a specific branch of tourism that includes professional and controlled usage of natural healing factors and physical therapy in order to maintain and improve health and quality of life. Today there is substantial growth in demand for health tourism, which is generated by the crisis in health care systems in the developed countries, high prices of health services, long waiting lists, and the aging of population. The trends in the world tourism markets forcast a further growth of health tourism, mainly due to changes in people's lifestyle. The aim of this paper is to study the potential that Croatia, and especially its continental part, has in health tourism and point out the possibilities of development of this form of tourism in the still quite turistically underdeveloped Continental region of Croatia.

For the purpose of this paper, an extensive research has been made since there are number of different publications, research and presentations available on the Internet. Since tourism industry is rapidly evolving and changing, these types of sources that can quickly follow the new trends, researches and findings comprise a large part of the paper.

The main motivation for travel in health tourism is improving our health. The "package" of health tourism comprises of different products and services, which are linked to the experience of travel made with the purpose of improving health (the Institute for Tourism, 2008). There are three types of health tourism: medical tourism, health tourism based on healing factors, and wellness tourism.

Medical tourism is defined as an organized trip outside the jurisdiction of the national health system, in order to improve or restore health through medical intervention (eg. cosmetic surgery, dental medicine, transplantation of organs, cells and tissues, preventive diagnostic examinations).

Health tourism based on healing factors is the oldest type of health tourism. This type of tourism focuses on revitalization of the psychophysical abilities and is being performed in different climate, marine and healing destination. Healing resorts offer special programs for recovery, a balanced diet, recreational, and other facilities.

The concept of wellness tourism is about a new need to care about health, namely the maintenance of a healthy body and spirit through the condition trainings, physical and mental relaxation and preserving your internal peace. It should be stressed that this is not a passing trend (Croatian Institute of Public Health, 2014). The promotion of this type of tourism, but also professional literature often identifies the term with the concept of a spa, which is not correct. Wellness is a more comprehensive, broader, and more complex concept than spa. Today wellness tourism is becoming a more important and more profitable aspect of tourism.

World trends in tourism markets forcast further growth of health tourism, mainly due to changes in lifestyle (globalization, less free time, more stress, etc.). For example, in the last year the medical tourism in the United States grew by 35%, which means that for the first time 1.6 million Americans used the services of the sector. By the end of 2035, 28% of the US economy will be related to health and health care (Bussines Diary, 2014).

In Europe, the situation is not so different. Europe is the leading region of the world when it comes to health tourism, according to the following numbers: 203 million Europeans traveling a year, expected growth of 7% by 2017, total spending about 105 bilion euros, and total influence on European economy about 328 bilion euros (Institute for Tourism, 2014). Some of the leading health tourism destinations in Europe include: Baden-Baden in Germany, Montecatini in Italy, Vichy in France, DreiKonige am Rhein in Switzerland, Loipesdorf in Austria, Karlovy Vary in Chech Republic, Balaton-Heviz in Hungary, and Terme Čatež in Slovenia (Kesar, 2013).

It is important to mention the market trends, which can influence further development of health torusim: green and sustainable (developing "green" destinations, using natural components), local and authentic (using local ingredients, emphasizing local identity), technology ("smart" systems, new treatments), diversification of offer (gastro programs, lifestyle programs), demand (further growth, targeting youger population).

Health tourism in Croatia is mostly based on natural healing factors that combine different kinds of medical, preventive and wellness programs adapted to the needs of specific tourist groups. In Croatia, there is 222 sites, of which 18 are organized as healing resort centers (specialized hospitals). According to the Chamber of Commerce, the Croatian touristic offer has six thousand beds in 18 medical institutions, of which 2 100 beds are under contract with the Croatian Institute for Health Insurance. In continental healing resort centers, more than 90% of domestic tourists reside, while on the Adriatic healing resort centres welcome a much larger share of foreign tourists, which ranges between 55 and 70%. The average stay of tourists in these centres, according to the CBS data, is about 14 days. The trend in tourism demand for wellness services in Croatia resulted in an increase of their offer. According to the records of the Chamber of Commerce, at the end of 2006 there were 30 wellness centers operating in Croatia. Now, there are 68 wellness centres in hotels in Croatia.

It should be noted that, for the first time, health tourism is clearly defined in national strategic documents. Besides that, institutions that are dealing with the issue of medical tourism in Croatia and are in the operational terms seeking to establish conditions and stimulating environment for the successful development of health tourism in Croatia, have been established. In addition, there are several associations for health tourism and various private initiatives. For example, two clusters which goal is to make Croatia a globaly known destination for health and medical tourism are operating in Croatia.

In the Development Strategy of the Croatian Tourism for the period until 2020, health tourism is positioned as one of the tourism products that will be the bearer of tourist activities in the Republic of Croatia by 2020. Health tourism would then have a leading role in prolonging the season and dispersion of tourist activities, which are now the key disadvantages n the overall perception of tourism development and the competitiveness of the Croatian tourist destinations.

2. RESULTS AND DISCUSSION

2.1. Methodology

To identify the positioning of health destinations in Croatia, regarding the well-known destinations in the competitive regions with similar preconditions for sucesfull health tourism, a benchmark analyses was made.

Firstly, the main regional competitors were identified in the contitnental part of Croatia. The competirors were grouped into two groups: those primarily focused on providing catering services and those primarily providing the health care services.

Table 1: The facilities providing the health tourism services

CATERING SERVICES			HEALTH CARE	
Wellness offer (hotels, spa and wellness centres)	**Natural health resorts**		**Hospitals/clinics/ private doctors**	
	Health resorts	**Specialized hospitals**		
Hotels: •Cca. 80 hotels with wellness centres and/or water parks Spas (with accomodation): •Terme Tuhelj (Tuheljske Toplice) •Terme Jezerčica (Donja Stubica) •Terme Sveti Martin (Sveti Martin na Muri) •Toplice Lešće (Lešće on the Dobra River) •Istarske toplice (Oprtalj)	*Three health resorts*: •Topusko •Bizovačke toplice •Veli Lošinj	•Biokovka - Makarska •Kalos - Vela Luka •Naftalan - Ivanić Grad •Daruvarske Toplice •Krapinske Toplice •Lipik •Stubičke Toplice •Varaždinske Toplice •Thalassotherapia, Crikvenica •Thalassotherapia, Opatija	*The public health institutions:* •Clinical/hospital centres (5) •Clinical hospitals (3) •Clinics (5) •General hospitals (20) •Specialized hospitals •Polyclinics *Private health institutions*: •800 subjects	

Source: The Action Plan for the Development of Health Tourism in Croatia, the Institute for Tourism, 2014.

When we look at the spatial distribution of health tourism facilities in Croatia, we can notice that there is a bigger concentration of specialized hospitals in the continental and a bit bigger concentration of wellness objects in the coastal part of Croatia.

The specialized hospitals are a part of the Croatian health care system. In Croatia, there are 24 specialized hospitals, which are owned by the countys. The specialized hospitals are divided into three groups: medical rehabilitation (14 hospitals), psychiatry (7) and children hospitals (3). The focus of this paper are specialized hospitals for medical rehabilitation.

The specialized hospital Varaždinske Toplice is by far the largest provider of health services in the field of medical rehabilitation in Croatia. Following are Biokovka and Krapinske Toplice with half the size of available capacities, ranging from 137 – 330 beds.

Natural health resorts are defined as providers of health care based on natural healing resources. There are three registered natural health resorts in Croatia.

The characteristics of specialzed hospitals and natural health resorts in Croatia can be summarized as the following:

➢ Specialized hospitals and natural health resorts are mainly based on the natural healing resources such as the thermal water, seawater, and mudpacks. Some of them have started as health resorts in the 19th century, which means that they have a very long tradition.

➢ Most specialized hospitals and natural health resorts are outdated and in poor condition because the last significant investments were made in the late 20th century. The quality level is thus significantly lower than the European standard.

➢ The users are primarily patients covered by the CIHI (Croatian Institute for Health Insurance), but the number is decreasing and certain special hospitals and health resorts are trying to attract tourists with additional offers (additional quality accommodation facilities and amenities such as wellness centers and services, and water parks, etc.).

➢ Specialized hospitals are primarily focused on rehabilitation that in these facilities creates an atmosphere of a classical hospital that serves for the recovery of ill patients.

➢ Specialized hospitals and natural health resorts are not certified for the services of health tourism, and only few of them have international certificates (ISO 9001, HACCP).

➢ Due to the large number of specialized hospitals that require a significant investment in the renovation and construction and due to overall unfavorable economic situation it is likely that the government will reduce co-financing of these facilities, which will lead to the need for their restructuring, and the orientation towards the market economy.

➢ There is a lack of cooperation between the different subjects (health, catering, travel agents, and science) in order to crate a comprehensive offer of health tourism. There is also a lack of the systematic promotion on national level and specialized agents.

Wellness is a relatively new trend on the domestic market. It is increasing each year by 30-40% and is expected to grow by even bigger rate. Wellness offer in spas and other objects in Croatia can be summarized as:

• Spa sector in Croatia is still lagging behind neighbouring countries (Slovenia, Hungary, and Austria) in offer and quality although the product is quite known and there is a substantial demand present around Croatia.

• There are several forerunners of the modern thermal bath concept ranging from holiday and fun to wellness. For example, Terme Tuhelj and Toplice Sveti Martin as well as recently opened Aquae Vivae in Krapinske Toplice.

- Wellness hotels are relatively new to the Croatian market. There is a growing number of four-star hotels offering bathing, sauna and fitness facilitites, as well as health and beauty treatments of different types and quality. These services do not require the employment of medical staff.
- Medically supervised wellness offer includes dermatological, detox and rheumatic programs, physical therapy, and nutritional programs with weight regulation.
- Wellness hotels on the beach are usualy five-star hotels with significant investments and modern design. Their competitiveness lies on the coastal positioning with beaches as an integral part of offer but are still characterized by seasonality. There are total of 68 objects located in the coastal zone (Institute for Tourism, 2014).
- Wellness hotels on the continent are rare and limited to three or maximum four stars. Generally, they are smaller and with a more modest offer. There are 13 objects situated in the central part of Croatia and Zagreb (Institute for Tourism, 2014).

Health care facilities providing medical tourism services in Croatia are characterized by a lack of interest in medical tourism and most of them do not have an international certification. The offer itself in unorganized since the services are based on the small number of specialized, internationally established doctors and private institutions. There are positive steps towards multidisciplinary associations combining health, catering industry, travel agents and science in order to establish a destination value chain.

Primary competitors to Croatia in the terms of development stage and the quality of health tourism promotion are Slovenia, Hungary and Austria. We can say that due to the vicinity and the great Croatian outbound market, Slovenia is the most significant competition to Croatia.

Wellness tourism in Slovenia is a few years ahead of Croatian wellness tourism. Slovenia has a clearly defined course of health tourism development for years. Slovenia has defined that it would invest in the development of high quality health tourism and create a superb offer, in order to attract the loyal and satisfied visitors, with greater purchasing power. Although the starting positions such as climate, water quality and distance were quite similar to those in Croatia, Slovenian spas had already embraced the global trends in health tourism years ago, while in Croatia, the trends are yet to be discovered and incorporated into offer that will be competitive on domestic and foreign markets. Slovenia has many high quality thermal rivieras and wellness centres, which work with a full capacity almost the whole year around. Compared to Croatia, which only has six thousand beds, Slovenia has sixteen thousand.

If we want to summarize the characteristics of competitive regions mentioned (Slovenia, Hungary and Austria) which were analysed for the purpose of the paper the following would be most important and can be used to create competitive advantages of Croatian health tourism offer:

a) The integration of offer/"flirting" – the offer is structured in a way that medical amenities are the focal point, and everything else (wellness and recreational facilities and services together with a great variety of accommodation is combined into an attractive package). There are also organized rehabilitation treatments and extended stay for elderly people.

b) The focus on quality – there are accreditation systems of medical institutions, and national and/or international certification systems are regulary implemented. Quality medical staff is continuously being educated in the field of health torusim.

286

c) Branding – the hotels are usually a part of the big hotel assosiations (eg. Best Wellness Hotels Austria, Health&Spa Premium Hotels) and 'spa' centres (eg. Spa Austria). Marketing emphasizes key words „terme", „spa", „health resorts".

d) Specialized agents – the agents are often bazed in the U.K. and the U.S.A., and many specialized agents for incoming health tourism are present.

e) Promotion and sales – national tourism organizations and asosiations are carrying the main promotion and sales acitvities in health tourism. They are mosty using the Internet sites, on-line booking, and specialized brochures as the main tools for marketing and sales.

f) Investments – there are continuous investments in the new and modern equipment, decorating space, and environment.

Besides the primary competitors, the Institute for Tourism defined the new and possible future competitors to Croatia in the field of health tourism. New competitors are Poland, the Czech Republic, and Turkey. They are mostly offering lower prices and are promoted on the U.S.A. and the U.K. markets. Possible future competitors are Bulgaria, Romania, and Serbia. They have a great potential of thermal spas regarding natural resources. In the future, they can become attractive destinations if they start investing in the hotel and medical infrastructure.

2.2. Research results

When we talk about the health tourism in continental Croatia the main focus is on natural health resorts and spas, which is very logical given the concentration of geothermal resources in that part of Croatia. Due to this fact, health tourism, together with medical tourism, was recognized as a primary product in the region of Central Croatia in Tourism Development Strategy of the Republic of Croatia 2020.

In order to achieve the desired position of Croatia as a destination for health tourism there are many preconditions to be fulfilled and they can be applied on the coastal and the continental part of Croatia respectively.

What also may give more momentum to the development of this type of tourism, in the currently still neglected part of Croatian tourism, is its positioning in the national strategy as well as in the legal framework in the field of healthcare, tourism but also other sectors (land use plans, visa regime etc.). What is significant for the progress of the development of this form of tourism is the announcement of amendments of the Law for providing services in tourism that will regulate the tourist services in the field of health tourism, while the Health Protection Law will regulate the provision of health care services in health tourism.

One of the most important challenges for the health tourism in Croatia is the problem of registration and evidence of service providers in the health tourism. The Ministry of Health mentions this matter in the National Strategy of Health, stating that there is a lack of adequate normative acts regulating health services in tourism, which would allow conducting health, tourism and hospitality industry under one roof respectively.

Other challenges include defining the conditions for the organization of health tourism offer and conditions for entities providing services in the health tourism (certificates, licenses) as well as the implementation of international standards of quality and medical certificates following the example of foreign practices (Medak, 2013).

Due to the aforementioned concentration of natural health resorts and spas in the continental part of Croatia, it is believed that legal regulation of this type of tourism would have multiple

benefits particularly for this part of Croatia. It would also increase the enhancement and protection of natural resoruces, especially because health tourism encourages the development of other economic branches and activities, and can contribute to the development of economically underdeveloped areas. Primarly this refers to the production of healthy food and preserving a clean ecological area in underdeveloped regions of Croatia. A special approach and coordination between the several ministries, especially the Ministries of Health, Tourism, Culture, and Regional Development should be established, as well as the need to create and adopt a comprehensive legislative solution by laying down special regulations for this specific area.

A special attention should be given to investment in the construction and rehabilitation of natural health resorsts, spas and specialized hospitals. According to the conclusions of the Round Table "Croatia, a year-round Riviera of Europe - strategic and legal framework for development of health tourism", held in Zagreb in 2013, the Action Plan for the Development of Health Tourism in Croatia is one of the key incentives for the "transformation" of existing health resorts and spas and their emergence in health tourism destination, with new services and new hotel capacities, and especially accommodation facilities for the elderly tourists, which can extend the off season.

The second component of the Action Plan should be new destinations for health tourism on unused locations of the former military barracks and resorts, or the so-called "brownfield investments" since they already have the necessary infrastructure (roads, electricity, water, and sewage) suitable for building the new capacities for health tourism. At the same time, it is necessary to increase the capacity of wellness services with new medical wellness services in order to extend the season and increase utilization of the total hotel capacities. The Slovenian experiences have shown that these programs ensure the expansion of capacities and a year-round occupancy, and the users of these services are mostly foreign tourists.

Apart from the infrastructural transformation and improving the health tourism offer, the emphasis should also be on the organizing of all the stakeholders interested in health tourism industry (counties and cities, specialized hospitals, spas, private health institutions, consulting companies in the healthcare and tourism, hotel companies, travel agencies, construction companies, educational institutions, manufacturers and distributors of food, insurance companies, and pharmaceutical companies and medical equipment suppliers) in order to be able to realize projects in health tourism much faster and in order create a new Croatian brand with a high added value.

The growth of health tourism offer and the resulting strong competition create the need for the differentiation, which is today, to a large extent, carried out through branding in order to ensure market recognition, and (perhaps more importantly) the introduction of quality standards. With this in mind, it is considered that continental spas should position itself as a unique destination because they are mostly within a radius of 70 kilometers from Zagreb, which also gives Zagreb the possibility of branding itself as the city of medical tourism. The above is based on the assumption of a better usage of capacity in the private and public health as well as on the completion of the University Hospital and the Terme Zagreb attracting interested partners and investors.

In accordance with the concept of branding it is necessary to apply the principles of marketing planning as a prerequisite for the implementation of health tourism development strategy in Croatia and to expand the market and product mix which results in decreasing dependence of providers of health care and tourism services on the financing of the health insurance system (Milinović, 2012).

With the aforementioned approach Croatia would eventually became a "country of health" in the broadest sense, and enable the connection of "blue" (coastal) and "green" (continental) parts of Croatia.

Besides only trying to connect different stakeholders, which are a part of the Croatian health tourism value chain it is also important to take the advantage of strategic merging of natural health resorts and spas as a precondition of creating a competitive position on the domestic and international markets. The Croatian health resorts must also be strategically linked with internationally recognizable and established providers of the health and medical tourism in countries of the relevant competition circles (Austria, Italy, Germany, Hungary, and Slovenia). Furthermore, the positive experience of European countries in the expansion of the concept of health tourism product and integrating it with other forms of tourism can also be part of the implementation of strategic guidelines that will help to make the Continental region of Croatia a competitive destination for the health tourism. The international cooperation in tourism within the European Union programs using exchange of knowledge, experiences, and concepts as well as the strengthening of the capacities can contribute to the achievement of significant results in the further development of this form of tourism.

The entire intensive development of health tourism is not possible without a permanent and target-oriented support of relevant institutions such as the relevant ministries and the other state institutions, since they are responsible for removing barriers and encouraging investments. On the other hand, the operational support through professional management of the National Association of Health Tourism with the functions of market research, information, education, advocacy, and connecting members is also extremely important.

All these preconditions that make interventions in the existing framework for the development of health forms in the Continental region of Croatia, should lead to the creation of a unique and recognizable product, which will separate Croatia from the extremely strong competition in the region. The active participation in preservation and development of natural, cultural and historic resources implementing sustainable development concept should also be taken into account (Birkić, Vitner Marković, Vrbanac, 2012).

2.2.1. Exaples of potential health tourism destinations in continental Croatia

Croatian Tourism Development Strategy 2020 recognized the prospective locations of investment projects while the Action Plan for the development of health tourism identified several project ideas for development of health tourism in continental Croatia. These potential locations and project ideas include reconstruction of old or building new objects and hotels in specialized hospitals situated in Varaždinske toplice, Lipik, Daruvarske Toplice, Naftalan, Stubičke Toplice, Krapinske Toplice, Topusko, Terme Zagreb, Bizovac, Sisak, Prelog, Sv. Ivan Zelina, Sv. Martin na Muri, and Babina Greda.

Given the available information of the planned investments, which will reposition the offer of health tourism, three examples of health tourism strategic development in continental Croatia were chosen.

Varaždinske Toplice are the oldest, largest and probably the most famous health resort in Croatia. Modern health "tourism" is based on thermal water temperature of 60 ° C, which began to be used for its natural healing attributes in 1820.

A specialized hospital for the medical rehabilitation Varaždinske Toplice today dominates the economic and social life of the town. It consists of the five main buildings on four acres of land. The hospital has 923 beds and several medical departments, together with the necessary

equipment and infrastructure, therapeutic units, outdoor baths, and a convention center. The entire complex generates about two hundred thousand overnight stays per year, of which about 80% comes from the public health system. The buildings are old and lagging behind in standard and quality. It employs a staff of 688, half of whom work in the health sector and half in the tourism sector. The specialized hospital has recently introduced the first development concept for the central area of the hospital. In addition to the necessary general reconstruction in existing capacities there are four new investments planned:

- Thermal Spa – the reconstruction of the hotel complex Minerva to raise categorization to three or more stars, reconstruction of the Terme and Konstatinov Dom and reconstruction of Lovrina bath into a four-star spa hotel;
- The Spa Hotel "Jupiter" – the construction of a new spa hotel capacity with 480 beds at the level of four or five stars, on an area of thirty thousand square meters;
- The Spinal Center "Junona" – the construction of a new hospital wing on 5 700 square meters;
- The Digital Museums Region – the establishment of the Digital Museum Aqua Iasae, with the museological and multimedia presentation of cultural and natural attractions with the backbone of the thermal water.

In *Daruvarske Toplice*, the water temperature has an average of 46.7 ° C. Daruvarske Toplice today are a modern center of health preservation and are constantly upgrading the quality of services provided in order to increase the customer satisfaction, in accordance with the requirements of the Quality Management System ISO 9001. Daruvarske Toplice have two accommodation facilities with 182 beds. They employ 86 medical professionals and 147 other employees. In 2013, they had 76,720 overnights of which high percentage is comprised of local guests. According to the Institute of Tourism data Daruvarske Toplice have a decreasing number of overnight stays in 2013 compared to 2012 and in the structure of overnight stays, just over 50% are the users of the national health insurance. The entire new positioning of Daruvarske Toplice is a + Green concept - the first green spa in Croatia. The synergy with the EU copyright + Green concept brought Daruvarske Toplice in 2011, a membership in EHTTA and placed Daruvarske Toplice alongside famous international health resorts such as Vichy, Evian, Baden Baden, Wiesbaden, and KarlovyVary. The introduction of innovative + green actions at all levels creates, shapes and builds networks into the structure of EU copyright interdisciplinary umbrella of + Green concept which makes the new +green brand of medical tourism in Daruvarske Toplice.

In developing this brand, Daruvarske Toplice have the following plans:

- Increase the accommodation capacity from the current 160 rooms to 250 rooms in the categories of accommodation of 3+ and four-stars by international hotel standards;
- Build a new hospital pavilion;
- Revitalize and adapt julius park and switzerland villa - the oldest spa park and a boutique four-star hote;
- Decorate the central muddy pool – elite and wellness center for treating infertility with the help of natural factors;
- Separate the provision of services for the patients using national health insurance from the other guests;
- Ensure energy independence through the use of renewable energy sources, and
- Expand their offer through health, cultural, sport, and gastronomic tourism.

The last example is the *Zagorje region*, which is being positioned on the market as a "the destination of health" and bases its development on two important health tourism complexes – Krapinske Toplice and Stubičke Toplice. The region of Krapinske Toplice employs more than a thousand workers in the health sector. Their health tourism product is based on the natural factors, tradition and the modern medicine.

The specialized hospital Krapinske Toplice employs 712 employees, including 43 doctors, 189 nurses and 141 physiotherapists. It covers thirty thousand square meters and has 600 beds (of which 456 for the health insurance users). In 2013, it had 159,451 overnight stays. In the structure of overnight stays, the users of the national health insurance represent more than 80%. Domestic guests make almost 100% overnights. In March 2015, they opened a new, the largest and the most modern complex of indoor pools in Croatia on over eighteen thousand square meters. On over 1 100 square meters of water surface, there are several pools that are filled with thermal water temperature of 28-38 °C and more than 160 water attractions.

The specialized hospital Stubičke Toplice consists of the three interconnected objects with a total of 235 beds (of which 150 for health insurance users) and 185 employees. In 2013, it had 62,679 overnights. There was an increase in comparison with 2012. In the structure of overnight stays, the users of the national health insurance represent about 80%. The thermal water temperature is 69 °C.

As a part of the development of long-stay tourism in Stubicke Toplice, a new program of investments worth 109 million euros is in preparation through the public-private partnership. There are also several investment projects for the renovation of existing buildings using renewable energy resources and energy efficiency, investments in a new swimming pool and a hotel and construction of greenhouses for their own production of fruits and vegetables with the help of the Agricultural school, and the Faculty of Agriculture Zagreb (the Ministry of Health, 2015).

The tourism product of wellness and spa of Krapina-Zagorje County is in accordance with the trends on the market and the needs of tourists. This product is combining different wellness and spa treatments and programs (body treatments, sports and fitness, sauna, nutrition, detoxification, high quality accommodation, thermal springs, and water parks) and the focus is on the "experience".

What is significant in promoting this kind of product and makes it a successful example of a continental tourism destination is that not only it includes the components of health tourism, but also it is combined with the other attractions and values that make this region a distinctive and interesting for tourists and enriches their stay in the region. Therefore, the promotion of Zagorje as a "destination of health" is associated with not only the preservation of health, thermal springs and attractive nature, but also with rich cultural heritage (castles, museums, festivals, art colonies, and the UNESCO traditional trade - licitar, Holy Mary sanctuary), the opportunities for active holidays, the excellent wines, and gastronomy (traditional Zagorje cuisine, the enowned and award-winning chefs, ecologically grown food, wine routes).

3. CONCLUSION
The health tourism in Croatia, especially in the Continental region of Croatia, represents a very interesting potential to create recognition and competitiveness of this region in the domestic and foreign markets. There are certain obstacles for the intensive development of this type of tourism. Therefore, a joint action is necessary to influence the creation of a positive and supportive environment for the further development of this type of tourism. It would be feasible primarily through the investments that are already planned on the regional and local levels and that may trigger the "transformation" of the existing health resorts and spas and their emergence

into the health tourism destinations with new services and hotel capacities. This would create the new attractive health tourism destinations on unused locations. The next segment is branding, in order to ensure market recognition and the introduction of quality standards. Strategic planning and networking should be aplied equally to everyone interested in the "health tourism industry" in the domestic market. Nevertheless, without a permanent and target-oriented support of relevant institutions such as relevant ministries and the other state institutions, that path would be even more demanding. The operational support through the professional management of the National Association of Health Tourism can be a significant boost. On top of that, the emphasizing of sustainable development, the usage of natural, historical and cultural resources for the purpose of their conservation and valorization is inevitable.

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WORK VISION AMONG Y GENERATION

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ABSTRACT
Increased graduate output is a determinative phenomenon in developed countries. Based on world tendencies it can be predictable that the role of highly qualified and foreign language speaking labour force has increased. Worldwide in many countries business service centres have expanding employment role. Their first recruitment target group is young graduates. This young generation could become the most important target of global companies because this generation is able to adapt to changes and they are really sensitive for new organizational cultures. Performance orientation and flexibility are typical for Y generation on the labour market. They are considered as "tech geeks" who are really opened to innovations. In this research we analysed job search attitudes with the participation of students in higher education. During the job search preference analysis we examined the considered factors in employment by the young generation. Based on the literature it is observed that job-seekers do not decide mainly on income to accept or decline a job. Their decision is also affected by the company's features (like employer brand, company size, promotion possibilities). We also analysed the career possibilities for young graduates at business service centres.
Keywords: *job search, human resources, shared service center, Y generation*

1. INTRODUCTION

Nowadays increasing labour shortage is probably the most important cause of company problems. Number of graduates is growing year by year on global labour market, but because of structural problems this growth can not satisfy labour demand on global markets. Activity organizing into Shared Service Center (SSC) is a typical firm organizational solution of multinational companies. According to *Hinek (2009)* in order to ensure rational company operation one activity or service can be outsource from parent company with applying SSC or to hire a company specialised in outsourcing. This research of Hinek reflected that outsourcing is not only a strategic decision but rather technical, financial, strategic, tactical, and political factors are important as well. Cost reduction is also a crucial element of this issue. International Service Centers are mostly owned by North-American or Western-European large enterprises. They operate Business Service Centers (BSC) and Shared Service Centers (SSC) mainly in Eastern-Europe and in the Far East. Young graduates are the target group of these service centers *(Fodor, 2015)*. Based on domestic experiences the primal target group of service sector is Y generation therefore service providers worth to pay attention to them. *Filius (2015)* said that the difference among generations is that Y generation express their demands and expectations more courageously, furthermore their professional development and career path are not only a domestic issue any more: they want to be present on international level. According to *Berta's (2015)* view, domestic services are important because from 2010 more

employees are working in tertiary sector. Based on the Hungarian Central Statistical Office data service sector employment is outstanding compare to other sectors: in 2014 tertiary sector employment was 1520,8% higher than primer sector and 363,1% higher than secondary sector. Business service companies have significant role in the service sector: in 2015 almost 100 enterprises operated in Hungary and they employed approximately 37 000 people. Most of the investment projects are related to this sector therefore this is the second biggest job provider area.

Analyzing other countries of the region (Poland, Czech Republic, Romania, Slovakia) it can be said that most of these countries' larger rural cities and towns are considered as an investment alternative, but unfortunately this is not true for Hungary *(Marciniak, 2014)*. It is likely that this factor has an important rule in this sector development in Hungary.

Because of the problems mentioned above, our goal is to analyse job search preference of some students in a rural higher education institution. We also analysed service centers visibility on employment aspect.

2. MATERIALS AND METHOD

In order to accomplish our research we used secondary and primary methods. Secondary data and information comes from the related reviewed literature. Concerning primary information we used a survey from the quantitative methods. The survey was send and filled by online and it was created by an international research team (Middle Eastern European university researchers from 4 countries and 10 universities). Our university participated in the fulfilment of the survey as well. Mostly closed questions were used. This paper contains the results of the institutional survey database. The project was started with the questionnaire of students participating in higher education in 2015. The number of received and valuable questionnaire was 108. MS Excel and SPSS 20.0 were used to evaluate these 108 questionnaires. Depending on the type of the questions we used univariate statistics and crosstabs. Relation between two or more variables and combined frequency distribution were analysed. During crosstab analysis Pearson's chi-square test were used in order to establish statistical relations between variables. Significance results were accepted under 5%. To measure association we used Cramer contingency coefficient.

3 RESULTS
3.1 Employment aspects

In this research we analysed employment preference among university students. Most of the consulted students plan to start working right after graduation. Only 25% of the responders think that employment and job search start during studies is very important. Early job seeking is slightly important for 10,4% and 18,8% does not deal with this question at all.

Early job search awareness is more typical for BA/BSc students and it is less important for MA/MSc students. 12,5% of BA/BSc students and only 5,2% of MA/MSc students deal a lot with employment questions. The explanation could be that most of MA/MSc students have already a job during their studies. 4,2% of students in higher vocational training do not care about employment issues at all, but at the same time also 4,2% are very experienced about it. During our research significant difference was identified in labour market behaviour of Y generation age groups. It means that concerning the importance of work start within Y generation, older students are more conscious compare to younger students (P=2,4% and C=0,24).

Responders planned to start working – because of age specificity - in different time (Figure 1). 50% of the responders would like to start working in one year but 39,8% of them are already working. We have to mention that among students there is an uncertain segment and they have not yet decided when they will enter into the labour market. This uncertainty could come from

the linear education system causing a late labour market entrance. On the other hand the reason could be the lack of labour market vision as well.
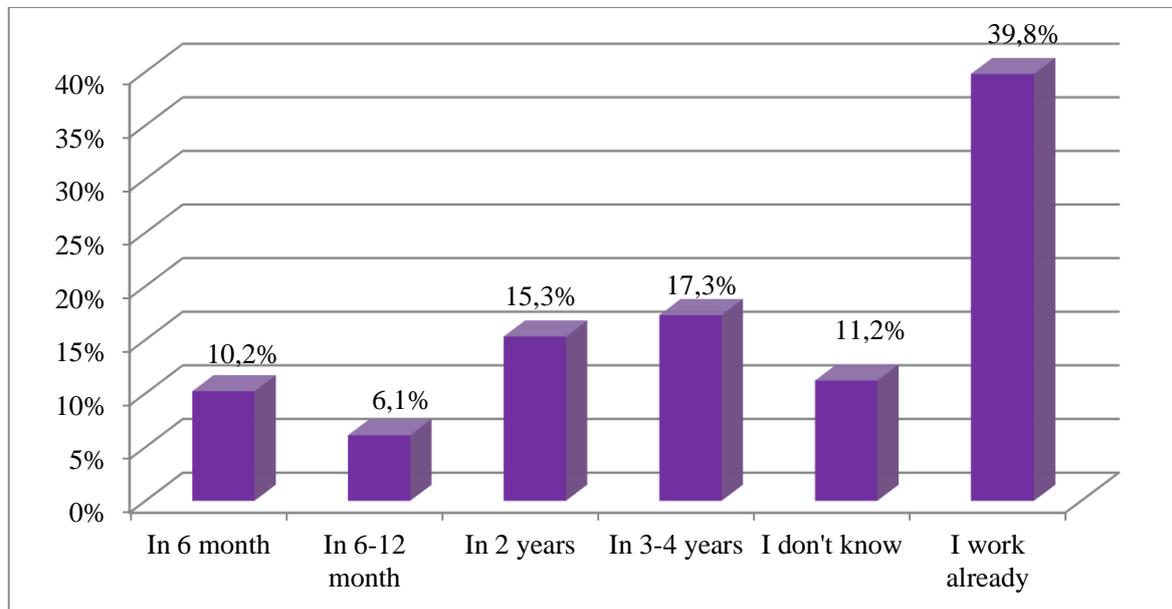
Figure 1: Planned labour market entrance (own data)

69,8% of the consulted knows well the biggest Hungarian employers and 30,2% do not have information from domestic operated companies. Relationship between awareness and age groups were medium (P=3,4% and C=0,3).
More than half of the responders (60,2%) would work in the private sector while 34,7% interested in the public sector. Non-profit sector is much less attractive for students.
75,8% do not have a special selected employer where they intend to work. From them 48,4% would work in private sector and 26,3% in public sector but they do not have a concrete concept. 18,8% know exactly which organization they would like to work for.

3.2 Decision preference of choosing workplace
Modern employers use more tools in order to get the competitive employees. Employee decision is affected by numerous factors and company type was analysed first. Responders would work at startups at least, 39,2% would work at their own business and for 36,5% family business is important but they do not exclude working at international companies (31,6%). Table 1 contains detailed data.

Table 1: Employment in private sector (own data)

Private sector	Not at all	Less	Maybe	I would like	Very much
Local small company	10,3 %	8,2 %	34,1 %	23,7 %	23,7 %
International large company	8,2 %	9,2 %	26,5 %	24,5 %	31,6 %
Start-up	13,3 %	16,3 %	38,8 %	19,4 %	12,2 %
Own business	12,4 %	11,3 %	19,6 %	17,5 %	39,2 %
Family business	15,6 %	9,4 %	15,6 %	22,9 %	36,5 %

We analysed workplace choice factors from motivational aspects as well. Questions were asked about employer's location, organization culture, career opportunities and wages. Table 2 shows these results.

Table 2: Expectations about the selected workplace (%) – (own data)

Workplace	Not important at all	Less important	Medium	Important	Very important
Reputation	6,1	4,1	35,7	32,7	21,4
Products/services	2	2	25,5	37,8	32,7
Company size	7,1	14,3	41,8	26,5	10,2
Trainee program	8,2	7,1	25,5	35,7	23,5
Career possibilities	2	1	9,2	33,7	54,1
Friends/family feedback	7,2	3,1	32	26,8	30,9
Travel possibilities	7,2	6,2	28,9	30,9	26,8
High salary	1	3,1	13,3	30,6	52
Geographical closeness	6,1	8,2	20,4	33,7	31,6
Training, development	1	1	11,2	42,9	43,9
Working environment	0	1	3,1	19,4	76,5
Workload	0	0	7,2	23,7	69,1
Working hours	4,2	6,3	28,1	35,4	26

Most of the consulted students considered these criteria from medium important to very important. Company ranking is influenced by working environment, workload, career opportunities, high salary, training and development opportunities: According to 59,1% (on average) these are the key requirements. Besides products and services, trainee program, working hours (shift working time or working time frame), geographical closeness, travel opportunities are also important. Company size, reputation and friends/family feedback are medium important (average 36,5%).

50,5% of the students considered self-fulfilment as the most important when it comes to choosing position. 45,9% believe that financial benefits are an important expectation when they choose a job or a position. Fast professional development, opportunity of contribution to company success, variety of work, flexible working time and chance for reputation inside or outside of the company are important for students but these factors are less important when they look for a concrete position. Table 3 contains these results.

Table 3: Importance of criteria concerning accept a position (own data)

Importance of criteria	Not important at all	Less important	Medium	Important	Very important
Financial benefits	1 %	2 %	7,1 %	43,9 %	45,9 %
Self-fulfilment	0 %	0 %	9,3 %	40,2 %	50,5 %
Flexible working time	1 %	2 %	19,4 %	38,8 %	38,8 %
Fast professional development	0 %	1 %	15,3 %	49 %	34,7 %
Contribute to success	0 %	3,1 %	16,5 %	48,5 %	31,9 %
Get a reputation	5,1 %	8,2 %	27,6 %	35,7 %	22,4 %
Variety of work	1 %	2,1 %	21,1 %	44,2 %	31,6 %

297

The next question analysed the preferences of employment areas within service centers (Figure 3).
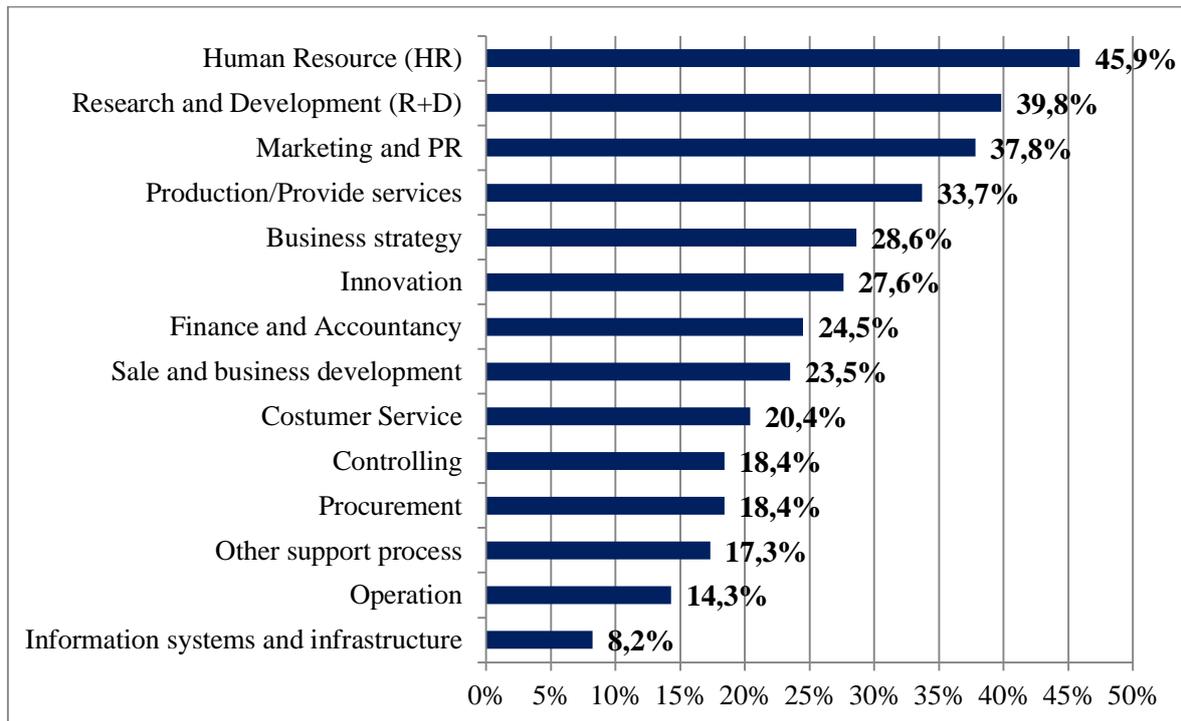
Figure 3: Preferences of employment areas (own data)

Almost half of the responders (45,9%) would kindly work on HR area, but R+D, marketing and production/services are also popular areas for them. On the average of 37,1% mentioned these areas.

Most of the students expect work development after 2-3 years: according to 49,5% after 2-3 years they will have a possibility for professional development and promotion. 13,7% would like to be promoted after the first year and 20% would anticipate vertical job development after 3-4 years. 16,8% would wait five or more years in order to get higher positions. The results are showed by Figure 4.
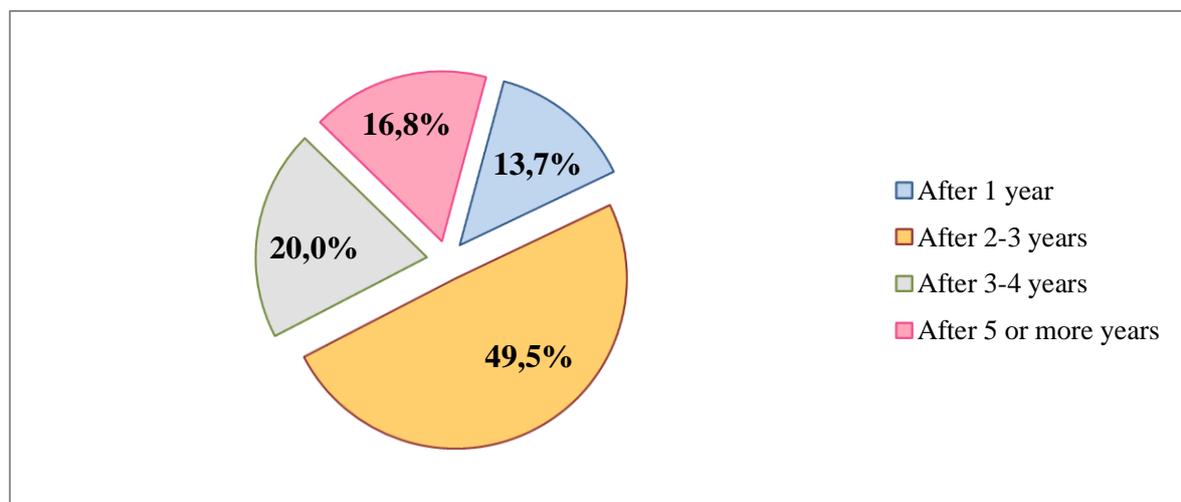
Figure 4: Expected promotion opportunities based on years spend at the workplace (own data)

3.3 Business Service Center attitudes

In this chapter we were dealing with questions about Call Center, SSC and Outsourcing Center. 74% of the students are aware of what Call Center really means, but the other two definitions were quite unknown for them. Approximately 25% heard about "outsourcing" and only 20,8% meet with the expression of SSC. More than half of the responders believed that SSC is more or less the same as Call Center or Outsourcing Service Center. The opinion was rather the same about that SSC's assignments are not similar to any workplace's tasks. 54,5% believed that an Outsourcing Center is roughly the same as SSC. 23,8% thought that Call Center and SSC is a different job. Basically most of the consultants (44,2%) have the same opinion about the importance of multilingual communication skills at SSC. According to 38,9% SSCs operates in modern office buildings and working hours are more than 8 hours (43%). Students other view was that working at SSC means monotonous work (48,4%), there is only a few promotion options (45,2%) and it has a high fluctuation rate (43%). Besides SSC offers higher salary than the average wage (45,3%), working atmosphere is modern and average age is low (42,1%), flexible forms of work is available (40,6%), working atmosphere is adequate for Y and Z generations (40,4%) and studies and qualifications are less important (38,9%).

4. CONCLUSION

Based on our results it can be said that the analysed target group is less interested in private sector as a career start opportunity. Their visions are the contrary of the literature and the analysed domestic labour market opportunities. SSC job opportunities are less attractive for the responders therefore this could be an explanation of the numerous SSCs in the Hungarian capital city and rural cities have only a few Centers. The target group of this research was the Y generation (age 20-25 and age 26-30), thus we mostly looked for relations among the answers of these age groups. 67,4% of the responders included these age groups therefore the results were mainly influenced by the opinion of Y generation. It is observed that Y generation deal with employment questions and work choice. Between these two values there is a medium strength relationship. In order to get a job, employees need medium language skills at least. 83,7% of the responder students speak minimum one language on medium level which is a basic job requirement at SSCs. Business Service Companies have a quite low visibility among rural university students because expressions like Call Center, SSC, and Outsourcing Business is mostly unknown for them. They either do not know the job possibilities that these Centers offer. University studies should contain these information in order to raise the popularity of these Centers.

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BITCOIN AS AN INNOVATIVE PAYMENT CURRENCY IN GERMANY: DEVELOPMENT OF THE E-GOLD STANDARD

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ABSTRACT

Recent years have witnessed the advances of e-money systems such as Bitcoin, PayPal and various forms of stored-value cards. This paper adopts a mechanism design approach to identify some essential features of different payment systems that implement and improve the constrained optimal resource allocation in Germany. Bitcoin is a digital, decentralized, partially anonymous currency, not backed by German or any government or other legal entity, and not redeemable for gold or other commodity. Bitcoin relies on peer-to-peer networking and cryptography to maintain its integrity. Compared to most currencies or online payment services, such as PayPal, bitcoins are highly liquid, have low transaction costs, and can be used to make micropayments in Germany. Although the Bitcoin economy is flourishing, Bitcoin users are anxious about Bitcoin's legal status. This paper examines a few relevant legal issues. The research question is to investigate how supplementary digital terminating currency Bitcoin can provide a superior fallback position as e-gold standard in Germany and worldwide. Digital self-liquidating e-Gold ounce could be distributed immediately to voters by using swipe cards used by some governments for transit facilities. Bitcoins as e-Gold ounce do not provide a viable medium of exchange because of the cost of their purchase, creation and/or exchange.
Keywords: Bitcoin, Digital currency, e-Gold Standard, Ounce

1. INTRODUCTION: THE ROLE OF THE BUNDESBANK

Oversight is an important role assumed by the Bundesbank in the field of payment transactions. This task is clarified with the latest amendment to Section 3 of the BBankG and is also recognised by the Treaty and the Statute as a basic task of the Eurosystem. Its aim is to ensure smooth payment transactions and encourage efficiency and security. In practical terms, this function is exercised largely by means of the general agreements on procedures and standards jointly developed with the banking sector and via institutionalised dialogues in various official bodies. Moreover, the Deutsche Bundesbank itself offers services in the field of payments and processing and thus assumes an operational function. Additionally, the Bundesbank carries out a statistical survey on payment services every year, which has to a certain extent been of limited scope and on a voluntary basis so far. To improve the data - an important basis for the performance of the oversight role - the Bundesbank is considering implementing a statistical regulation in the near future. Such a regulation would entitle the Bundesbank to collect statistics from all credit institutions in Germany. In exercising the oversight function, close cooperation between the bodies overseeing payments and the BaFin is of fundamental importance. In the field of electronic money the Deutsche Bundesbank also cooperates with the Federal Agency for Security in Information Technology (BSI) and takes advice from this body, as systems with electronically stored units of value are subject to a special security test. The legal foundation for banking supervision is the KWG. The aim of this law is to safeguard the ability of the banking sector to function and protect creditors by monitoring the credit standing and liquidity of banks. The law aims to achieve this objective by respecting the principles of a market economy. Under the KWG, the supervision of banks is primarily the task of the BaFin, which, however, performs this task in cooperation with the Deutsche Bundesbank. The Deutsche

Bundesbank is above all involved in the ongoing supervision of banks and in analysing reports and notices from banks. In addition, however, it is involved in quality control in connection with the minimum requirements for the trading activities of credit institutions (MaH) and internal risk models.

1.1 Payment systems of the Deutsche Bundesbank

Continuing the tradition of the former Reichsbank (i.e. its explicit mandate to handle payment transactions), the Deutsche Bundesbank is actively involved in processing payments, with the aim of achieving the following goals:1. an adequate share of cashless payments in general; 2. the promotion of large-value payments in particular; 3. subsidiary participation in retail payments; 4. the provision of payment systems/services which are neutral with respect to competition; 5. the promotion of safe and efficient procedures; and 6. contributing to a reduction in processing times. The Deutsche Bundesbank fulfils its statutory task of ensuring the processing of domestic and international payments by providing a neutral giro network available to the banks in the various banking groups and offering its services in the area of cashless payment transactions to holders of Deutsche Bundesbank accounts in 118 branches and seven computer centres and two payment transaction points (as at year-end 2002). Banks have the option of using the Deutsche Bundesbank's facilities instead of private giro networks or groups of banks. Against the backdrop of the close connection between the implementation of monetary policy and the processing of payments through the central bank, the Bundesbank pays particular attention to the encouragement of large-value payments. These payments are processed through RTGSplus, which at the same time provides a connection to the TARGET system. Together with the banking sector, the Deutsche Bundesbank developed this new liquidity-saving large-value euro payment system, combining the features of the two previous large-value payment systems, the Euro Link System (ELS) and the liquidity-saving hybrid system Euro Access Frankfurt (Elektronische Abrechnung Frankfurt; EAF), to form one single real-time gross settlement system, which can be used for both domestic and cross-border payments in euros. It went live on 5 November 2001. The EAF was closed at this time, whereas the ELS will still be operated mainly as a communication channel to RTGSplus until the end of 2004. The new system is a means of gaining electronic access to the Deutsche Bundesbank, which has provided for this kind of access since 1990. In addition, the Bundesbank also offers an electronic procedure intended specifically for the handling of mass payments (credit transfers, cheques and direct debits), namely the Retail Payment System (RPS).

1.1.1 Cash payments

The euro is the German currency and was introduced on 1 January 1999. At that time it only existed as book money or as electronically stored units of value, with banknotes and coins continuing to be denominated in DEM. After its introduction as cash on 1 January 2002 the euro became the only legal payment medium in Germany; nevertheless, the DEM, which was the only legal payment medium until then, could still be used until the end of February 2002 according to an agreement between the Deutsche Bundesbank, the ZKA and the German retailer association. The German banknotes and coins in circulation could be exchanged cost-free at banks at least until this date; thereafter the Deutsche Bundesbank guarantees the exchange of DEM to the new currency. Banknotes are available in seven denominations (EUR 5, 10, 20, 50, 100, 200 and 500) and the coins in eight (1, 2, 5, 10, 20 and 50 cents and EUR 1 and 2). The German 1, 2 and 5 cent coins have an oak leaf on the back, the other cent coins a picture of the Brandenburger Tor in Berlin, and the euro coins the eagle as the German heraldic animal. In addition, there are very small quantities of DEM 10 coins, although these are primarily for collectors and therefore rarely used in payment transactions. Banknotes and coins are legal tender, although there is no obligation to accept more than 50 coins, or in the case of

commemorative coins no more than EUR 100. At the end of 2001 total currency in circulation - including cash in bank vaults - amounted to EUR 82.9 billion, of which EUR 76.5 billion was in banknotes (92.3%) and EUR 6.4 billion in coins (7.3%). Cash in bank vaults amounted to EUR 14.9 billion. Although the share of card-based payments is rising continuously, cash payments still amounted to 68.8% of the value of all retail payments in 2001.

1.1.2 Non-cash payments

In Germany, cashless payments are effected by means of credit transfers (49.8% of the total number of cashless payment transactions in 2001), cheques (2.3%) and direct debits (36.4%). The usage of debit and credit cards is steadily increasing, reaching in total a share of almost 11.3%. Other types of payment, such as special payment instructions via Deutsche Postbank AG, but also payments made with prepaid cards, are relatively insignificant (less than 1%). [1]

1.1.3 E-banking and e-money

The German banking sector is currently undergoing a process of fundamental change, caused by, among other things, the possibilities offered by home banking. Here a distinction must be made between electronic banking in closed networks - as offered, for example, by the online service provider T-Online AG (a subsidiary of Deutsche Telekom AG) - and internet banking (open network). In addition to providing payment transaction services, home banking can also be used both for account management and securities transactions and for obtaining information. It was estimated that there were 19 million online accounts in Germany in 2001. It is further estimated that at the end of 2001 there were 29 million internet users, and it is reckoned that at the end of 2005 there will be 43 million. During the stock boom period (in the years 1998 to 2000) the number of customers conducting stock exchange business online doubled. The growth rates have decreased since the stock markets dropped off in 2000. Nevertheless, the increase in new online accounts is unbroken and is expected to continue as confidence in the usage of the technology increases as well. Given the rapid increase in internet use, the share of electronic commerce5 (e-commerce) in the total volume of trade will grow even further. Secure and efficient payment systems are prerequisites for the projected growth of e-commerce, since e-commerce will only be of interest to companies and private individuals if fast, simple and, above all, secure payment systems are available. It is becoming evident that in e-commerce between companies and private households, debit and credit cards are being used for the payment of larger amounts and e-money is being used for very small to small amounts. Here the borderline between e-money based on hardware and e-money based on software is becoming blurred, as card money can also be used for remote payments via the internet. Major banks and other institutions working in cooperation with banks have developed e-money schemes besides GeldKarte, such as PayCard, CyberCash and eCash. So far none of them has been playing a pivotal role. Indeed, CyberCash and eCash have now discontinued their operations. The expectations of rapid growth in these markets have been shattered by the fact that suppliers of goods and services and consumers have so far not accepted those payment methods.

1.1.4. Other developments

With EDIFACT a uniform global format for the processing of electronic business and trade was created. In 1997, in step 1, both the conditions for the exchange of EDI messages between the parties named in the contract and the requisite technical accessories were established with a view to handling business transactions between customers and banks via remote data transfer. In the second step mandatory EDIFACT acceptance was introduced on 7 February 1998, a

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[1] https://www.bis.org/cpmi/paysys/germanycomp.pdf (29.04.2016)

uniform global format for the processing of electronic business and trade. Since then, all banks have had to be in a position to receive EDIFACT payments. In addition, there is no longer any need to convert EDIFACT messages into a national format. The Deutsche Bundesbank accepts EDIFACT payments in the ELS within the framework of electronic access to the Deutsche Bundesbank. Because of the very small number of payments in that format the Bundesbank deliberately does not accept such payments in RTGSplus.

Interbank funds transfers in Germany
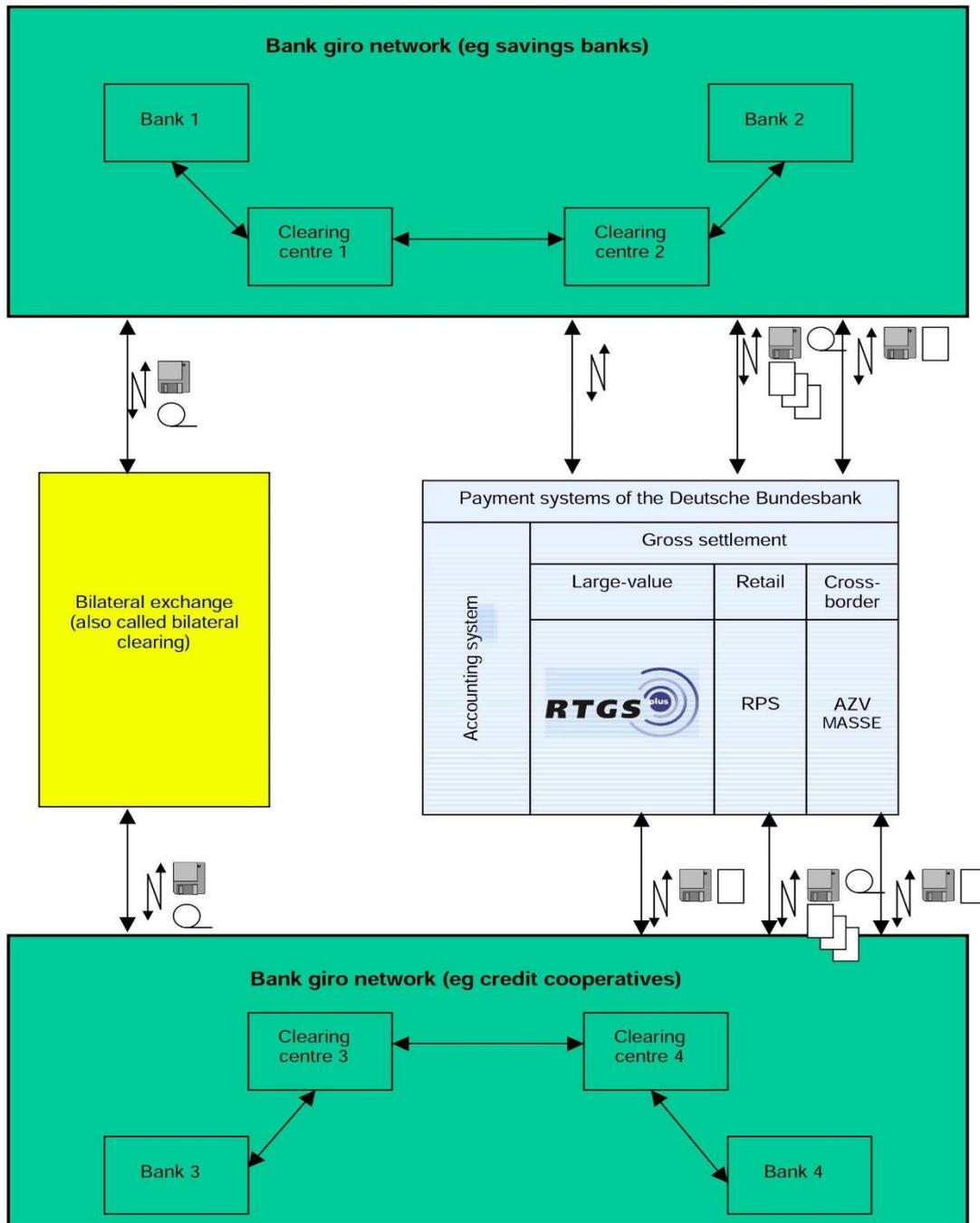
RPS = Retail Payment System of the Deutsche Bundesbank.

AZV = Cross-border payments procedure (via correspondent banks) of the Deutsche Bundesbank.

Source: https://www.bis.org/cpmi/paysys/germanycomp.pdf (29-04-2016)

1.1.5 Interest Rate Policy

Under the gold standard, interest rate policy worked through bank rates (discount rates), or, more correctly, because the monetary authority in a country could set its bank rate different from that in other countries. The empirical evidence in Bordo and MacDonald (2005) shows that under the gold standard short-term interest rates differed in Germany.

The price data for a Germany on the gold standard between 1880 and 1913 reveal facts:

1. Germany experienced very little inflation when the period 1880 to 1913 is considered as a whole.

Germany	1880 - 1913	1880 - 1895	1895 - 1913	Std. Dev.
Germany	0.42	-1.26	1.83	4.73

   Table: Average and standard deviation of annual inflation rates for Germany, 1880 - 1913[2]

The lack of inflation between 1880 and 1913 was achieved by countries experiencing deflation over the first part of the period and inflation over the remainder. Question arises does the Bitcoin "issue" in Germany, could/should interact with/against Interest Rate Policy in developing a new e-Gold Standard?
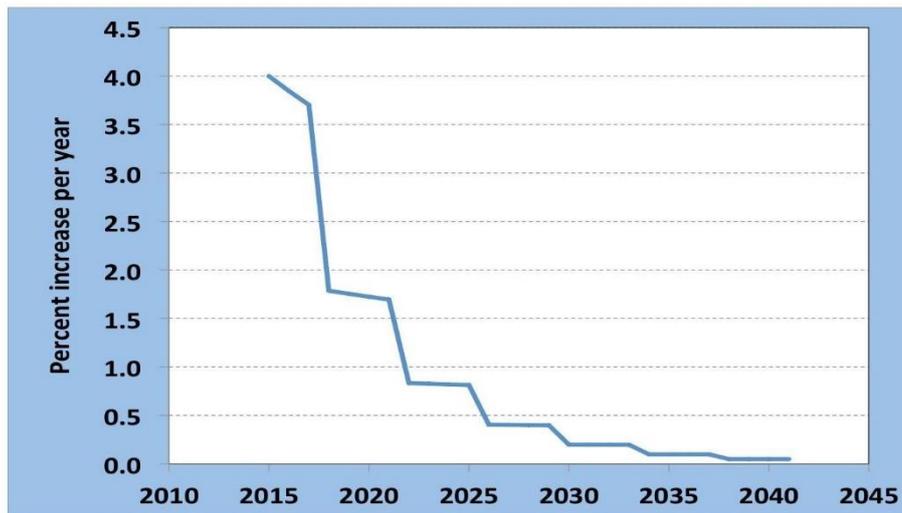
Percentage growth rates of Bitcoin, 2015 - 2040

Source: http://www.bankofcanada.ca/wp-content/uploads/2016/03/swp2016-14.pdf (29.04.2016)

Recent years have witnessed a number of retail payment innovations known as electronic money (or e-money). In some decentralized systems such as Bitcoin, bilateral transactions can be completed only after they are verified and written into a general ledger by other users (e.g. Bitcoin miners). In addition, according to CPSS (2001), it is quite common globally that the transferability of e-money balances among end-users is restricted. Specifically, 77% of e-money systems included in that survey prohibits transferability among end-users. Bitcoin (BTC) also has a built-in feature that allows the individual making a transaction to include a transaction fee paid to the Bitcoin miner. This feature of e-money can allow for charging

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[2] http://www.bankofcanada.ca/wp-content/uploads/2016/03/swp2016-14.pdf (29.04.2016)

merchants fees or other transaction fees, which are often observed in e-money payment systems. In contrast, electronic money such as prepaid cards and Bitcoins can function even in a setting with anonymous users and setting that renders cash essential. While some e-money systems allow the issuer to track the identity and payment history of users, it can be difficult to implement in most anonymous systems (e.g., Bitcoin and prepaid card). One future extension is to explore the welfare implication of introducing a record-keeping technology into this environment.[3] Extrapolating from the price-level experience under the e-gold standard, there are three conjectures about the behaviour of country price levels under the Bitcoin standard. In the long run, inflation in Germany would not be zero. Instead, there would be moderate deflation that would increase over time until reaching a rate of deflation equal to the negative of the rate of growth of world output around 2026. Changes in the world stock of Bitcoin are set according to the algorithm that determines how many new Bitcoins "miners" receive for verifying transactions. The percentage increase in the world stock of Bitcoins in each year from 2015 until 2040 is shown in previous Figure. There would not be periods of deflation followed by periods of inflation as was the case under the old gold standard. Price levels of the various countries would be highly, but not perfectly, correlated, much as they were under the old gold standard. My reasoning is that under the e-gold standard, just as under the old gold standard, the money supplies in Germany would not necessarily move together, although the more tightly a group of countries are linked in terms of trade and finance, the more closely their money supplies would be linked.[4]

2. CLASSIFICATION FOR SUPERVISORY PURPOSES

BaFin[5] has qualified BTC with legally binding effect as financial instruments in the form of units of account pursuant to section 1 (11) sentence 1 of the German Banking Act (Kreditwesengesetz – KWG). These are units similar to foreign currencies and not of legal tender. They include value units having the function of private means of payment in barter transactions, as well as any other substitute currency used by virtue of private-law agreements as a means of payment in multilateral settlement accounts. This makes a central issuer obsolete. BTC are not e-money within the meaning of the German Payment Services Supervision Act (Zahlungsdiensteaufsichtsgesetz – ZAG) because there is no issuer establishing claims against himself by issuing BTC. This is different for digital currencies, which are based on a central agent (e.g. Liberty Reserve). BTC are not legal tender either, and therefore qualify neither as foreign currency nor as foreign banknotes and coins. BTC are used to settle in personal contracts amongst the users involved. For delivery of BTC, the customer receives the desired consideration in the form of an item of purchase, a service, a currency of legal tender or other commercial goods. Commercial use of BTC may therefore be subject to authorization pursuant to the KWG. Without such authorization, such activity may constitute a criminal offence pursuant to section 54 of the KWG. Anyone buying and selling BTC for commercial purposes in their own name for the account of third parties engages in principal broking services. These services are subject to an authorization requirement. Purchase or sale of BTC is affected for the account of a third party if the economic advantages and disadvantages arising from such transaction are carried by the principal. Furthermore, the activity must bear sufficient resemblance to commission business pursuant to the German Commercial Code (Handelsgesetzbuch – HGB), although individual rights and obligations may differ from those of a typical commission transaction. In the case of BTC platforms, the elements of a principal broking service subject to an authorization requirement are therefore satisfied if:

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[3] http://www.bankofcanada.ca/wp-content/uploads/2015/11/wp2015-43.pdf (29.04.2016)

[4] http://www.bankofcanada.ca/wp-content/uploads/2016/03/swp2016-14.pdf (29.04.2016)

[5] German Federal Financial Supervisory Authority

- the individual participants have power to issue instructions to the platforms up to the time of execution of the order by specifying the quantity and price of the transactions;

- the respective participants do not know their trading partners and the BTC platform acts not as representative of the participants but in its own name;

- the economic advantages and disadvantages of the transactions are carried by the participants who wire cash to platform accounts or transfer BTC to their accounts; and

- the BTC platform is required to render account to the participants on the execution of the transactions and to transfer purchasedBTC. [6]

The German Ministry of Finance (Bundesministerium für Finanzen, BMF) threatens to scare innovation out of Germany. In a recent statement regarding the issue of taxation of Bitcoin as a means of payment, the German Ministry of Finance (Bundesministerium der Finanzen, BMF) classified the commercial sale of Bitcoin, and thus the use of Bitcoin as a currency as sales-taxable. This kind of taxation could severely damage the commercial spread and application of Bitcoin in Germany. The BMF's assessment stands in stark contrast to other EU-nations as for example the United Kingdom, which recently negated such a tax classification. The Bundesverband Bitcoin, German affiliate of the Bitcoin Foundation, has expressed its strong concern about the negative impact this decision might have on Germany as a location for upcoming and existing business and technology enterprises. . It is with regret that the Bundesverband Bitcoin e.V. has taken notice of the statement issued by the German Ministry of Finance (Bundesministerium der Finanzen, BMF) on 12 May 2014, responding to a parliamentary question regarding the value-added tax (VAT) on turnovers of the virtual currency Bitcoin. According to the BMF, the commercial sale of Bitcoin is a sale of "other services" [dt. „sonstigen Leistung"] which is subject to VAT. Such taxation could discourage the usage of Bicoin as means of payment to retailers in general, gastronomy and online shops, as these would be subject to double taxation: the first round of taxation whilst selling the actual goods and provision of service and then once again for the sale of received Bitcoin. If this mode of taxation were to endure, the innovative market of decentralized payment forms with all its merits for retailers and customers would be obstructed effectively. Revenues, tax receipts and innovation will driven abroad. With its assessment, the BMF contradicts other European partners, which consider Bitcoin transactions as VAT-free, based on the EU Value Added Tax Directive, binding to all European Member States. The Bundesverband Bitcoin e.V. therefore calls upon the German Federal Government to rethink its current assessment and not make itself the unloved stepmother to innovation in the European Union. [7]

3. STUDY SHOWS 44% OF CONSUMERS IN GERMANY KNOW WHAT BITCOIN IS

It should come as no surprise to find out a lot of people have heard of Bitcoin by now, even though very few consumers have used the cryptocurrency so far. A new German Consumer Payment Study shows 1% of participants have ever used Bitcoin, which is a disappointing

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[6] http://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2014/fa_bj_1401_bitcoins_en.html (29.04.2016)

[7] https://www.bundesverband-bitcoin.de/wp-content/uploads/2014/05/Press-Release-Bundesverband-Bitcoin-PM-14-002_eng.pdf (29.04.2016)

number. lthough these types of studies do not paint the complete picture of consumerism in Germany, there are some telling signs regarding Bitcoin adoption in the country to be found. Considering how there are so many different payment options available in the country, it should come as no surprise to know Bitcoin is not all that popular in Germany right now.

To be more precise, the study shows how only 1% of participants knows what Bitcoin is, and have used the cryptocurrency in the past. While this is a rather low number, there is nothing to worry about just yet, as only 26% of respondents indicated they had never heard of Bitcoin before they were shown a video on what it is all about.

What is rather surprising, however, is how a significant portion – 44% – of participants indicated they know what Bitcoin is, but have not used it yet. This is a promising sign for cryptocurrency adoption in the country over the coming years, as there seem to be educational efforts taking place to promote the benefits of Bitcoin in general. However, 29% indicated they heard of it but are uncertain as to what Bitcoin is or does.

Another interesting piece of information comes in the form of how people seem likely to use Bitcoin in the next year. Especially the ones who haven't used it yet, 12% seems willing to give Bitcoin a try in the next 12 months. If this were to be the case, Bitcoin adoption in Germany would get a significant boost.

Whether this is due to a lack of educational efforts, or not making Bitcoin accessible enough for general consumers, remains a big mystery for now. One thing is for sure, though: both types of solutions are direly needed. With a healthy portion of participants indicating their knowledge on Bitcoin, new ways have to be found to get cryptocurrency into the hands of these people in a convenient manner. [8]

Virtual Currency Awareness and Usage Level
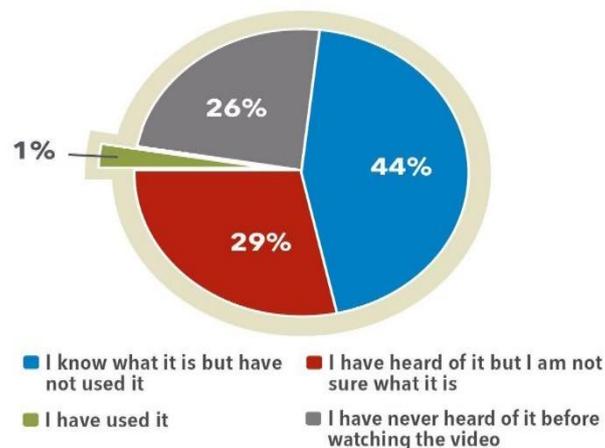
- I know what it is but have not used it
- I have heard of it but I am not sure what it is
- I have used it
- I have never heard of it before watching the video

Source: http://tsys.com/Assets/TSYS/downloads/rs_2016-de-consumer-payment-study-english.pdf (29.04.2016)

Among the 99% of respondents who did not use a virtual currency (Graph 21), 12 percent indicated that they were "Likely" or "Very Likely" to use one next year – which would represent a significant increase over the respondents who claimed to have used it to date. Bitcoin, the leading virtual currency, looks set to remain a niche player in the near-term from a consumer-proposition perspective.
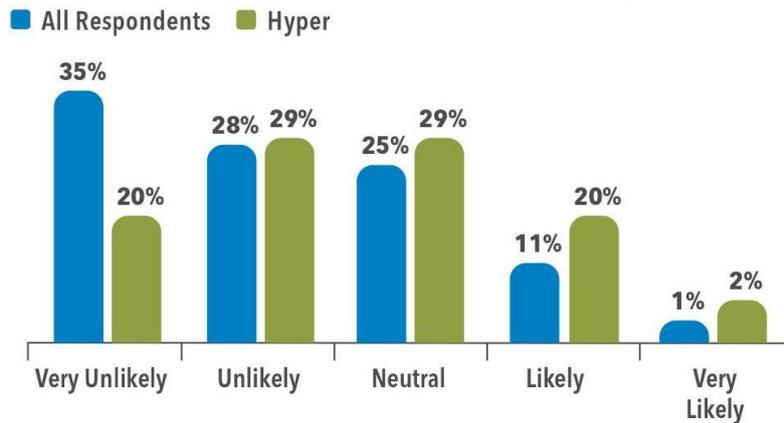
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[8] http://bitcoinist.net/study-shows-44-of-consumers-in-germany-know-what-bitcoin-is/ (29.04.2016)

Source: http://tsys.com/Assets/TSYS/downloads/rs_2016-de-consumer-payment-study-english.pdf (29.04.2016)

4. BITCOIN.DE LAUNCHES INTERNAL DIAMOND STORE

Bitcoins are scarce and have an innate mathematical beauty – properties they share with diamonds. If you prefer your beauty to take tangible form, you can now use your bitcoins to buy diamonds on Bitcoin.de. The bitcoin exchange is the first platform on which customers can spend their bitcoins on diamonds.

With the rapid pace of technological progress you would think it would be a simple matter to take a few billion carbon atoms and compress them together into a crystal, such that each one links to exactly four other atoms (A 70 kg body would have approximately $7*10^{27}$ atoms. Of that, $4.7*10^{27}$ would be hydrogen atoms, which have one proton and one electron each. Another $1.8*10^{27}$ would be oxygen, which has 8 protons, 8 neutrons and 8 electrons. There are $7.0*10^{26}$ carbon atoms, which have 6 protons, 6 neutrons and 6 electrons.[9]). Despite advances in synthetic gemstones, though, it's still not that easy; the best process to achieve this feat of chemical geometry is to bury the atoms several hundred kilometers deep in the earth and cook them for a few million years.

Figure following on the next page

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[9] http://education.jlab.org/qa/mathatom_04.html (02.05.2016)

Development of the Bitcoin price in Euro (May-2013 – May-2016)

Source: https://www.bitcoin.de/en/chart (29.04.2016)

The quantity of bitcoins issued is in principle restricted to 21 million units. At present, just under 14 million are in circulation. Utilisation of these units as a means of payment is still very low, however: worldwide, only around 80,000 to 105,000 transactions (These include all bitcoin transfers, regardless of whether a purchase transaction was the reason for the transfer. Source: http://blockchain.info/en/charts/n-transactions.) are made on this basis each day. By way of comparison: just over 25 million credit transfers are made in Germany alone every working day. (Over 250 working days per year. Source: http://www.bundesbank.de/Redaktion/EN/Downloads/ Statistics/Money_Capital_Markets/Payment_Systems /zvs_daten_eng.pdf?__blob=publicationFile.)

Figure following on the next page

Deutsche Bundesbank
Payment behaviour in Germany in 2014

Familiarity with innovative payment methods broken down by age group

2014, figures in per cent; as reported by respondents

- contactless card payment
- mobile payment, in-store
- mobile payment, not in-store
- e-payment scheme

Age group	contactless card payment	mobile payment, in-store	mobile payment, not in-store	e-payment scheme
18 to 24 years of age	57	72	73	98
25 to 34 years of age	65	74	74	99
35 to 44 years of age	53	60	64	96
45 to 54 years of age	57	66	65	92
55 to 64 years of age	59	58	56	80
65 years of age and above	36	37	39	54

Average

Deutsche Bundesbank

Virtual currencies – the example of bitcoin

Bitcoin is currently the most prominent example of a virtual currency. The term bitcoin describes both the corresponding unit of currency and the payment system. A distinction should be made between the payment function and store of value function offered by virtual currencies. The bitcoin payment system enables the worldwide transfer of bitcoin units within a short space of time. In the past, bitcoin has primarily been the subject of much press coverage on account of the sometimes highly volatile exchange rates, but also due to a number of incidences of theft from online bitcoin depositories. In addition to bitcoin, there are several other virtual currencies. However, to date these have had a negligible impact.

Source:
https://www.bundesbank.de/Redaktion/EN/Downloads/Publications/Studies/payment_behaviour_in_germany_in_2014.pdf?__blob=publicationFile (29.04.2016)

5. SPOTLIGHT ON BLOCK CHAIN TECHNOLOGY

A block chain or blockchain is a distributed database that maintains a continuously-growing list of data records hardened against tampering and revision. It consists of data structure blocks—which hold exclusively data in initial blockchain implementations, and both data and programs in some of the more recent implementations—with each block holding batches of individual transactions and the results of any blockchain executables. Each block contains a timestamp and information linking it to a previous block.

5.1. Model

A block chain implementation consists of two kinds of records: transactions and blocks.
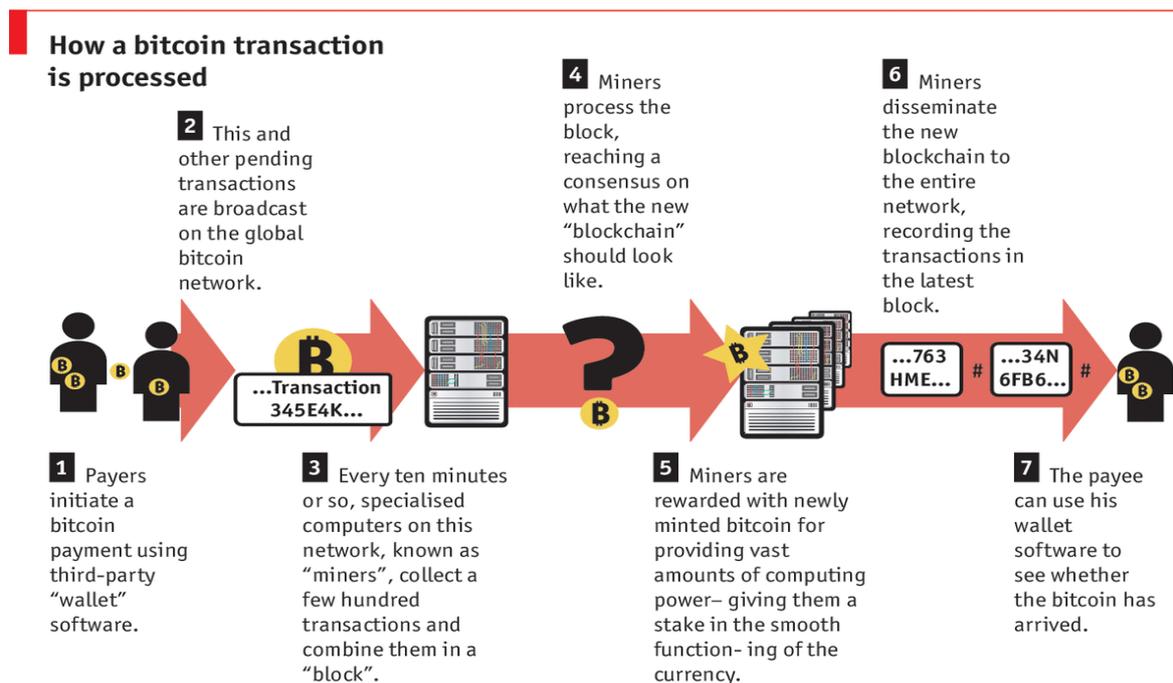
Source: Economist.com (02.05.2016)

Transactions are the content to be stored in the block chain. Transactions are created by participants using the system. In the case of crypto currencies, a transaction is created any time a crypto currency owner sends crypto currency to someone. System users create transactions that are passed from node to node on a best-effort basis. The system implementing the block chain defines a valid transaction. In crypto currency applications, a valid transaction must be digitally signed, spend one or more unspent outputs of previous transactions, and the sum of transaction outputs must not exceed the sum of inputs.

Blocks record and confirm when and in what sequence transactions enter and are logged in the block chain. Blocks are created by users known as "miners" who use specialized software or equipment designed specifically to create blocks. In a crypto currency system, miners are incentivized to create blocks to collect two types of rewards: a pre-defined per-block award, and fees offered within the transactions themselves, payable to any miner who successfully confirms the transaction.
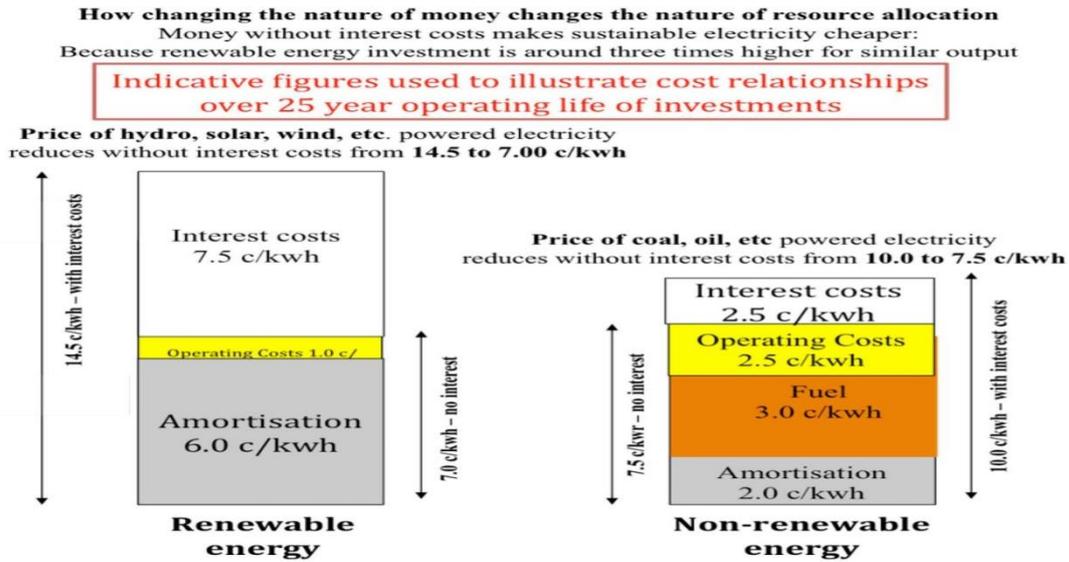
Source: Might Supplementary Tethered Currencies Reduce Financial System Risks?- Shann Turnbull PhD (02.05.2016)

6. CONCLUSION

Public block chains, like Bitcoin, Litecoin and others threaten disintermediation as they empower peer-to-peer networks. The value they create is taken away from central institutions and returned mainly to consumers. However, early predictions of the demise of our global banking system or national governments seem hasty and premature in the cold light of day. The reality is that while many transactions will benefit from a decentralized approach, many others will still need to be handled via an intermediary, which can, despite additional complexities and regulation, veto suspect transactions, provide guarantees and indemnities, and deliver a range of associated products and services that consumers cannot yet access on the block chain.

A block chain represents a total shift away from the traditional ways of doing things – even for industries that have already seen significant transformation from digital technologies. It places trust and authority in a decentralized network rather than in a powerful central institution. Centralized systems, particulary in financial services also act as shock absorbers in times of crises despite their challenges and bottlenecks. Decentralised networks can be much less resilient to shocks, which can impact participants directly, unless careful thought is given to their design. Furthermore, the regulators in financial industries have to understand the technology and its impact in their sector.

Figure following on the next page

Characteristic	Consumer blockchain	Single organisation blockchain	Collaborating organisations on a blockchain
Decentralised processing network	• Increases speed of exchange and reduces time delays • Reduces price of exchange (if a fee is charged) • Improves quality, reliability and availability of services	• Increases speed of exchange between departments/ divisions, which reduces backlog and overall costs • Improves availability, reliability and maintainability of services	• Increases speed of exchange, which reduces backlog and overall costs • Improves availability, reliability and maintainability of services
Distributed ledger	• Increases transparency (in the case of public blockchains) • Increases confidence	• Increases efficiency by standardising data formats across departments/divisions and ensures process integrity • Improves auditability because records are verified in near real-time	• Increases efficiency by standardising data formats across multiple organisations, enabling interoperability, and ensures process integrity • Reduces risk of fraud, error and invalid transactions across the group because records cannot be altered • Improves auditability because records are verified in near real-time
Digital signatures	• Reduces risk of fraud or theft	• Helps identify customers and participating departments/ divisions	• Helps identify customers and participating organisations
Programmable logic	• Enables transaction criteria to be strictly enforced	• Enables new capabilities to be added to existing services and processes	• Enables new capabilities to be added to existing services and processes across the group • Enables collaboration criteria to be strictly enforced
Private vs. public	• Public blockchain enables anyone to participate in any capacity	• Private blockchain restricts processing to members or employees of the organisation but opens up use to consumers	• Private blockchain restricts participation to members of the group of organisations but opens up use to consumers

Source: Deloitte

Source: http://www2.deloitte.com/uk/en/pages/innovation/articles/blockchain.html (02.05.2016)

Source: Author (07.05.2016)

Whilst Gold "vouchers" can be purchased and traded online instantly, these vouchers are often from fractional or non-audited reserves, they are not the same as a Bullion bar[10], whereas a Bitcoin holding is publicly audited, as good as a Bullion bar, just lighter and cheaper to store or transmit.

Confiscatory risk: The overwhelming advantage should go to Bitcoin because of an awesome little thing called Deniability. They can't take what they don't even know you have, and can be stored completely in your brain making it unfindable. Plus, gold already gets confiscated when trying to sneak it across borders all over the world... With bitcoin it would be ludicrous to even try.

Advantages of bitcoin: other important criteria for the best apocolyptic money, such as divisibility, malleability, counterfeit-adversity, and fungibility.

- Divisibility: Separating gold into smaller chunks is not very easy at all, and keeping the peices uniform in size is nearly impossible. Bitcoin is easily divisible down to 100,000,000 perfectly uniform pieces, making it childsplay to pay for anything down to any size with it.

- Malleability: Got a bunch of tiny gold pieces you want to re-combine back into a bigger coin or even brick? Go fire up the furnace and break out the wrought iron casts... Meanwhile bitcoins all fit back into your wallet and automatically account for themselves back to your full balance without any thought on your part whatsoever.

- Counterfeit-adversity: Yes, you can counterfeit a gold bar or coin by wrapping a layer of gold outside with a thick core of Tungsten. Meanwhile bitcoin is famously counterfeit-adverse, because we all can have a copy of the ledger and basically can see everyone elses' bitcoins if they try to lie about them.

- Fungibility: Last but not least, and some might say the most important criteria of all. Fungibility is the quality of all parts being easily judged equal to all other parts of the same denomination. Gold is notoriously poor at this, because the purity of the gold is not easily judged, and there is no standard accounting size either that is fair such as an atom count. How can you tell if one gold coin that looks similar to another is truly worth that other coin? You cannot without a lab. Meanwhile, bitcoins are all simply ledger entries, so there is nothing different about them on an atomic level.

Gold and Bitcoin as e-Gold standard. In time we'll solve the last problem too; lack of electricity and internet connections, by having great little self-powered bitcoin wallets the size of a credit card that don't need the internet because we'll have blockchain satellites by then. So it's time to face facts goldbugs; Our shiney metal is a relic of ages past and can't do anything as well as a bitcoin can. In many ways, gold is the precious metal counterpart to the bitcoin. Like the bitcoin, gold must be obtained through mining. But, while gold is obtained through physical mining, bitcoins must be "mined" virtually through the deciphering of special computer encryptions. Another similarity is that both gold and bitcoins are only available in limited quantities. It is estimated that there is approximately 171,300[11] metric tons of gold in the world (1 Metric Ton = 35 273.9619 Ounces[12]), while the Bitcoin system will only be able to generate and support 20,999,999.9769[13] bitcoins, the last Bitcoin will be mined on May 7th, 2140. Given

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[10] https://en.wikipedia.org/wiki/Bullion (07.05.2016)

[11] http://www.bbc.com/news/magazine-21969100 (08.05.2016)

[12] http://www.asknumbers.com/tonnes-to-ounces.aspx (08.05.2016)

[13] https://en.bitcoin.it/wiki/Controlled_supply (08.05.2016)

such similarities and their individual market activity over the past few years, it is understandable why many believe that bitcoin could ultimately replace gold in terms of value. However, in spite of this evidence, there are a number of reasons why this shift is unlikely to occur. The first reason that the bitcoin will never replace gold is because it still poses a great deal of financial risk. Despite its recent peaks in market value, the bitcoin continues to experience significant price fluctuation that often results in substantial losses (see http://www.likeforex.com/misc/historical-rates.php?f=XAU&t=BTC&y=2016&page=1#). Furthermore, both the future and the viability of the bitcoin have yet to be determined, leaving many customers wary over the the security of their virtual savings in the event that the system becomes terminated or obsolete. With such instability and uncertainty surrounding the bitcoin, it is unlikely that it will generate the customer base to match, much less surpass, gold as an investment asset. Another reason that the bitcoin is unlikely to replace gold as an investment asset is that the system has yet to achieve full status as a truly "universal" and legitimate form of currency. Many countries, including Germany, Norway, Russia, France, Thailand and Korea, refuse to use the bitcoin for fear of potential loss. In fact, several have gone as far as making it illegal in their country. In contrast, there isn't a country in the world that would ignore the value of gold, much less prohibit its use. Therefore, until the bitcoin can reach the same worldwide level of legitimacy and approval that gold has, it will never be able to replace gold as a valuable commodity. The final reason that the bitcoin is unlikely to surpass gold as an investment commodity is that gold has consistently demonstrated signs of recovery since it plummeted by 28% in 2013. Many people presumed that the sudden drop in gold's market value was an indication that it had lost its status as a safe investment choice. However, a number of signs, such as the increase in debt-to-GDP ratio and the increase in the price of mining, suggest that gold will not only recover from its drop, but it will continue to thrive as a popular investment commodity. Consequently, as long as investors believe that gold can generate profits, they will continue to forgo any other potential replacements.[14]

Performance Bitcoin / US-Dollar and Gold / US - Dollar

	1 Week	1 Month	3 Months	Current Year	1 Year	3 Years
Exchange rate Bitcoin in US-Dollar	428,42	416,25	377,98	433,18	232,11	121,00
Change Bitcoin in US-Dollar	+4,97%	+8,04%	+18,97%	+3,81%	+93,74%	+271,65%
Exchange rate Gold in US-Dollar	1.240,60	1.260,00	1.104,10	1.074,20	1.202,80	1.572,85
Change Gold in US-Dollar	+3,88%	+2,28%	+15,99%	+19,22%	+6,47%	-18,57%

Source: Authors Calculation (07.05.2016)

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[14] http://www.jmbullion.com/bitcoin-vs-gold-infographic/ (07.05.2016)

Calculated Fixed Rate 1Bitcoin / 1 Gold Ounce as e-Gold Standard

Bitcoin Reserves – BTC 1.	Gold Reserves in Metric Tones 2.	Gold Reserves in Ounces – XAU 3.	Calculated Fixed Rate BTC / XAU 4.	Calculated Fixed Rate XAU / BTC 5.
20,999,999.9769	171,300	6,031,847,484.90	0.0034815203848358	287.2308329302396

Source: Authors Calculation (08.05.2016)

When we watch and see for years the transaction volume, it looks very much that Western Union[15] and MoneyGram[16] are soon going into bankruptcy. The advantage of the BTC block chain are brutal for these 2 giant companies, and many people do not understand completely the system.

By establishing the Financial Innovation Laboratory in the Silicon Valley, Hitachi will accelerate research & development of blockchain technology, collaborative creation with customers, and development of solutions to support business innovation in financial institutions.[17] Thus, it is not yet late for the Bundesbank to react. The Bundesbank have to understand the technology and its impact and should support the banking industry's efforts to develop new payment methods and unlock advantages by automating processes and thus reducing compliance errors.[18]

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ANALYSIS OF PERSONAL AND PROFESSIONAL DEVELOPMENT PROGRAMMES OF THE UNEMPLOYED: TRAINING MENTORING AND COACHING

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ABSTRACT

Training, mentoring and coaching programs provide all people seeking a job with the opportunity to develop personal and professional skills through the correct identification of the abilities and power witch they can use successfully for the job they will have in the near future. Proper implementation of these programs will have visible effects within the society, resulting in a decrease in the unemployment rate and an increase in the degree of effectiveness in the workplace. Mentoring and coaching programmes complement the training sessions and help unemployed people to assess and to refine themselves, to act in an optimal direction of professional development. To ensure the success of these programmes not only qualified personnel is needed, but also proper publicity so that unemployed people can become aware of the importance of participation in programmes that are intended to improve their access to the labour market. There is a need, at the same time, for emphasising the economic advantages that these programmes have within the society. Recently implemented, the mentoring and coaching programmes for the unemployed can attract the most reluctant unemployed, bored of training courses which they have attended and which have not given them the desired results, whose purpose was not to easily find a suitable job.

Keywords: Coaching, Mentoring, Personal and Professional Development, Training, Unemployed

1. INTRODUCTION

People need education and training throughout their life, even though not all realize this. Many are tempted to turn to personal development and professional training courses only when they feel instability at work or when they become unemployed. The Romanians' perception about the training, mentoring and coaching programmes is not happy, even in the case of young graduates who have more knowledge about this kind of programmes. Reluctance is the word that best describes their attitude about programmes aimed at developing professionally and personally.

Unemployment is an economic phenomenon that scares the population, its causes and effects being numerous. The complexity of the phenomenon causes anxiety not only with the population, but also among the institutions of the State, which must have the ability to identify appropriate solutions to reduce unemployment rate and to reduce and combat the negative effects of unemployment. No country wants the population to experience the consequences of such a phenomenon, which lead to the implementation of a number of projects whose objective was to facilitate and enhance access to the labour market of unemployed people and other categories of people looking for a job, promoting active employment measures. Training centres have had a major role in decreasing the rate of unemployment and increasing that of employment, many of them having cooperation agreements with Local Agencies for Employment, contracts that have allowed the achievement of the target group and objectives of the projects implemented.

Because it is a problem faced by many countries, funding grants were offered in support of the eradication of unemployment, so the POSDRU (Sectorial Operational Programme for Human Resources Development), current POCU (Operational Programme for Human Capital), can be

considered a company that has made available thousands of jobs for the Romanians and trained hundreds of thousands of unemployed and inactive people in the labour market. The Romanian economy has had many benefits from operational programmes, especially if we also take into account the staff within the programmes and the grants/scholarships allocated to some of the participants trained. The allocation of the funds of the European Union continues in the period 2014-2020, when it is expected that a large number of projects will continue the previous steps concerning the insertion in the labour market of a large number of unemployed and inactive people. There is however a problem of mentality, that attending training and counselling sessions does not bring any benefit, but on the contrary, it is a waste of time. It is for this reason that more subsidies/scholarships have been allocated to those belonging to the target group of each project, the money being a temptation that cannot be ignored.

The objective of the research is the presentation of socio-economic benefits deriving from the proper implementation of training, mentoring and coaching programmes intended for unemployed people. Research is targeting training, mentoring and coaching programmes of unemployed people so that: brief information is given about each of these programmes, making reference to the optimal development and implementation; statistical data concerning the number of training programmes that have taken place in recent years are analysed in order to be able to make a correlation between the number of unemployed and the number of training programmes free of charge for inactive people in the labour market; aspects of mentoring programmes are listed to be able to outline a programme of mentoring for the unemployed; some of the advantages of coaching are described with the purpose of drawing the attention to this kind of programmes that are favourable to society as well as the national and international economy. The findings are designed to determine the differences between the training, mentoring and coaching, to no longer have conceptual and perception confusions.

2. TRAINING PROGRAMMES

In the last decade, the number of training programmes dedicated to unemployed people and people seeking employment has increased considerably. However, there is no compelling evidence concerning the relationship between the effectiveness of these programmes and the state of the economy in the counries that have implemented such programmes. Knowing the purpose of the training programmes for the unemployed, we assume that some of the unemployed workers who have received training have found work and thus contribute to economic growth.

Although an English term, „training" has become familiar to many Romanians, its equivalent in the Romanian language being „formare". Training programmes are fixed programmes, organized according to certain criteria and aimed at the transmission of relevant information for people who want to follow courses of development, specialization or qualification. Training implies the existence of a trainer, who is a person empowered to teach specific concepts. Therefore, training, according to the authors of the *Handbook of best practices in human resources management*, is "an intervention led by an instructor and content-based, aimed at helping the trainees acquire some behaviour wanted within the organization" (2010, p. 64).

The more training programmes are aimed at actively stimulating the participants, the better the results will be, the trainees using the information received from the course with greater ease in practice. The purpose of training is to transmit information that leads to the formation and/or development of competence, so as to have visible changes both professionally and personally. When we speak of professional training courses, we refer to a wide range of courses whose classification is not understood by most people who wish to form and not only. Thus, courses are organised as following:

- initiation courses - courses for those wishing to acquire information, skills and minimal abilities in a particular area of activity, a new domain, which they decide to know, such as computer operation;

-qualification and requalification courses - courses which ensure professional knowledge and skills that enable trainees to practice the job for which they were prepared. These courses are divided into three categories: level 3 qualification-1080 hours, level 2 qualification-720 hours and level 1qualification-360 hours. These courses can be attended by graduates of 10 school years, who can be later, depending on the course of re/qualification: bartenders, tailors, bakers, masseurs, waiters, accountants, secretaries, etc.

-specialization course - students aquire the skills and knowledge in a certain segment of the coverage of an occupation. These courses help participants to complete their knowledge in a field in which they are already qualified. Often there are training courses for: project manager, assistant manager, sales manager, sales agent, inspector of human resources, trainer, health and safety at work specialist etc.

-development courses - students acquire new basic knowledge and technical expertise, being already qualified or training to acquire new skills in an occupational area, such as: computer operation in the workplace, communication techniques, reconciling professional life with the personal one, socio-cultural animator, starting a business, personal development for their career.

To be effective and to have positive economic effects, training programs are conditioned (Luț, 2010, p. 84) by issues such as: students' awareness of the advantages of training and the need for training in the chosen field; the center of formation allowing trainers to use modern methods and means of training; course structure permitting the application of the knowledge transmitted within both training sessions and the workplace and everyday life; trainers' experience and capacity to adapt the course depending on students' needs and requirements; actualisation of the statistics on the number of training programmes proposed and conducted, and the continuity of the statistical data presented; presentation and promotion of the results of each training programme in as many conferences and economic and educational events as possible.

These programmes should take into account the requirements and needs of the unemployed, and this aspect can be found out by means of surveys and by maintaining positive relations with the unemployed people and the employment services. The action of orienting the unemployed toward a training course which would facilitate access to the labour market pursues issues such as: "what he/she wants to do, his/her professional aspirations, preferences, motivations, his/her own interests; what he/she knows to do, that is, his/her original specialization, positions held, whatever knowledge and skills, advantages and weaknesses; what he/she can do, i.e. choosing trades that he/she can learn according to the requirements of the labour market (Petrescu, 2003, p. 211).

In Romania, the National Employment Agency (ANOFM) put at the disposal of interested parties some statistical data about the number of free training courses intended for unemployed people, data that we have processed so that relevant conclusions can be extracted about the benefits of training programmes among the unemployed. Since 2010 in the first months of each year a national plan for the current year has been posted on the NEA web site. At least 90% of the free training programmes were intended for unemployed people (table 1), most of the training programmes being planned for 2010 – 2397 programmes, out of which 2173 programmes were aimed at the unemployed. In the period of 2010-2015 there were 12939 free training programmes, out of which 12427 were addressed to the unemployed.

Table 1. Free training programmes in Romania, planned for 2010-2015 (statistical data processed by the author based on those oferred by the ANOFM (National Employment Agency), www.anofm.ro)

Year	Number of free training programmes	Out of which: for the unemployed	
		Number	%
2010	2397	2173	90,65
2011	2229	2148	96,37
2012	2072	2010	97,01
2013	2093	2041	97,52
2014	2002	1953	97,55
2015	2146	2102	97,95
Total	**12939**	**12427**	**Average: 91,18**

Regarding the number of courses according to the form of training, we note in Table 2, that most of the training courses have been for re/qualification - 9365, while the fewest were for development and specialization - 601, 574 respectively, which means that the unemployed and the people attending the training courses want to qualify or change their qualification to find a job more easily. Skill courses level 3 are highly valued because the total number of hours allocated to them allows students to learn more. Their drawback is the length, which is why the number of level 3 courses is quite small compared to the number of level 1courses. Unfortunately, there is no statistics on the number of qualifying courses of level 1, level 2 and level 3, just as there are no concrete data about the number of unemployed people who found a job within 12 months after course completion, irrespectively.

Table 2. The number of planned courses in Romania, depending on the formation type in 2010-2015 (statistical data processed by the author based on those oferred by the ANOFM (National Employment Agency), www.anofm.ro)

Year	Initiation courses		Re/qualification courses			Development courses		Specialization courses	
	Number	%	Number	%		Number	%	Number	
2010	493	20,57%	1750	73,01%	105	4,38%	49	2,04%	
2011	464	20,82%	1570	70,44%	96	4,30%	99	4,44%	
2012	397	19,16%	1468	70,85%	97	4,68%	110	5,31%	
2013	412	19,68%	1465	70%	111	5,30%	105	5,02%	
2014	292	14,58%	1546	77,22%	72	3,60%	92	4,60%	
2015	341	15,89%	1566	72,97%	120	5,59%	119	5,55%	
Total	**2399**	**Average: 17,45**	**9365**	**Average: 72,42**	**601**	**Average: 4,64**	**574**	**Average: 4,49**	

Not all courses that have been planned have also been carried out, as the number of people planned to be trained does not coincide with the number of those who have been trained (table 3). In the period 2011-2015, there were 213,441 people planned to follow training courses, among whom 205,201 were unemployed people, but attended only 207,818 people, among whom 198,597 were unemployed, a number of 202,113 people benefitted from gratuity. Only in 2011 and 2015 the number of people planned for training was smaller than the number of people receiving training, in other years the beneficiaries of training courses being fewer than those who were planned. Of the 207,818 people trained within 2011-2015, there were 202,113 people who have benefited from the training courses free of charge, which means that the number of those who are willing to pay for training is very small. It can be considered a cause of the increase in unemployment, because the lack of interest for training and development

negatively influences the employees, and employers do not require human resources who are ill-equipped and do nothing for their own training.

Table 3. Indicators carried out versus indicators planned regarding professional training (Statistical data processed by the author based on those oferred by the ANOFM (National Employment Agency), www.anofm.ro)

Year	Planned		Carried out		
	Number of people trained	Among whom: unemployed	Total of people trained	Total people free courses	Total unemployed
2011	45124	43649	48321	47514	46687
2012	41130	39927	38881	38390	37977
2013	42245	41096	36949	36551	36124
2014	42292	39965	40265	38342	37438
2015	42650	40564	43402	41316	40371
Total	**213441**	**205201**	**207818**	**202113**	**198597**

For the year 2016 a national plan for training has not yet been drawn up, the only data available that we can find on the site of the National Employment Agency under the heading of Professional training is the number of free training programmes and of the people who will be able to participate in these courses organised by the NEA. Since the beginning of 2016, most training programmes were expected to begin in April 2016 - 192 courses, attended by a number of 3600 individuals (Table 4), and the fewest training programs started this year were in January - 76.

Table 4. Free training programmes during the period January-March 2016 (Statistical data processed by the author based on those oferred by the National Employment Agency, www.anofm.ro)

	January 2016	February 2016	March 2016	April 2016
Number people	1548	2606	3252	3600
Number courses	76	135	171	192

Correlating the annual average of unemployed people with the number of unemployed people who have received free training (table 5), it should be noted that only a small fraction of registered unemployed people were able to follow training courses free of charge, which is troubling for a society that wants to develop economically and that has as an objective to diminish the unemployment rate. In the period 2011-2015, the highest average of unemployment was registered in 2011 - 484,192 unemployed, this being the year in which 9.64 % have received free training courses – 46,687 unemployed.

Table following on the next page

Table 5. Evolution of unemployment and trained unemployed people (Statistical data processed by the author based on those oferred by the National Employment Agency, www.anofm.ro)

Year	Anual average of unemployed people	Number of unemployed people who have benefitted from free professional training	
		Number	%
2011	484192	46687	9,64
2012	448381	37977	8,47
2013	476165	36124	7,59
2014	475790	37438	7,87
2015	455830	40371	8,86

Of course here are also added the unemployed and the inactive individuals who attended training courses free of charge in professional training centres, as a result of accessing European funding. In the period 2007-2014 a large number of unemployed and inactive people participated in training. Until 31 December 2014, the operations financed from the European Structural Fund were attended by 290,144 unemployed and 508,992 inactive people on the labour market (Table 6). Most have benefited from training courses free of charge. The exact number of the trained unemployed and inactive people is not known because some of the projects envisaged for the period 2007-2013 were completed in late December 2015 and the data has not been centralized yet.

Table 6. Total number of unemployed and inactive people who attended operations financed from FSE until 31 December 2014 (Statistical data processed by the author based on those oferred by the Ministry of European Funds, www.fonduri-ue.ro)

Priority Axis	Total number of unemployed people			Total number of inactive people		
	Men	Women	Total	Men	Women	Total
1.Education and professional training to support economic growth and the development of the society based on knowledge	67	81	148	54257	66415	120672
2.Correlation of lifelong learning with the labour market	503	371	874	74269	92221	166490
3.Increase of adaptability of the workforce and of enterprises	1737	2173	3910	11757	17683	29440
4.Modernization of the public employment service	0	0	0	0	0	0
5.Promotion of active employment measures	123543	126983	250526	43221	61290	104511
6.Promotion of social inclusion	12663	22011	34674	32789	55090	87879
Total	**138517**	**151627**	**290144**	**216293**	**292699**	**508992**

All these data are meant to provide information about the role of training programmes intended for unemployed people. Another category that is covered by the training programmes implemented through operational programmes is represented by the people inactive in the labour market. In recent years there have been developments with regard to the number of people attending courses for free, but many of the training centres face the unwillingness of the unemployed and inactive people to attend courses on the grounds that they are no use. This means that training programmes which will be implement will have to take into account the existing requirements of the labour market, to create a balance between the courses offered to the unemployed and the existing job vacancies.

3. MENTORING PROGRAMMES

There are few unemployed people who turned to mentoring programs in order to increase the chances of finding a job to suit their expectations. Mentorship is still at the beginning in Romania, being treated with distrust. The skepticism stems from the lack of information about mentoring programmes. The Romanians don not know what is meant by the concept of mentoring and the mentor's role in the mentoring programmes intended for the unemployed people. What many people do not know is that the mentor transmits values, standards, rules of the profession, expresses opinions related to the strategies and concrete action plans and gives advice (Latis, 2011). The mentor speaks not from books, but from experience, being an expert in a given field of activity. The mentor can be considered an experienced counselor, a professional working with enthusiasm; he/she is responsible and has a positive attitude; he is a good communicator and listener and transmits the optimism of those with whom he/she interacts.

A good mentor listens to the needs and expectations of his/her clients, working with them to help them develop as a result of setting realistic and achievable goals, providing constructive feedback, making customers aware of their progress, encouraging them to explore new areas of activity. When clients are people looking for a job, a mentor's activity is more intense, for the psyche of the unemployed and those without a job is much more unstable, some are faced with serious problems of attitude and behavior. The unemployed workers going through mentoring have the opportunity to develop both professionally and personally, the benefits of mentoring programmes being worth mentioning. Regarding the mentoring programmes for the unemployed, the aspects summarized in Table 7 can be addressed as follows:

Table 7. Aspects targeted by the mentoring programmes addressed to the unemployed (Author's adaptation from Centre de tranfert pour la réussite éducative du Québec, Guide d'implementation d'un programme de mentorat en milieu scolaire, 2014, p. 6, http://www.ctreq.qc.ca/wp-content/uploads/2014/09/Guide-Mentorat.pdf)

Dimension	Aspects
Educational/ vocational	- valorification of studies; - awareness of vocational aspirations; - enlisting and participating to courses of: initiation, re/qualification, specialization, development.
Social/ relational	- active involvement in society; - doing voluntary work; - perceiving the feeling of belonging.
Psychological/emotional	- increasing self-esteem; - enhancing motivation; - control of emotions.
Cognitiv	- capacity to solve problems; - financial and professional autonomy; - setting personal and professional objectives on long and short term.
Behavioural	- descouraging the use of alcohol and drugs; - descouraging aggresive behaviour; - encuraging optimistic attitude; - removing suicidal thoughts.
Professional	- awareness of professional competence and skill; - identifying antreprenorial spirit; - outlining a correct CV and looking for an adequate work place.

Each mentoring programme stems from the desire to find a solution to a particular individual or group problem. Mentoring is not a panacea, thus not all problems can be solved through mentoring. Mentors need to be anchored in reality in order to establish which are the aspects

where they can help and which are the aspects that do not need their professional expertise. Certainly some aspects represent a challenge and deserve to be addressed through mentoring programmes. We can outline a mentorship programme for the unemployed following the model of the one presented in Table 8 as follows:

Table 8. The outline of a mentoring programme for the unemployed (the author)

Justification of the programme – the mentoring programme addressed to the unemployed people will increase their chances of insertion on the labour market in the case of those unemployed people going through mentorship. The unemployed are often faced with problems due to low self esteem and lack of professional and personal counselling.

Benficiaries of mentoring programme - unemployed people and people looking for a job, especially the unemployed who come from disadvantaged categories.

Mentoring programme structure:

-vision – the experience and training of mentors will help unemployed persons who are part of the programme have easier access to the labour market;

-purpose – preparation of the unemployed people to meet the requirements of employers;

-objectives – attracting a large number of unemployed within the programme; identifying the difficulties faced by the unemployed involved in the mentoring programme; development of a strategy that would be consistent with the needs of the unemployed and of the existing labour market requirements; the active involvement of the mentored unemployed in the mentoring programmes; decreasing the rate of unemployment through labour market insertion of at least one-quarter of the beneficiaries of the programme.

The main activities of the mentors and the mentored unemployed:

Mentors	Mentored unemployed people
-establish relations with professional mentored unemployed, speaking about their own experiences and knowledge; -help the mentored unemployed to meet successful entrepreneurs, find out what the expectations of employers are; -stimulate the curiosity of those mentored and challenge them to find solutions and new ideas to quickly find a job; -urge unemployed to establish objectives and goals in the wake of finding personal weak points and strengths; -presents success stories, helping the unemployed participants in the programme to become what they want; -solving of possible problems/tensionante states with diplomacy.	-are receptive to new and interested in receiving any information which facilitates insertion on the labour market; -communicate openly and actively engage in the activities carried out; -become aware of appropriate behaviors and attitudes in the workplace; -request and provide feedback from mentors, out of the desire of development; -take account of the advice and implement it; -search for jobs on the basis of the educational and vocational training they have, without humiliating themselves or exaggerating with large claims.

The method of delivery - 20 face-to-face meetings, one meeting each week, with a running time of 120 minutes, of which there are 20 minutes break. If the unemployed can not participate in the meeting, it can take place via the internet or telephone, depending on the time avalability of the unemployed person and mentor. Over the course of 15 meetings, at the meeting there is a mentor and an unemployed person, and for the other 5 meetings there are 2 mentors and 6 unemployed people and 2 entrepreneurs, to see how they are doing in the case of teamwork.

Monitoring and evaluation of the programme – completion of self assessment sheets addressed to both mentors and unemployed and evaluation sheets for the unemployed workers who participated in the programme; monitoring of the mentored unemployed over a period of 12 months to determine the number of those who have found work as a result of active participation in the programme of mentoring; evaluation of the programme on the basis of indicators made; drawing the conclusions and making the proposals respectively, so that more effective mentoring programmes can be developed in the future.

Mentoring helps the unemployed to become what they want to become, to engage in various activities that fulfil both personal and professional needs. Through mentoring programs, personal potential of the unemployed lies in continuous activation, as the mentor "draws attention to the essential traits which distinguish a theme or any kind of problem from another,

encourages and rewards success, consistently and quickly corrects mistakes, anticipates the difficulties and knows how to overcome them" (Andreescu et all, 2014, p. 9). The mentor helps the unemployed to become their own mentors, which will cause visible positive changes in their attitude and behaviour.

4. COACHING PROGRAMMES

Coaching involves guiding a person, the emphasis being placed on encouraging that person, not on the advice/suggestions. Organizations which turn to coaching are concerned with motivation, effectiveness and performance of employees. Training Centres and institutions which implement programmes for unemployed people and people seeking employment can also take an advantage. Coaching is personal, the discussions that take place between the coach and the client are confidential and rely on compliance with certain ethical standards.

Coaching intended for unemployed people is a good method for the identification of their needs and requirements, helping to professionally develop through a personal approach. Unemployed people have the opportunity to find answers to the questions they could apparently not answer before, the coach channeling them so that they become aware of the strengths and weaknesses, of what prospects for the future they have, what hobbies they can turn into possible business success, etc. It is ideal that meetings should be individual, not in groups made up of unemployed, so that each of them can express freely, uninhibited, without being embarrassed by the people around. Team coaching cannot be negected either, especially since it has begun to be practised. For the successful application of this type of coaching, it takes a very well-prepared coach, who has abilities and powers related to collective factors. "The purpose of team coaching is to support the development of collective performance of the team, in a continuous and measurable way, so that the operational result of the team can exceed the sum of the potential of each member" (Cardon, 2003, p. 4).

Coaching sessions are all the more important for the unemployed, as their interest for starting their own business is higher. This is due to the fact that, nowadays, coaching can be applied in the context of business and organizations, regardless of their field of activity. If unemployed workers are aware of their condition, they become more responsible and have a higher self confidence, the effects of coaching sessions are visible, because it is their role.

In recent years, Romania has begun to focus on decreasing unemployment through coaching programmes, but there were very few projects undertaken with the help of EU funds which have turned to this innovative method of inserting unemployed people on the labour market. Such a project was implemented in the period 2011-2012, in Bucharest-Ilfov region. Within the programme POSDRU 76749 Coaching – opportunity on the labour market, the beneficiary target group not only benefitted from individual and group coaching, but also counselling and vocational guidance, professional training, mediation and support for looking for a job, as well as assistance for the initiation and development of a business, the latter being addressed to a group of 20 recipients, the winners of ' Start 20 businesses" contest (Synthesis).

5. CONCLUSION

Training, mentoring and coaching programmes are aimed at personal development and professional training of employees, unemployed people and inactive people, wishing to increase a person's abilities and powers, so it is not just the person who resorts to such programmes to win, but also the organisation to which he/she belongs or will belong. Given the challenges that an unemployed person has to face in society and in the family, it can be affirmed that the unemployed need to get in touch with very well trained experienced staff with an impressive baggage of knowledge. For example, through coaching, the unemployed workers can become aware of their professional skills and abilities and decide which training courses they should choose; through training they get new information and develop new skills; and

through mentoring the unemployed can benefit from guidance to properly use the knowledge acquired recently.

Clearly, the success of tomorrow's economy also depends on the success of training, mentoring and coaching programmes, intended for unemployed people and inactive people in the labour market. The integration of young people and of all categories of unemployed people on the labour market poses a continuous challenge, the expected results being a solution to many economic and social problems that the Romanian society is facing.

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DRUG CONSUMPTION IN KOSOVO IS IT PREDICTION OR PLANNING?

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ABSTRACT

Health Insurance System in Kosovo has not started yet and due to this all the prescriptions of medicines are paid from patients from 'out of pocket' money. In this regard there is no system or database which collects the data about drug consumption in the pharmacies while the Kosovo Medicines Agency has published the drug consumption which is based on imports from wholesalers. This published analysis includes all the medicines that are imported in Kosovo and also those that are manufactured in Kosovo, and that are distributed later to retail pharmacies, hospitals, and other healthcare organizations. Hospital prescriptions and prescription from primary health care centers are based on the essential list of medicines mainly and the annual planning for these medicines is always been an issue for the policy makers since there no health information system in place for the entire health system and there is no prescription database existing, this makes it that every year there are debates for the (non)fulfillment of the real needs of the patients. In this context due to changes in planning of the medicines in the essential list there is a question to be made on the drug consumption if it is based on a planning or in predictions?
This paper analyses the prescriptions planning/predictions over two year period in the health system in Kosovo and the main results show that the start of the drug insurance system will be also the start of the implementation of all the requirements that will make drug consumption to be based on a planning and not predictions.
Keywords: *Drug Consumption, hospital prescription, prescription database, reimbursement*

1. INTRODUCTION

The consumption of drugs in Kosovo can be divided in two parts which include the consumption in hospitals for inpatients which get these drugs for free from the essential list of medicines, and the consumption or ambulatory or outpatients that take their prescription in primary health care centers or in the private sector and then take the medicines in the private pharmacies from out of the pocket money which is very hard for the population since the official unemployment rate is 30.2% according to the Statistical Agency of Kosovo.

Putting together these two parts makes the total consumption of drugs for which there are no exact data since the pharmacies are still not linked with the information system – a prescription database that would collect online all the prescriptions that are dispensed to patients in 519 retail pharmacies all over Kosovo (KMA 2015), while for the hospitals there is a different situation where one part of the system is existing which is not complete and still some part of the reports still has to be done manually. In this case with a lack of the health information system and where the data have to be collected, computerized and analyzed manually it means that this is a cycle that will be never ended.

Some of these data for the drug consumption are already published by Kosovo Medicines Agency in 2014 which include drug consumption in Kosovo for years 2011-2013. The limitation of these figures is that not everything that is imported in ex 2013 will be used in

2013, or that not everything that is imported will be consumed, or some part will be exported and at the end some part will be expired. However all these are small percentage since most of it is consumed and when there is a few year analysis the average of some years will give the approximate value of the total consumption.

In other words there is a figure which shows that how much drugs are consumed per capita in Kosovo in monetary values but also in DID – Defined Daily Doses, which is unit of measurement of drugs with their average maintenance daily dosage for 1000 inhabitants per day. This indicator is used in all the European countries as a drug utility analyses and main drug consumption tool. In this case when the indicator is unique there can also be made comparisons between countries not just as values of consumptions but as well as in attitudes for the drug prescriptions. In this case we know approximately what the consumption is but we don't have the planning for the different parts of the system as planning of cardiovascular drugs for hospitals and cardiovascular drugs for ambulatory care, or planning of respiratory drugs for hospitals and ambulatory care etc.

The Ministry of Health of Kosovo is responsible for the management of the drugs from essential list of medicines and in this way for the management of the process that has to deal with planning but which is in hierarchy has to be done from each hospital while the primary care makes the part of the planning for their part of the system for which they are responsible. As it was noted with the lack of the health information system the annual planning has in all the past years big differences in percentages which in 2010 were reported to be as high as +- 500% (MoH 2010). In this paper are shown different perspectives of essential list of medicines planning/prediction which in each year leads to 'nonfulfillment of the needs of the population despite the very low budget that is dedicated for Health/pharmacy in Kosovo.

2. METHODOLOGY

Methodology used is based on ATC classification of drugs. According to WHO in the Anatomical Therapeutic Chemical (ATC) classification system, the active substances are divided into different groups according to the organ or system on which they act and their therapeutic, pharmacological and chemical properties, furthermore explaining that drugs are divided into fourteen main groups (1st level), with pharmacological/therapeutic subgroups (2nd level), the 3rd and 4th levels are chemical/pharmacological/therapeutic subgroups and the 5th level is the chemical substance.

Furthermore were introduced DDD (Defined Daily Dose – as the average maintenance daily dose of a product) and DID (Defined Daily Dose of a product per Inhabitant per Day) which are used for drug utilization studies and also that are used in the analysis for this paper.

Drug consumption data were collected from wholesalers in the time period 2011-2013. As this was the first official publication by Kosovo Medicines Agency (KMA) this was the reason of analyzing it for three year period in order to get also the perception of the trend of drug use (KMA. 2014)

The detailed analysis of data included also different indicators needed for final results. These including the total quantity in mg of substance, defined daily dose of the product, time period of the consumption that has been made and population in total.

The other part of the data that are the drugs from essential list of medicines these were analyzed according to ATC classification and in monetary values according to the group of organs in which they act.

Data were collected in Excel format due to the lack of other forms of system which would made it easier for analysis. Initially entering it from hardcopy to excel and then validating it and further analyzing according to the desired indicators.

3. RESULTS

The drug consumption for years 2011-2013 shows the differences of drug groups within years and also the trend of prescriptions that are made by doctors. In this case it is worth to be mentioned that in some of the cases that changes are significant, means that there is a need for further analysis about the reasons or factors that are leading to the particular results. On the other cases when the results are steady and there has been an epidemics or other conditions that may influence prescribing again are reasons to make an investigation about the reasons or problems that could be seen in cases that could not have an adequate treatment.

In the figure 1 is shown the comparison between the drug consumption based on level one of the ATC codes within three years in Kosovo:

Table 7 Drug Consumption in Kosovo 2011-2013 (Source: KMA, 2014)

ATC 1	2011	2012	2013	Grand Total
A	€ 3,814,821.44	€ 4,057,549.47	€ 5,227,757.38	€ 13,100,128.29
B	€ 3,214,534.82	€ 3,633,039.42	€ 5,366,609.68	€ 12,214,183.93
C	€ 4,985,072.59	€ 6,140,228.63	€ 7,511,511.14	€ 18,636,812.37
D	€ 722,834.33	€ 779,633.49	€ 935,654.26	€ 2,438,122.08
G	€ 1,189,018.61	€ 909,913.07	€ 1,231,227.71	€ 3,330,159.38
H	€ 582,215.91	€ 1,114,013.49	€ 852,195.44	€ 2,548,424.84
J	€ 5,919,427.99	€ 6,620,593.72	€ 5,834,674.59	€ 18,374,696.30
L	€ 3,496,065.07	€ 7,058,046.99	€ 5,595,446.98	€ 16,149,559.04
M	€ 2,794,497.02	€ 3,162,747.31	€ 3,237,373.78	€ 9,194,618.11
N	€ 3,400,936.67	€ 4,635,876.88	€ 3,998,372.38	€ 12,035,185.92
P	€ 16,552.32	€ 10,480.32	€ 4,958.20	€ 31,990.84
R	€ 1,806,894.99	€ 1,553,303.06	€ 2,196,083.31	€ 5,556,281.36
S	€ 822,393.54	€ 440,432.81	€ 500,348.09	€ 1,763,174.44
V	€ 112,763.04	€ 85,006.08	€ 263,899.35	€ 461,668.47
Grand Total	€ 32,878,028.35	€ 40,200,864.73	€ 42,756,112.29	€ 115,835,005.37

For example group L which is the group representing drugs that are used in oncology have had a big change in consumption from 2011 to 2012 or from € 3.49 to € 7.05, or group H which represents hormones in 2011 from € 0.58 million in 2012 is € 1.11 million. These big changes are not usual in a country with a well-developed treatment guidelines and a good supervision authorities. If there is a change like this it mean that in that country in that particular year have been a reason starting from epidemics, or other health conditions leading to this change.

If we further analyze the group L in subgroups, from level 3 of the ATC we have these results:

Table following on the next page

Table 8 Drug consumption of the group 3 ATC of L drugs (Source: KMA, 2014)

ATC	€ 3,496,065.07	€ 7,058,046.99	€ 5,595,446.98	€ 16,149,559.04
L01A	€ 20,223.00	€ 94.00	€ 67,087.50	€ 87,404.50
L01B	€ 498,921.00	€ 8,274.50	€ 645,970.96	€ 1,153,166.46
L01C	€ 15,408.50	€ 148,798.58	€ 99,606.34	€ 263,813.42
L01D	€ 1,883.00		€ 4,785.36	€ 6,668.36
L01X	€ 2,258,568.70	€ 5,007,110.81	€ 3,425,352.10	€ 10,691,031.61
L02A	€ 1,812.10	€ 197.65	€ 95,416.00	€ 97,425.75
L02B	€ 31,075.70	€ 31,991.10	€ 37,733.12	€ 100,799.92
L03A	€ 660,980.07	€ 1,795,018.90	€ 1,107,120.00	€ 3,563,118.97
L04A	€ 7,193.00	€ 66,561.45	€ 112,375.60	€ 186,130.05
Grand Total	€ 3,496,065.07	€ 7,058,046.99	€ 5,595,446.98	€ 16,149,559.04

From the table no 2 we see that there are significant changes in consumption of different drug groups of the level three of ATC. When we consider that these drugs are used in very specific conditions like cancers and in these changes we can see that there is no proper way or a straight trend of the use of these medicines which would indicate that some guidelines are followed but is a completely not understandable table with such big differences.

Similar results are also in the H group or hormones with statistically significant differences as it is shown in the table three below:

Table 9 Drug consumption of the group 3 ATC of H drugs (Source: KMA, 2014)

ATC	2011	2012	2013	Grand Total
H	€ 582,215.91	€ 1,114,013.49	€ 852,195.44	€ 2,548,424.84
H01A	€ 153,770.20	€ 552,335.94	€ 321,123.60	€ 1,027,229.74
H01B	€ 18,005.00	€ 5,440.00	€ 124,954.00	€ 148,399.00
H01C	€ 21,200.00		€ 225.00	€ 21,425.00
H02A	€ 339,109.08	€ 498,099.65	€ 322,890.34	€ 1,160,099.07
H03A	€ 28,380.00	€ 28,627.50	€ 48,589.50	€ 105,597.00
H03B	€ 21,491.34	€ 27,412.80	€ 34,413.00	€ 83,317.14
H04A		€ 2,097.60		€ 2,097.60
H05B	€ 260.30			€ 260.30
Grand Total	€ 582,215.91	€ 1,114,013.49	€ 852,195.44	€ 2,548,424.84

The consumption that is shown as a total imports that are made from wholesalers includes all the drugs that are send not only to the private pharmacies but also those that are part of the essential list of medicines and that are sent to hospitals through regular tendering procedures. In this case in order to make the procurement procedures the initial process is planning that usually starts from hospitals and that is than supervised from Ministry of Health although there were many changes in these processes during the last three four years so it is hard to make someone responsible for results that show these big differences in the planning of these medicines. The Ministry of Health in 2013 published an analysis of the essential list of medicines according to VEN and ABC indicators showing all the products of the list as planned from hospitals and prioritized by MoH in order to fulfill the most important or vital products first. The analysis showed the similar problems as the drug consumption with big differences in the planning of medicines from one year to the other. In the table four below it is shown the planning for the health system.

Table 10 Health system planning (source MoH 2013)

Health system	Total	Primary	Secondary	Terciary
Drugs	€ 22,142,159.11	€ 4,274,763.15	€ 3,203,436.38	€ 14,663,959.58
Medical consumables	€ 7,749,564.37	€ 571,407.92	€ 2,986,080.15	€ 4,192,076.30
			Total	**€ 29,891,723.48**

If we further analyze the drug group planning from 2013 we can see the different drug groups as they are planned for the three different levels of the health care system as it is shown in the figure 5.

Table 11 Planning of drugs from essential list in 2013 (Source MoH 2013)
- Continues on the next page

Group	Primary		Secondary	Terciary	Total
Anestetics	2,103		397,001	280,036	679,140
Analgetics,	€ 238,262.92		€ 121,801.82	€ 747,810.00	€ 1,193,374.74
Antialergic	€ 54,137.55		€ 32,467.82	€ 28,281.60	€ 114,886.97
Anticonvulsants and Antiepileptics	€ 97,315.49		€ 17,439.01	€ 16,511.80	€ 131,266.30
Antiemetics	€ -		€ 23,228.08	€ 22,350.72	€ 45,578.80
Anti-infectives	€ 407,562.46		€ 375,266.13	€ 1,515,908.00	€ 2,298,737.06
Antituberculars					
Antiparkinsonics	€ 5,290.56		€ 298.80	€ 353.60	€ 5,942.96
Antianemics and other blood related	€ -		€ 655,353.30	€ 294,900.00	€ 950,253.30
Cardiovascular	€ 196,107.81		€ 296,308.17	€ 335,860.80	€ 766,870.68
Dermatologics	€ 48,776.71		€ 35,576.07	€ 23,254.20	€ 35,093.94
Diuretics	€ 53,362.27		€ 10,112.24	€ 3,864.50	€ 67,339.00
Gastrointestinal	€ 112,923.68		€ 57,037.03	€ 327,816.00	€ 497,776.71
Hormones and Antidiabetics	€ 1,171,134.50		€ 129,545.30	€ 569,295.30	€ 1,869,975.23
Gynecologic	€ 12,310.92		€ 16,885.50	€ 14,160.00	€ 43,356.42
Contraception					
Neonatal	€ -		€ 3,000.00	€ -	€ 3,000.00

Ophtalmics	€ 56,108.70		€ 15,722.75	€ 14,499.12	€ 86,330.57
Psycho therapeutics	€ 159,216.20		€ 29,271.71	€ 590,982.60	€ 779,470.51
Respiratory	€ 138,137.12		€ 31,982.82	€ 836.64	€ 170,956.57
Fluids	€ 179,643.96		€ 714,423.69	€ 947,105.60	€ 1,841,173.25
Vitamins and Minerals	€ 13,535.25		€ 11,846.70	€ 12,067.50	€ 37,449.45
Immunoglobulines and vaccines	€ 106,833.96		€ 149,897.85	€ 86,742.00	€ 343,473.81
ARV therapy					
Immunosupresants	€ -		€ 80,790.60	€ 82,991.04	€ 163,781.64
Hemodyalisis					
Other	€ -		€ 8,680.00	€ 19,644.00	€ 28,324.00
Oncology				€ 9,219,799.56	
Total	€ 3,052,763.11		€ 3,205,256.40	€ 5,915,627.02	€ 12,125,227.98

The second group from table 5 – analgesics it is planned in the total value of € 1.1 million while in 2010 the same group was planned only € 0.448, or group of antianemics in 2010 (PhSK 2010) is € 0.214 million while in 2013 is € 0.95 million, or oncology drugs with € 4.3 million in 2010 into € 9.3 million in 2013 million (Pharmaceutical Society of Kosovo 2010, MoH 2013). These differences that for a particular product in these analyses is shown to be as much as 500% more or less makes us conclude that this is rather prediction of product consumption than a real planning procedure that should be done according to a specific guidelines and taking into consideration very specific tools that would be obligatory in the process of planning and control.

4. DISCUSSION AND CONCLUSION
This analysis shows the gap between the planning from year to year and the needs for changes towards strategy and development of the pharmaceutical sector in Kosovo.
The part of this analysis that has to deal with the essential list of medicines show differences between years which were very high in particular cases with statistical difference and this proves the fact that for some of the medicines from the essential list for the upcoming year were more predicted than planned in details. Another fact for this issue is that there is no administrative instruction in place nor a guideline that defines the responsibilities of each stakeholder in this process and their duties towards the management of the essential list in all the components of the drug management cycle (selection, procurement, distribution and use) in which all these categories has also their subcategories or components that are related to the process for which the last result is the better health of the population.
In this context the beginning of the Health Insurance Fund and drug reimbursement means that there are some duties to be fulfilled in legislation in order that the processes would be initiated and this will lead to a better management of essential list also.

The creation and implementation of legal and sublegal acts defining exact duties, responsibilities, rights and processes that are related to drug management for the pharmaceutical sector with the new drug reimbursement system will be the beginning of a new concept and in a new way of thinking also, that will hopefully make all the parts of a system including those that are related to planning, to be coordinated towards a modern and competitive pharmaceutical sector.

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PERFORMANCE MEASUREMENT IN INTEGRATED CULTURE SYSTEMS: A "TREASURE'S MAP" FOR PUBLIC (PLUS) VALUE?

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ABSTRACT

This paper focuses on the topic of Performance Measurement in the realm of Community Governance with the aim to fill the gap in the literature of Public Management and Governance and to provide practitioners with good tools for measuring Public Value. It is argued, infact, that there is a major opportunity for governments to achieve effective and efficient results in improving their communities by allowing citizens to use performance measurement (Bovaird 2003, Holzer and Yang, 2004; Borgonovi 2008; Bianchi, Wiliams, 2013) to generate actions towards better public services (Bianchi, 2009, 2012, 2014; Bianchi, Rivenbark, 2014). In other words, the model of Community Governance, observes the linkages between citizens, governments and measuring performance as configured in a triangle (Foley, Martin, 2000). The literature will also cover the issue of the territorial dimension named the Metropolitan Area (Bryson, 2011) that, by its natural and original configuration as a public policy, is "per se" conceived as a form of public value that is generated or destroyed (Esposito, Ricci, 2015). Within the territorial configuration of Metropolitan Areas, policies towards the creation of integrated systems, such as culture systems in this circumstance, will be also explored in order to understand if Performance Measurement represents a tool that is useful to visualize tangible and intangible Public Values or if it is, rather, a "myth" as argued by some authoritative scholars (Mondell, 2004).
Keywords*: performance measurement, public value, community governance, integrated culture system*

1. INTRODUCTION

The topic of performance measurement (Bovaird, 2003; Holzer and Yang, 2004; Borgonovi, 2008; Bianchi, Williams, 2013) of public value (Benington, 2009: 5,6; Benington and Moore, 2011) for the welfare of citizens is not merely, today, a subject of interest amongst academics of public management. More increasingly, it has become a heated matter for public managers and their organizations' practitioners since they are daily confronted with problem of delivering efficiently and effectively public actions, policies, goods and services under the rubric of the 21st century's paradigm in the Public Management literature, that is *Community Governance* (Manfredi, 2009, 2013). This perspective, which unfolds through a series of networks and relationships has sparked off the development of innovative public and private models aimed at integrating all community's views and interests in a *systemic view*. Community Governance, therefore, entails a method of governing that pursues, as its primarily aim, sustainable development for communities and territories, and it is supported by coherent processes of community planning and programming by adopting a multidisciplinary, strategic and systemic approach (Totikidis, 2005).

This paper focuses on the topic of Performance Measurement in the realm of Community Governance with teh aim to fill the gap in the literature of Public Management and Governance and to provide practitioners with good tools for measuring Public Value. It is argued, infact, that there is a major opportunity for governments to achieve effective and efficient results in improving their communities by allowing citizens to use *performance measurement* (Bovaird 2003, Holzer and Yang, 2004; Borgonovi 2008; Bianchi, Wiliams, 2013) to generate actions towards better public services (Bianchi, 2009, 2012, 2014; Bianchi, Rivenbark, 2014). In other words, the model of Community Governance, observes the linkages between citizens, governments and measuring performance as configured in a triangle (Foley, Martin, 2000). The literature will also cover the issue of the territorial dimension named the *Metropolitan Area* (Bryson J.M. 2011) that, by its natural and original configuration as a public policy, is *"per se"* conceived as a form of public value that is generated or destroyed (Esposito, Ricci, 2015). Within the territorial configuration of Metropolitan Areas, policies towards the creation of integrated systems, such as culture systems in this circumstance, will be also explored in order to understand if Performance Measurement represents a tool that is useful to visualize tangible and intangible Public Values or if it is, rather, a "myth" as argued by some authoritative scholars (Mondell, 2004).

1.2 Research Design

The paper analyses *performance measurement* of Public Value in the territorial framework of the Metropolitan Area of Bari. In particular, the focus will be on the applicative problems resulting from the measurement of intangible values generated or destroyed in the cultural integrated system of the Metropolitan Area of Bari. The paper, in fact, finds that the main difficulties in measuring intangible public value, that would ultimately lead to disvalue of public cultural goods/services, lies in the incapacity of understanding the cultural heritage as made of both tangibles and intangibles. Given the conditions of a high level of generability of the case study itself, the paper has the ambition to support scholars and practitioners to map all tangible and intangible public value produced or destroyed, to the extent that a real Public Value's Map (Esposito, Ricci, 2014) could be drafted on the same way as the *Treasure's Map* is conceived. The Map itself will be able to identify the strategies by avoiding all those problems deriving from performance measurement and transformation of (dis)value into (plus)value (Esposito, Ricci, 2015). This is achieved by measuring the variation and gradation of public value created for the community in the perspective of Community Governance.

The investigation conducted in the perspective of Metropolitan Areas through the case study of the Integrated Culture System of the Strategic Plan *"Metropoli Terra di Bari"* (2007 – 2015).

1.3 Research Method

This paper uses a case-study method (Yin 1989, 1995) which is a valuable tool for understanding the complexities of governing in the perspective of Community Governance and for suggesting criteria for further actions in creating a shared, integrated, networked-based and systemic public value. The case under examination is the one of the Integrated Culture System of the Strategic Plan "Metropoli Terra di Bari" (2007 – 2015) and uses a deductive and inductive approach for describing the phenomena and dynamics of the processes entailed.

1.4 Research Objectives

The aim of this paper is to find answers to two research questions:
RQ1: In what way, the tools used for performance measurement, can contribute to the visualisation of Public Value or disvalue?

RQ2: How could performance measurement eventually contribute to determine the extent of public value creation or destruction? Alternatively, is Performance Measurement an emerging or declining organizational "myth"?

The case-study method can help understanding the complexities of measuring public value also characterized by forms of capital rationing that affect both current and future communities. In general, the case-study method (Yin, 1989, 1995), has a twofold aim of detailing the main characteristics of the phenomena and of understanding the dynamics of a given process. From a methodological point of view, the development of a case study represents a "strategy of research that is concentrated on the comprehension of the dynamics that characterize specific contexts" (Eisenhardt 1989, p. 532). Qualitative approaches and forms of research in action (Fayolle, 2004), allow to describe, explain and understand situations in their own dynamics and their own evolution. The case-study method represents a valuable tool to 'capture' different dimensions of performance measurement of Public (plus)Value, from the analysis of the case study itself as far as suggesting criteria for further action (Craig 2003).

2. MEASURING PUBLIC VALUE: A LITERATURE REVIEW

The theme of public value has been abundantly subject of attention in the academic community. In recent years it has become also known amongst a non-specialist audience, this way becoming part of what can be called as a new 'management frenzy' (Abrahamson, 1991, 1996). From a theoretical point of view, the research work was inspired by the debate that, according to some authoritative authors, began in 1995 with Moore who was, at that time, dealing with the subject of quality in PA (Jorgensen, Bozeman, 2007: 361). Through further elaborations, clarification and contextualization, it has, then, developed into a model that features the theory of public value as a new paradigm – integrative or even alternative to NPM – that was named Public Value Management (Stoker, 2006; O'Flynn, 2007; Alford and O'Flynn, 2009).

Value is *created* and *destroyed* whenever an individual is called upon to perform any of these activities in relation to a public service (Denhardt and Denhardt, 2003; Kelly, Mulgan and Meurs, 2002). In theory, these actions produce disvalue (Esposito, Ricci, 2015) when the emerging target differs from the one which was originally established and conceived to be reached by the actions themselves. This means that it could be possible to understand whether a certain behaviour - or an omission - by a politician is such as not to create or even destroy value. It is therefore paramount to understand if the good pursued by political action is what essentially originates, motivates and drives political action, that ultimately is, in other words, any action carried out in the community and for the community. In order to better understand the significance of this statement, it seems extremely useful to go back to 2300 years ago by citing the philosopher Aristotle who addressed the question as follows:

" (…) all knowledge and every pursuit aims at some good, what it is that we say political science aims at and what is the highest of all goods achievable by action. Verbally there is very general agreement: (…) it is happiness" (Nicomachean Ethics, Book 1).

Happiness should therefore be the good to be pursued through politics. As far as happiness it concerned, it seems to depend on whether and how public value is *created* or *destroyed* after meeting an ever changing *social desirability* (Dahrendorf, 1994: 30).

Scientific literature has shown how public managers are given a much more demanding task, which is to combine purely political issues with those of a more technical nature, in order to ensure the creation or destruction of public value (Hefetz and Warner, 2004).

The approach to public value was born at the beginning of the '90s, independently from NPM studies, and it has gradually become an important part of their development and revision, first by highlighting and, later, by filling and amending their gaps and inconsistencies respectively. This has led in some cases to significant changes of direction in the process of modernization

of public administration compared to originally NPM issues. What has been revisited, in particular, is the notion that policy makers should take into account multiple goals. According to this relatively new approach, the citizen is not seen as a customer, but rather as someone who contributes to shape decisions and public policies that are ultimately taken by managers who operate in the light of transparency and delivery of quality-based public services.

The theory of public value is based on the need to assess public services and to achieve higher levels of efficiency and effectiveness measured by Performance Measurement tools. This would in turn facilitate the establishment of an accountability culture where the public management should be held responsible as much towards citizens as they are towards politicians, overcoming a static approach based on top-down models where public managers try to reach targets set at central level following performance measurement.

It has been argued (Blaug et al., 2006) that the public value model tries to reconcile the tension between bureaucracy and democracy. The assumption at the basis of the public value theory is the acknowledgement of needs and preferences of citizens, who are the recipients of public services, in order to avoid that any decision regarding quantity and quality to be delivered stays only in the hands of politicians, public managers or of private companies.

Public value should therefore be seen as a key factor in designing and implementing political decisions and strategies regarding the services to be provided and should involve the entire decision-making process as far as the final stage when the service is delivered (Lapsley, 1999; Sevic, 2001; Marcon and Russo, 2008).

In the last twenty years the systems to measure performance in complex organizations have abounded and have become part of the current debate amongst scholars and practitioners (Mondell 2004).

Governments, at all levels, have developed performance measurement systems, with particular reference to the use of resources and the quality of services delivered but such measures, mainly economic and financial in nature, have been considered scarcely efficient to support the development of public policies and the definition of actions to respond to citizens' needs. "Whilst many accounting scholars have long taken a rather critical view of the possibilities of improving public sector management through one-sided reliance on financial PM, proposing a more multidimensional approach (e.g., Mayston, 1985; and Pollitt, 1986), more pronounced, normative advocacy of readily 'packaged' solutions to the latter end has only recently surfaced (Chow et al., 1998; Forgione, 1997; Kaplan, 2001; and Kaplan and Norton, 2001). However, the basic idea of tightly coupling performance indicators to strategic objectives inherent in such approaches goes back a good while (Drucker, 1954 and 1976) and has long appealed to public sector reformers (see e.g., Covaleski and Dirsmith, 1981; Dirsmith and Jablonsky, 1979; and Holmblad Brunsson, 2002). Given this longstanding debate, it would seem opportune to investigate how 'new' PM solutions such as those outlined above may become more firmly embedded in organizations at a conceptual level" (Modell, 2004).

3. MEASURING PUBLIC VALUE IN COMMUNITY GOVERNANCE AND INTEGRATED CULTURE SYSTEMS

Although some scholars claim that 'the public sector provides a leading edge on issues of performance measurement' (Lapsley and Mitchell, 1996, p. 5), critics argue that public sector organizations 'have measured too many things and the wrong things' (Atkinson et al., 1997, p. 26) and need to 'sharpen their focus when identifying the long-term issues of mission, objectives, and strategies' (Chow et al., 1998, p. 278). "This suggests that there are at least two potential bases for challenging the current state of public sector Performance Measurement practices for prospective contestants. They may claim that one-sided reliance on financial and other types of efficiency-based PM has largely failed to improve the provision of public services. Alternatively, the Performance Measurement practices of public sector organizations

may be considered too broad and unfocused to provide strategic direction for action. Whilst seemingly inconsistent, these two positions are not mutually exclusive but may co-exist in organizations and generate ambiguity as to how Performance Measurement should be improved. The latter one, which may be described as yet another Performance Measurement myth, implies that there are few alternatives available in terms of 'better' approaches for broadening the assessment of performance within the public sector" (Modell, 2004). The focus of this paper, focuses on the development of the Apulia Integrated Cultural System. A system intended as a "web of relationships" that can connect the local cultural system with actors or other institutional and economic networks of proximity (Valentino et al, 2001). According to some scholars engaged in developing a theoretical framework on Integrated Cultural System, beyond some semantic ambiguity (Seddio, 2013), the economic and business literature identifies the integrated cultural system as a systemic complex and culturally shared landscape. In this paper, the cultural heritage will be investigated not as a set of cultural assets to be protected and maintained (Riccaboni, Magliacani, 1984); but rather as a set of organizational and governance solutions, to govern the growing strategic complexity (Rebora, Meneguzzo, 1990; Cavenago, 2000; Ruffini, 2000; Borgonovi, 2001; Longo et al, 2005). This heritage is represented, therefore, as a complex system, culturally homogeneous with social and economic implications in the reference area, by the different stakeholders involved in the economic activities (Airoldi, Brunetti, Coda, 1994: 129; Airoldi, Forestieri, 1998; Valotti, 2000: 51), capable of promoting and supporting the processes of generation of utilities that are to influence public interests (Kooimen, 2003; Longo et al 2005: 17).

The theoretical framework that is emerging from the basis of the analysed literature, could also be useful to investigate the possible different trends in the application of studies on cultural systems integrated in different countries.

In Italy, the garrison of corporate economic literature on the subject of integrated cultural systems, is guaranteed by various scholars (Sibilio Parri, 2004; Marcon, 2004; Seddio, 2002, 2013; Zangrandi, 2007; Zan, 2007; Hinna, 2009; Donato , 2010; Manfredi, 2010, 2013; Del Sordo, Orelli, 2012; Magnani 2014), and by a substantial and growing ranks of professionals.

3.1 The model of community governance applied to Bari Metropolitan Area

The Metropolitan Area of Bari is located in a crucial border, at the edge of the European Union, as a gateway to the Balkans and with close ties with the Southern coast of the Mediterranean Sea.

This area, which should not be considered as the periphery of the Apulian region has made use of the Strategic Plan BA2007 – 2015 to activate processes and resources enabling the creation of a Metropolis as a centre of cultural production.

The Metropolitan Area of Bari attempted to implement a strategy to prevent that culture became everything. Thus, very specific actions in the field of arts, heritage and knowledge had been clearly identified and implemented following European trends which place culture in a pivotal position as being used in urban development strategies and cultural agents as provider of contents for a creative economy.

The scope of the Strategic Plan of the Metropoli Terra di Bari, as far as the field of culture and heritage is concerned, was merely centred on the development of a homogenous plan of cultural and tourist strategies at the Metropolitan Area's level in order to create an univocal and attractive tourist and cultural offer of the reference area. The drafting of a local cultural strategy depended, to a great extent, on the state of the art and the level of development of each single municipality compounding the Metropolitan Area. The idea of the Plan was to focus on the field of culture and tourism in order to prove their usefulness and their contribution to the creation of an economic and financial opportunities for the community of the Metropolitan area such as employment and urban regeneration. A strong emphasis was made in the economic

dimension of culture that would have helped in providing new jobs and new income to the local economy of the Area.

The strategic Plan was merely used as a tool that would have offered the Metropolitan Area a renewed image that, at turn, would have contributed to increase local community identity and historical awareness through the creation of cultural and creative industries. The activity of strategic planning in the sector of culture was mainly focused on the creation of a portrait of the city as a City of Knowledge and Creativity. The main goal was to fill the Plan with a set of events emphasising processes of cultural production, diversity, interculturalism and intercultural dialogue by making the most of the existing traditional cultures of the Area.

Cultural actions were those actions aimed at creating a respectful tourist offer, based on the cultural assets of the territory, contributes to the economic growth of the Metropolitan Area, without damaging the social fabric so that rural spaces as well as urban ones were all used at best, as a single common and shared heritage, to connect the Municipalities of the Area altogether. And this is what was meant as an integrated cultural system where the main idea was to link intangible cultural capital to the territory and the community and to present the system created as an attracted offer to sell on the market.

Therefore, it could be argued that the scope of the Plan regarding culture, heritage and tourism did not contemplate the establishment of a set of indicators that would have afterwards measured the result of the impact of those strategies on the territory and on the communities of the Metropolitan Area. No assessment of performance indicators can be actually conducted, today, at level of the integrated culture system that the Plan attempted to create, simply efforts of creating a strategic, synergic and concerted vision on culture were not driven by the spirit of measuring the cultural intangible value generated or destroyed.

4. CONCLUSION. PERFORMANCE MEASUREMENT IN INTEGRATED CULTURE SYSTEMS: A "TREASURE'S MAP" FOR PUBLIC (PLUS) VALUE?

An interesting case of community planning is found in the adoption of the Community Governance's model applied to the Strategic Plan of the Bari Metropolitan Area (or PSMTB). The PSMTB needs to be conceived as political willingness, and ultimately a decision, to converge into a single institutional authority. The analysis of documents related to performance measurement of the Metropolitan Area of Bari has occurred through two steps:

a) direct collection of data;
b) collection of documents and indirect resources resulting from public engagement activities.

From the analysis of the documents above, it has been possible to observe that the tools of Public Measurement cannot highlight, in a clear and measurable manner, the value that is generated or destroyed. This can be explained in the lack of robust, measurable and valid strategic objectives that the Public Administration has established ex-ante.

The paper, in fact, finds that the main difficulties in measuring intangible public value, that would ultimately lead to disvalue of public cultural goods/services, lies in the incapacity of understanding the cultural heritage as made of both tangibles and intangibles (*RQ1*).

Given the conditions of high level of generability of the case study itself, the paper has the ambition to support scholars and practitioners to map all public value produced, tangible and intangible, to the extent that a real Public Value's Map (Esposito P., Ricci P., 2014)is drafted on the same way as the Treasure's Map is conceived.

The paper fills the gap in the examined area of public value that is the measurement of gradation/variation of public value. The investigation conducted in the perspective of Metropolitan Areas through the case study of the Integrated Culture System of the Strategic Plan "Metropoli Terra di Bari" (2007 – 2015) represents an instrument itself by the means of the Treasure's Map that it created.

From the analysis of the case-study it is possible to observe that the performance measurement tools adopted by the Metropolitan area of Bari in the cultural integrated system seems to be a missed opportunity. The tools abovementioned are not part of the Treasure's Map since they don't enable the assessment of the value's transformation as far as the intangibles are concerned. Consequently, they are also unable to allow the visualisation of the plus value may be generated or destroyed.

From the observation of the performance measurement conducted by the Metropolitan Area of Bari, it comes that *(RQ2)* is confirmed since, in this case study, performance measurement tools in the public sector stand as only a "*myth*" (Mondell, 2004).

Any European metropolitan area, strategically planning its future, needs to formulate a strong cultural vision. In other words: There is no future for a metropolis that does not give culture a central role in the exercise of strategic planning and confirms with adequate funding and suitable processes the expansion of the cultural resources during the implementation of the plan. The inclusion of culture in the Strategic Plan Metropoli Terra di Bari took into account three main strategies guiding the future of the Metropolis: a polycentric, competitive and attractive and efficient governance.

The case study of the Metropolitan Area of Bari shows a lack of culture and cultural heritage's indicators that demonstrates the institutional incapacity of measuring intangibles and the government's aim to monitor trends in the contribution of cultural heritage to the Metropoli Terra di Bari's society and economy. No indicator has been set as it is shown in the document on "Performance Assessment of the City of Bari – Pianificazione e Controllo Strategico nelle grandi Citta" conducted and presented by the Italian Ministry of Funzione Pubblica in 2013.

Therefore it this context it is not possible to measure the value or disvalue, rather, the plus-value generated by cultural assets and their impact on cultural heritage on individual and community well-being. Specifically, it is not possible to discern any correlations between participation in arts and cultural heritage activities, individual well-being and social capital in communities in the Metropolitan area of Bari. What is important is the use of intangible and performance outcomes that are being used to assess investment in cultural heritage and determine future public policy. This links the value that the public cultural places experience with the Public Value that public authorities seek to create through investment and policy. And arts and cultural heritage are the conduits for that value creation. And all this, is completely inexistent in the study case under examination.

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NEW CHALLENGES AND ADVANCES IN PUBLIC CRISIS MANAGEMENT

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ABSTRACT

The article reveals the possibilities to foster good governance in crisis. It addresses the following issues: how to relate to crises, actions concerning crises, the evolution of Public Crisis Management, systematization of approaches to crisis management for local "crisis situation" and "full-scale" crisis, the implementation of Keynesian approach, Monetary policy, Institutional Economics in Crisis Management in USA, EU, China. Special attention is devoted to Russia's way of maintaining sustainability. For these purposes criteria and indicators for evaluation of Public Crisis Management effectiveness are discussed. As a result of research work we present empirical study of Russian success in Public Crisis Management and our view on its further development.
Keywords: Public Crisis Management, Global Crisis Management, crisis situation, full-scale crisis, prevention measures, emergency measures, rehabilitation measures, sustainability, criteria and indicators of Public Crisis Management effectiveness

1. INTRODUCTION

The well-known fact is that activities of any socio-economic system - national economy, region, individual enterprise - have the risk of crisis. The question is how we should relate to crises. The most common understanding of the crisis is that it's a purely negative and catastrophic phenomenon. The famous Webster Dictionary [11] says that crisis is a dangerous, unstable situation, threatening negative consequences. But since the ancient times it is well known that crisis is not only a danger, it also gives new opportunities. So we can say that crisis is a turning point and an integral element of development in any system: the human body, the state, the enterprise. Therefore it is very important to be able to use the crisis "to clean the system" and to organize its revival on a new level.

Analysts and practitioners often speak about positive aspects of crises, but usually it begins and ends with declarations, especially if it concerns Public Administration, Economic development and Finance. How to actualize positive component of crisis? How to turn crisis into positive side? This is the main problem we'll touch in the article.

2. THEORETICAL FUNDAMENTALS AND TERMINOLOGY FOR PUBLIC CRISIS MANAGEMENT.

The measures of crisis management certainly depend upon the type of crisis. But rather often there is no clear understanding about the type of crisis and even if it is really crisis or not. In public crisis management we can see that rather often technogenic catastrophe or environmental disaster are called "crisis". From our point of view, it is not always right. For example, once occurred aircraft crash can be characterized as an accident but if accidents occur

frequently we can speak about the crisis in air transportation or aircraft industry. Once occurred flooding of settlements or drought can be an environmental catastrophe but if we see the recurring phenomenon we should speak about crisis of housing and public utilities, irrigation systems, social support, etc. So, in this article we consider the crisis as the maximum aggravation of the contradictions of development, usually crisis evolves gradually and has a multicomponent structure.

Unlike a *full-scale crisis* we should distinguish *crisis situation.* Specific features of a crisis situation are locality, structural homogeneity (appears in isolated area or a limited number of spheres), suddenness. As examples of a crisis situation in Public management we can speak about accidents, detection of corruption, violations during the elections of legislative and executive authorities, failure of political negotiations, disability of key figures, reduce of reputational or political capital, and so on. Crisis management varies depending on the factors that cause the crisis situation. It can be focused on civil servants, foreign affairs, certain territories, loans and prevent the development of a full-scale crisis.

As we can see, crisis situation may appear in different spheres: policy, social sphere, industry, environment. In contrast with crisis situation full-scale crisis usually manifests and reveals itself or at least is accompanied by deep economic decline. That is why Public Crisis Management in the case of full-scale crisis includes a broad set of measures usually focused on economic and financial improvement. But specific measures of crisis management depend on the type of full-scale crisis.

In scientific literature crises are usually distinguished as cyclic and systemic. The dynamics of economic development is not simple and linear, but complex and wavy. In some periods the structure of the economy does not meet the new trends. This can be caused by the international division of labour, depletion of natural resources, human capital development, etc. Social system regularly undergoes phases of rise, decline, crisis, depression, recovery. The phase of crisis in such loop is called *cyclic crisis*. The cyclic crises are typical for the market economy. In addition to these crises, some researchers propose to distinguish *systemic crises* which are connected with deep changes in social-economic formations. The followers of this theory should say that the transition from a command to a market economy in Russia is an example of a systemic crisis.

From our point of view, classification of crises on cyclic and systemic has practical importance for Public Crisis Management. It allows to determine the depth of the challenge, the scale of changes, justify and develop the program of activities. But as far as theory is concerned, we can say that all crises are cyclic - systemic crises fit into the overall trend of development as very large, long cycles which depend upon transition from one economic order to another. So, fundamental approach allows us to consider systemic crises as a type of cyclic crises.

The term "Crisis Management" first appeared in the early 60s of the XX century in connection with "Caribbean" or "Cuban" crisis. Regarding enterprises the term originated in the early 80s – the first monograph was written by Fink Stiven [4] and now is widely spread. The use of the term "Crisis Management" for Public Administration, states, territories, industries came later. In recent years the term "Global Crisis Management" appeared. It emphasizes that at present

we are dealing mainly with the global crises - crises evolution usually touches a lot of countries[1].

The public activities related to crisis are called *crisis management* almost all over the world. But scientific schools and practitioners in Russia usually use the terms: *anti-crisis management*, anti-crisis instruments, anti-crisis national and regional programs [17], etc. So the question is which term is more correct - crisis or anti-crisis management and whether the problem is only linguistic or in different meaning.

The opponents of anti-crisis management usually say that within the anti-crisis paradigm it is not considered the possibility of using crises for refreshing the system and organizing its further development. From their point of view, the term "anti-crisis management" assumes measures only to prevent and avoid crisis.

In Russian legal documents, orders, decrees actions related to crises in the most general form are usually classified as follows:

- *prevention*, including tax regulation, changes in monetary policy, firing a key government officials, organization of controlled crises in "old industries", creating "airbags", development of ranked list of risks for each factor of crisis, "provocative" measures like simulations (transport, nuclear energy), and so on;
- *emergency measures* aimed at preventing deterioration of the situation (controlling inflation and interest rates, nationalization of businesses, social measures of support, etc.);
- *rehabilitation measures* - planning of crisis management measures and their implementation, stimulation of business development and innovations, support of small businesses.

So the list of measures shows us that in Russian Public Administration and Public Crisis Management there are two types of measures – some of them are aimed at preventing crisis, others – at "using crisis" for rehabilitation of the system. That is why according to Russia we can consider the difference in terms as a linguistic problem. In this article we'll use the term "crisis management" as the most popular in the world.

3. SOME HISTORY AND MODERN INTERNATIONAL EXPERIENCE.

The list of the deepest crises of the last century is the following.

- Great Depression (1929-1933) - it was manifested in the decline of production and consumer demand by 40-50% in many countries, especially in USA, significant growth of unemployment, reduction of prices for agricultural products.

    The last 30 years are characterized by the growth of crises frequency.

- October 19, 1987–so-called "Black Monday". The beginning of the crisis was connected with the strong decrease in the capitalization of a number of mega-companies. The Dow Jones Index fell by 22.6%, after that collapsed the markets of many countries.

- 1994-1995 -"Mexican Crisis". It was caused by the growth of distrust to the government and its possibilities to stabilize the financial situation, output of capital because of expectations of crisis.

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[1]See more[12, p.50-91].

• 1997 -"Asian crisis". Its main features are the collapse of the stock market because of foreign investments exit. It was accompanied by the devaluation of currencies in the region, the deficit of balance of payments.

• 1998 - Russia's default. It was caused by huge government debt, the treasury bills bubble, low prices for raw materials.

• 2008-2009 – "global financial crisis". It began in USA as credit and mortgage crisis and quickly hit most of the countries in the world. This collapse was reflected in bankruptcy of fifty banks and financial institutions, including Lehman Brothers, Fannie Mae, Freddie МасиAIG, it touched the exchange securities, consumption and savings of the population, resulted in the large decrease in the GDP of many countries of the world.

In 2010-2015 there were a lot of crisis situations all over the world. Some analysts call them "crisis" but most of them were local, structurally homogeneous, appeared in a limited number of spheres and should be considered not as full-scaled crisis but as crisis situation. Nevertheless the frequency of national and world crises, the necessity of development of adequate prevention and rehabilitation measures lead to constant evolution of concepts of crisis management.

The most famous concept of crisis management in the first part of XX century was the Keynesian approach which provides active state intervention in economic life [5], [6]. This approach was used as the basis of a "new course" of President Roosevelt in 1933-1939 and helped to overcome Great Depression. Keynesian model with some additions and clarifications (so-called neokeinsians theory) also worked within two decades after World War II. The most famous examples in the post-war practice are the Swedish model of socialism [1] and German social market economy [2]. But as public regulation does not fulfill the task of supporting sustainability fully the Monetary policy [3] became popular.

Supporters of monetarism argue that government measures for stimulating demand do not improve the economic situation, they generate new imbalances and crises. The monetarists support the idea of tax cuts during downturns and reducing government expenses during economic growth, thus decreasing the role of government in the economy.

From the beginning of the XX-th century in parallel with the above concepts many researchers considered Institutional Economics [10] as a base of crisis management. They expand the area of crisis management and take into account the impact of the institutions: the state itself and a variety of organizations, unions, corporations, political parties, public organizations and others as well as entrenched traditions, habits, customs, cultural, ethical factors affecting people's behavior. They attached great importance to adaptation of strategy to changes in the institutional environment.

Different countries followed different concepts of Public Crisis Management. This became particularly evident in the crisis of 2008 and the following years.

USA used mostly monetary policy, the main instruments were: financial inflows into the financial sector to reduce interest rates and stimulate investments. Beginning from September 2012 government monthly purchases mortgage bonds for $ 40 billion and support very low interest rate in 2015-2016.

Public Crisis Management in EU was changing during the period. In the beginning of the crisis there were attempts to follow monetary policy, then elements of Institutional Economics were added: in 2010 twenty seven countries established European Financial Stability Fund

(EFSF).The assistance of the Fund was provided to Greece, Italy, Ireland, etc. In 2014 г. another large step to transition to Institutional Crisis-management was made – the European Central Bank received the authority to oversee all banks in the Euro area.

The Keynesian approach was the main feature of Public Crisis Management in China. Chinese government did not make a great effort for saving the financial sector but try to develop the infrastructure and improve the living standards, stimulate consumer demand.

As far as Russia is concerned, we can see the attempts to apply monetary policy, for example the injections in the banking sector and providing opportunities for banks to develop their credit policy. But our empirical research shows that in most cases capital didn't reach companies because of complicated regulations, bureaucracy, corruption. As a result, banks preferred to invest money abroad and to strengthen their own position.

Having identified this situation, Russian government undertook direct investments in the real sector and social sphere. The funds for it were accumulated during the previous years by increasing the international reserves and the provision of a budget surplus. In 2009 these funds were largely used for supporting the country in crisis. As a whole Russia spent about 300 billion dollars for Crisis management in 2008-2009 [19]. Nevertheless, the share of long-term investments in the economy didn't increase in spite of the fact that there was the great necessity of it: wear, deterioration of fixed assets reached 49% in 2014 [18, p.68]. Most of expenses in crisis were for "filling the holes".

So we can see that Russia try to combine Institutional Crisis Management, further development of Public and market institutions with mobilization of resources as in command-and controlled economy, saving money for "bad period" instead of investing in modernization of economy, innovative development, economic diversification.

Now we can look at some statistical data to analyze the success of different approaches in some countries (Table 1) [7, p.88].

Table 1. Selected Indicators of Development

	GDP		Indus-trial Produc-tion	Consu-mer prices	Unemploy-ment	Current-account balance, % of GDP	Budget balance, % of GDP	Interest rate, 10-year gov't bonds	Currency units per $	
	latest	2014							Apr	Year ago
Taiwan	+2.9	+3.2	+7.0	+1.6	4.1	+11.3	-2.1	1.58	30.1	30.0
China	+7.7	+7.3	+8.6	+2.8	4,1	+1.7	-2.2	4.2	6.2	6.2
Russia	+2.0	+2.0	+2.0	+6.9	5.6	+0.9	-0.4	8.94	35.7	31.2
USA	+2.6	+2.8	+3.0	+1.1	6,7	-2.1	-2.9	2.69	-	
Euro area	0.5	+1.1	+2.1	+0.5	11.9	+2.3	-2.5	1.58	0.72	0.77

Statistical data shows us that in 2014 China and Taiwan have the best results: one can see the growth of GDP and Index of Industrial production, sustainability of consumer prices and currency. Euro area is in deep stagnation – there are low growth of GDP, high unemployment. As far as Russia is concerned, most indicators are also unsatisfactory. We have low growth of GDP and Industrial Index and at the same time high growth of consumer prices, interest rates and currency units.

So, statistical data of different countries does not give the answer to the question: "What concept of creating mechanisms of financial and economic stability is more adequate?"

4. RUSSIA'S WAY OF MAINTAINING SUSTAINABILITY.

One of the urgent questions for all countries including Russia is how to create stability and reduce the possibility of crisis situations, how to make crises rare. In order to take into account Russian specifics we suggest the following general sustainability criteria and indicators that can help to determine the beginning and development of crisis or crisis situation[2].

- The frequency of crises compared to:
  - developed countries;
  - rapidly developing countries;
  - countries of the former USSR;
  - other post-socialist countries.
- The dependence on external factors:
  - the level of foreign debt and its structure;
  - the volatility of international capital flows and outflows of capital from the country by years;
  - the dependence on prices of the main exported commodities.
- The degree of the budget deficit.
- The level of economic independence of the regions.
- The effectiveness of the tax system.
- The execution of the state functions in the financial sector:
  - the availability of loans to the real sector and population;
  - provision of "long money" for innovative projects;
  - sustainability of currency;
  - overcoming inflation;
  - institutional support for securities' market.
- The diversification of the economy:
  - overcoming the "raw orientation" of economic development,
  - de-monopolization, creating conditions for "fair competition";
  - small business development;
  - support of innovative development, science, education.

Unfortunately, analyzing the development of Russia through this list of criteria we can see that our country is not fully sustainable. In addition to above figures this is evidenced by numerous facts, in particular: Russia is divided into regions-donors and regions-recipients and interbudgetary transfers are about 37%, so a lot of regions are unsustainable; export of mineral raw materials is almost 70% of total export goods and Russia is greatly dependent upon export of raw materials; the share of innovative products in the total volume of shipped goods is very few - just over 7% [18, p.535, 397].

So the analysis of results of almost 25 years of Russian "perestroika" allows to make the conclusion that the dominant concept of creating mechanisms of financial and economic stability is not fully successful and additional measures for strengthening stability and crisis

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[2]See more [20, p.96]

response are required. From our point of view, the main elements of Public Crisis Management (including prevention, emergency and rehabilitation measures) are:

- further development of all institutions of civil society (legal, political, financial, ethical, cultural, and so on);
- forecasting of changing phases of macroeconomic cycle;
- development of scenarios of prevention, emergency and rehabilitation actions in the period of crises;
- the use of macroeconomic measures of influence on companies and financial sector in all phases of the cycle to mitigate the crisis (budgetary, credit, investment, financial and banking measures);
- the monitoring of organizations' activities at all stages of the cycle for defining the zone of possible fluctuations and preventing "bad fluctuations" in proper time;
- identification and assistance to companies in the phase of the crisis if they can be rehabilitated, and effective implementation of bankruptcy of those who cannot be refreshed.

Measures of prevention crisis and support of the financial sector are covered in literature rather widely and in practice most of the countries use traditional approaches: inflows of capital into the financial sector, reducing interest rates thus stimulating investments through banks, and so on. So in this article we will pay special attention to the Public Crisis Management directed on the real sector.

We can distinguish the following types of Public Crisis Management measures for companies:

- individual support for selected companies;
- system-related measures concerning all companies (regulation of interest rates, taxes, currency, and so on).

During "perestroika" a lot of new market institutions for crisis management were developed in Russia but the above data shows that they didn't provide stability in full and system-related preventive tools does not fulfill their role of mitigation and overcoming crises. Moreover most of system-related emergency macroeconomic measures and measures for rehabilitation – fiscal, credit, tax, monetary policy– gave delayed effect and couldn't help quickly. That is why Russia preferred so-called "selective instruments" for supporting chosen companies in crisis.

The main efforts of Russian Government were directed on supporting primarily giant, "strategic" companies. As an example we may speak about interest free loans for Russian Automobile giant "AUTOVAZ" and protective measures related to the promotion of domestic auto on the market; budgetary subsidies for Russian Railway Company, reduction of taxes and export tariffs for companies of steel industry, other different measures for ensuring the survival of "strategic companies".

In most cases measures of governmental support were directed only to prevention a catastrophe and didn't allow to achieve significant results. They were not aimed at modernization of production, energy efficiency, optimization of production. As a result of these measures we have conserved the production of low-quality cars, Russian Railway and steel industry remained inefficient, and so on.

One of the main factors of inefficiency was that the reasons to select companies for rehabilitation proceedings were often political and social, not economic. This led to undershooting of the own possibilities of giant companies: they continued looking forward for

support of the government, insufficient use of internal reserves remained. As a result, production costs and administrative expenses were not decreased, re-engineering processes were not performed, new products and cheaper services were not offered.

Along with the support of "strategic" companies Russian government declared a lot of measures of small and middle business (SME) support. However, many of these measures actually were associated only with micro business and did not stimulate the growth of the scale of business. As a result, medium business is in the worst situation because it is touched neither by any systemic measures for small enterprises nor by measures of selective support of large companies. The impact of small business in the economy remains low: their share in GDP is 15%, the proportion of employed in small business is only 10%.[3]

Special problem is the SME support in crisis because the deepest point of all economic crises is insolvency and bankruptcy.[4] Depending on the financial situation of the company the government may help companies to overcome crisis independently or under the Law of Bankruptcy. The independent recovering is usually connected with effective use of internal company's reserves as well as with systematic measures of support – reducing interest rates, taxes, so on. As far as Bankruptcy is concerned, the goals of bankruptcy procedures and its concept changed a lot during the last years all over the world. In XX-th century bankruptcy was viewed primarily as expropriation, liquidation mechanism but after 2003 a lot of countries revised their bankruptcy laws, focusing on assistance in the rehabilitation, restoration business. Even historically "pro-creditor" countries (England, Germany) take active measures aimed at the revival of insolvent companies. For example, in 1999 in Germany an attempt to restore the insolvency companies was undertaken in half of cases, in 2006 –in 80% of cases [13, p.71].

In Russia we can see the conservation of prevalence of companies' liquidation. Among companies under Bankruptcy Law [21] procedures of rehabilitation are used less than for 10% companies, about 90% are usually liquidated (Table 2) [14].

Table 2.The proportion of liquidation and rehabilitation procedures in Russia

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Liqui-dation	96%	88%	86%	93%	99%	95%	95%	95%	93%	90%	90%	90
Rehabi-litation	3%	11%	13%	7%	1%	4%	4,3%	4%	6%	7,6%	6,5%	5,96

At first glance it may seem that the problem is in the shortcomings of the Law but the world experts consider Russian Insolvency Law rather balanced – it takes into account the interests of both sides – debtors and creditors. From our point of view, the main factors that contribute to the prevalence of the liquidation procedures in Russia are the following:
  • historical understanding of bankruptcy by the society as liquidation of the company;
  • distrust of both parts (creditors and debtors)that procedures under the Law of bankruptcy can protect;

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[3] Calculated on the basis of [18, p.206,211]

[4]Large, «giant" companies are better protected from bankruptcy by Russian Insolvency Law [21].

- the tradition to go for bankruptcy when there is no assets and no opportunities for development, only large debts;
- applying bankruptcy procedures for hostile takeovers.

So improvement of only Insolvency Law is not enough for increasing the number of restored companies and overcoming crises. Changes in all institutions of Public Crisis Management are needed. And as a result, an understanding of the bankruptcy institution as element of government support should be developed, changes of stereotypes of business behavior and ethics should come.

This does not mean that Russian Insolvency Law is ideal and it should not be changed. There are several urgent unsolved problems of bankruptcy. Some of them are inherent only for Russian regulation, some of them are global. For example our domestic problems that still remain are: separation of special groups of companies ("strategic companies") in the Insolvency Law and additional privileged conditions for their rehabilitation; low debt payments to the workers of the companies in crisis. Other problems– bankruptcy proceedings with a foreign participants, insolvency of group of companies (holdings) are unresolved issues not only in Russia but all over the world [8], [9].

5. SPECIAL MEASURES OF CRISIS MANAGEMENT IN RUSSIAN SUB-SOVEREIGN ENTITIES.

Russia consists of 85 sub-sovereign entities, so we may speak not only about Public Crisis Management at macro level but also highlight the specific of regional Crisis Management. One can see different approaches for developing programs for maintaining economic and financial safety in sub-sovereign entities. We'll show the variance of strategies on examples of Voronezh and Tomsk regions.

In the period of deep crisis 2008-2009 in Voronezh region Anti-crisis Program [16] highlighted the following priorities:

- ensuring the competitiveness and regional economic development,
- maintaining business activity in the region;
- supporting the balance of regional and local budgets;
- promotion of employment;
- ensuring the rights of citizens to receive quality public services.

The program also contains the implementation plan for the Government. For example, for the task of "ensuring of favorable conditions for development of investment activity" the region's Government sees its own role in:

- creating the image of the region, attractive for investments due to the formation of a progressive investment legislation, establishing a favorable tax regime;
- the development of the transport and business infrastructure for the needs of potential and existing investors, and so on.

In general we can say that Crisis Management Program of the Voronezh region is systematic and deeply developed practical plan of measures, which includes short-term objectives to support the economy in the acute phase of the crisis as well as mid-term and long-term goals of stable development of the region.

Contrary to Voronezh region, Crisis Management Program of Tomsk region at the same period [15] was directed to resolve only the most acute problems and local authorities chose mostly

selective measures. They made the register of "important" organizations and supported mostly these organizations. So Crisis Management was understood in Tomsk region narrowly – as measures to overcome the crisis and recession, there were no medium and long term goals in the Program. The key words in the Program are "conservation", "retention", "prevention". For example, the goals were represented as: to save the level of the government support of small business, to conserve the level of employment, to prevent reduction of real incomes of population below 95% relative to 2008, and so on.

These only two examples show us that understanding of the ways to enhance stability; the role and content of Crisis Management Programs differ significantly across regions. And the variation is not so much concerned with economic and financial diversity of regions but with a different understanding of the content of the crisis, the ways to overcome the crisis.

From our point of view, special measures of crisis management in sub-sovereign entities are:
- further development of local legislation and the establishment of market institutions within available mandate and taking into account the specifics of the region;
- creating conditions for consolidation of enterprises: within the framework of one system they can "pull" the weak links with the help of more sustainable;
- the building of the technological and value chains, in which local authorities, helping to one company, for example, with public contract, will provide a multiplier effect for all related industries;
- effective management of blocks of shares owned by the state or municipalities;
- the use of "business" managerial technologies in public sector (for example, taking on personal responsibilities, faster decision making) [20, p.84-88, 127-130, 180-200].

6. CONCLUSION

Public Crisis management is in alienable element of Good Governance and its importance grows up because of increasing of crises frequency and the territorial width of crises. Strategic alternatives for overcoming the crisis varies depending on the deepness of crisis and the factors that contributed to its downfall: exogenous, endogenous, operational, financial, etc.

Specific Public Crisis Management measures vary depending whether it is full-scale crisis or crisis situation, systemic or cyclic crisis. They also differ upon:
- national traditions;
- stage of macroeconomic cycle;
- deepness of crisis in regions and sectors of the economy;
- level of globalization and the degree of international division of labor;
- budgetary, credit, investment possibilities of the country and its financial and banking system;
- types of organizations to which it is directed:
  - small business,
  - rapidly growing companies,
  - recently rehabilitated companies,
  - "young" companies",
  - innovative companies.

An empirical study of a number of countries which used different approaches to Public Crisis Management (Keynesian approach, Monetary policy, Institutional Economics) shows that there is no unique solution.

Russia's way of maintaining sustainability is primary directed on prevention a catastrophe and is not fully aimed at modernization of production, energy efficiency, optimization of production. The system of Public Crisis Management in Russia does not actualize positive components of crisis completely.

The criteria of Public Crisis Management effectiveness proposed in the article allow to develop activities to strengthen stability: overcoming the "raw orientation" of economic development, look to further de-monopolization; creating conditions for "fair competition"; giving real support of innovative development, science, education; increasing the level of economic independence of the regions; moving away from individual support for selected companies and development of system-related measures concerning all companies; improvement of Insolvency Law and other elements of Bankruptcy institution, and so on.

Crisis management is developing constantly, its evolution continues and now there is necessity to speak not only about Public Crisis Management but about *Global Crisis Management*. Effective Crisis Management requires coordinated decisions and actions of international organizations, global civil society, state bodies, national civil society, multinational corporations, national diasporas.

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WHO IS STRONGER? GERMAN STOCK EXCHANGE XETRA OR BMW? – THE CASE OF 2014

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ABSTRACT
The automobile industry today is the most lucrative industry. In this paper, we ask whether the BMW, one of the automaker giant, could retain its' profitability in 2014. The results are extremely robust to alternative model specifications. It also affected by the recession but cannot lose the profitability in 2014. This interesting thing inspires me to conduct research on the financial performance of BMW AG. Xetra is growing up and down in 2014. In the beginning of my paper I give an overview on the BMW. Later I analyse the net profit, sales revenue, costs and assets base of the corporation for the Q1 in 2014. Then I go for ratio analysis to judge the financial health of the organization. In ratio analysis I use Return of Assets (ROA), Return on Equity (ROE), Basic Earning Power (BEP), Liquidity ratio, Profitability Ratio, Divided Pay-out (DP) Ratio and Du Pont Chart to conduct my analysis. The findings on the analysis are discussed along with the respective chapter, besides making separate chapter for it.
Keywords: Stock Prices, Xetra, BMW

1. INTRODUCTION

Auto sales in Europe are growing this year after falling to a two-decade low in 2013. The world continues to change at a rapid pace. In many countries, individual mobility remains a focus of political regulation and national industrial policy. The shift in society requires new mobility solutions. Volatility has long become a constant in everyday business. Markets and consumers alike remain uneasy in these periods of economic uncertainty. To meet these challenges BMW formulated its Strategy Number 1, which aligns the BMW Group with two targets: to be profitable and to enhance long-term value in times of change. And this applies to technological, structural as well as cultural aspects of the BMW[1]. Bayerische Motoren Werke AG (BMW), (English: Bavarian Motor Works) is a German automobile, motorcycle and engine manufacturing company founded in 1916. In the first half of 2014 global luxury car leader is still the BMW. BMW's first-half sales rose 10 percent to 886,347 vehicles, including a 7.3 percent gain in June. Six-month auto sales by BMW's namesake brand exceeded Audi's deliveries by 16,997 vehicles compared with a difference of 23,760 a year earlier, according to figures released by the manufacturers this week. BMW's lead against Mercedes shrank 6.3% to 102,827 cars. All three automakers posted record deliveries for the period[2].

In the first half of 2014 The German Xetra Index has recorded too much sideways. After the stock market barometer achieved new highs in the previous year, this year it went little out of breath. Although we witnessed for the first time in the history of the Xetra the 10,000 point mark, the correction in the past few days made sure that the Xetra since the beginning of the

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[1]http://www.bmwgroup.com/bmwgroup_prod/e/0_0_www_bmwgroup_com/investor_relations/fakten_zum_unternehmen/strategie.html (09.07.2014)

[2] http://www.bloomberg.com/news/2014-07-08/audi-joins-mercedes-in-narrowing-bmw-luxury-car-sales-gap.html (09.07.2014)

year has increased only about 3%. Nevertheless, the perspective for achieving a higher profit with equity investments in the rest of the year is rather good. The fact that there was no significant correction, speaks to the strength of the Xetra stock market. Given the high economic growth in Germany and positive signals from the former "problem countries" such as Greece and Spain also goes in favour. The problem still persist, the stock market in Lisbon temporarily lost more than 2 percent. Within a last month the index has fallen more than 1,000 points or 14%. Does the next "financial bomb" ticking in Portugal? Bulgaria maybe? A few days ago in Bulgaria, - the citizens had a run on the banks with mass cash taking from their accounts. The country is not just poor - but also has massive debts. And Bulgaria is not an isolated example of a weakness in the Euro zone. The number of jobseekers in France has recently reached a new record level. The question is, what stocks to invest in? BMW? Which industry? Car (automotive) industry? The term automotive was created from Greek autos (self), and Latin motivus (of motion) to represent any form of self-powered vehicle. This term was proposed by Elmer Sperry[3].

2. BMW GROUP COMPARING XETRA INDEX

Most of the world's car markets reported growth in the first quarter 2014. While Europe's markets are gradually turning the corner and returning to the road of positive growth, some emerging markets showed signs of a downward trend. Car markets in Europe seem to be gathering pace and grew overall by 8.2 % compared to the previous year. Vehicle registrations in Germany increased by 5.6%. Rises were also recorded in Italy (+6.2%) and France (+3.1%). The Spanish market, which had suffered the most severe downturn in recent years, grew by 11.8% in the first quarter of 2014. The growth rate in the United Kingdom was particularly impressive (+13.7%)[4]. For future analysis and trends we should take a look to Figure 1.

Figure following on the next page

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[3] Scientific and Technical Societies of the United States (Eighth ed.). Washington DC: National Academy of Sciences. 1968. p. 164. (10.07.2014)

[4]http://www.bmwgroup.com/bmwgroup_prod/e/0_0_www_bmwgroup_com/investor_relations/finanzberichte/z wischenberichte/2014/0314/_pdf/Q1_2014_sw.pdf (09.07.2014)

Figure 1: Change of BMW Share price comparing Xetra Index on December 30, 2013

Source: http://www.bloomberg.com/quote/BMW:GR (09.07.2014)

The figure BMW:GR (ticker symbol[5]) means that it has grown +23.104% from 09.07.2013 and Xetra Index has grown +19.873% from the same date. Basically we could choose any specific time in the past to be our starting point (zero point), but more convenient is to choose beginning/ending of the fiscal year or beginning/ending Q1/Q2/Q3/Q4. Of course fiscal years differ from country to country[6].

In order to get further information we should take a look to Figure 2.

Figure following on the next page

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[5] http://en.wikipedia.org/wiki/Ticker_symbol (09.07.2014)
[6] http://en.wikipedia.org/wiki/Fiscal_year#United_States (09.07.2014)

Figure 2: Change of BMW Share price comparing Xetra Index on December 30, 2013

Source: http://www.bloomberg.com/quote/BMW:GR (09.07.2014)

The figure BMW:GR means that it has grown +34.863% from 09.07.2013 and Xetra Index has grown +24.269% from the same date up to 01.07.2014.

As stated in the beginning of this research we are about to make our own calculation comparing the change of BMW share price with Xetra Index. A share price is the price of a single share of a number of saleable stocks of a company, derivative or other financial asset. In economics and financial theory, analysts use random walk techniques to model behaviour of asset prices, in particular share prices on stock markets, currency exchange rates and commodity prices. Xetra (Exchange Electronic Trading) is a worldwide electronic trading platform for securities, based in Frankfurt, Germany. It was created for the Frankfurt Stock Exchange and launched in November, 1997[7].

Following is calculation.

Table 1: Analyzing change of BMW share price in comparison with Xetra Index

	1	2	3	4
	09.07.2013	30.12.2013	01.07.2014	Change 30.12-01.07
BMW:GR	0	+23.104	+34.863	+11.759
Xetra Index	0	+19.873	+24.269	+4.396

Source: Calculation of Author (09.07.2014)

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[7] http://deutsche-boerse.com/dbg/dispatch/en/kir/dbg_nav/about_us/20_FWB_Frankfurt_Stock_Exchange (09.07.2014)

If we analyze data from Table 1 we can see that BMW:GR rose for 11.759% from 30.12.2013. up to 01.07.2014. In the same period of time Xetra Index rose "only" 4.396%. Thus, BMW:GR has 7.363% better performance than Xetra Index in the first half of fiscal year 2014. For more reliable conclusions we should analyze what has happened with share prices of Volkswagen AG and Daimler AG because they are in the same branch of business and these two companies are direct competitors to BMW AG. The price to earnings ratio (PE) helps to find undervalued stocks. It is commonly accepted that if the PE of a stock is lower than the PE of its reference market, the stock has upside price potential. In order to present the best selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have: a minimum rating of two stars, a neutral to positive valuation, a risk zone weak to average. When the PE ratios are identical, the analysts' 7 week earnings per share revision (7 wk EPS rev) acts as the deciding classification element. The correlation coefficient permits to identify the stocks of which the dependence on the market is the weakest. If this value is very low, less than 0.5, it signifies that less than 50% of the movements of the stock are explained by the movement of the market. On the contrary, a number close to 1 indicates that the value is very close to the evolutions of the market. In order to present the best selection, only the societies with a market capitalization higher than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have a minimum rating of two stars; a neutral to positive valuation; a weak to average risk zone; and a minimum correlation of 0.66. In the case of a tie in the ranking, the stock's "behavior in declining markets" (Bear Market Factor) acts as the deciding classification element. The risk evaluation is based on essentially two criteria: the stock's "behavior in declining markets" (Bear Market Factor), and the stock's "sensitivity to bad news" (Bad News Factor). By positioning a stock according to the world averages, three risk levels can be attributed (weak, average, high). Combining these elements makes it possible to create a final ranking of the best defensive stocks in the market. To present the best selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have a minimum rating of two stars; a neutral to positive valuation; a weak to average risk zone. In case of a tie, the stock's "behavior in declining markets" will act as the deciding classification element.

Figure following on the next page

Figure 3: The 10 top stocks classified by market capitalization on January 01, 2014

Symbol Market	Name Sector	Price Ccy	Mkt Cap in $bn	G/PE Ratio	LT P/E	LT Growth	4wk Rel Perf	Div	Correlation	Beta 1 year in basis pts	Stars	Risk Zone	Global Evaluation
7203 JP	TOYOTA MOTOR CORP. Automobiles	6,270.00 JPY	206.57	1.84	8.9	13.6%	-2.6%	2.8%	0.86	110	★★★		
VOW3 DE	VOLKSWAGEN AG Automobiles	200.35 EUR	124.23	1.72	7.7	11.3%	-0.8%	2.0%	0.57	114	★★★		
DAI DE	DAIMLER AG Automobiles	62.50 EUR	90.96	1.53	9.3	10.5%	1.2%	3.6%	0.64	133	★★★★		
7267 JP	HONDA MOTOR CO.LTD. Automobiles	4,230.00 JPY	73.22	1.61	9.6	13.6%	-3.7%	2.0%	0.88	100	★★		
BMW DE	BMW AG Automobiles	83.60 EUR	73.05	1.00	9.7	6.6%	-2.8%	3.2%	0.65	119	★★★		
F US	FORD MOTOR CO. Automobiles	15.38 USD	61.76	1.69	8.5	12.0%	-9.7%	2.3%	0.55	125	★		
GM US	GENERAL MOTORS CO. Automobiles	40.20 USD	55.84	2.42	7.2	17.5%	-1.8%	0.0%	0.59	142	★★★		
A005380 KR	HYUNDAI MOTOR CO.LTD. Automobiles	229,000.00 KRW	54.86	1.53	5.9	8.1%	2.1%	0.8%	0.63	129	★★★		
7201 JP	NISSAN MOTOR CO.LTD. Automobiles	896.00 JPY	38.70	1.94	8.3	13.1%	-3.5%	3.0%	0.69	96	★		
PAH3 DE	PORSCHE AML.HLDG.SE Automobiles	76.48 EUR	31.87	1.93	5.8	11.0%	1.1%	0.1%	0.60	128	★★★		

Source: http://www.thescreener.com/pdf/currentinvestmenttopics/2014/2014-01-08_Automobiles.pdf (10.07.2014)

As we can see from Figure 3. the price to earnings ratio (PE) of BMW AG among the 10 top stocks classified by market capitalization is the highest with 9.7%, and the dividend rate with 3.2% is the second highest after Daimler AG with 3.6%.

3. MORE COMPREHENSIVE ANALYSIS

Profit

Profitability is the most important thing could come to anyone mind when the question about financial performance arises. We should concentrate in the last 10 years in the beginning of our financial analysis in order to gain broader view of the profitability of the BMW.

Figure following on the next page

363

Figure 4: Profit before taxation in period 2004 – 2013 and Q2-2014 respectively
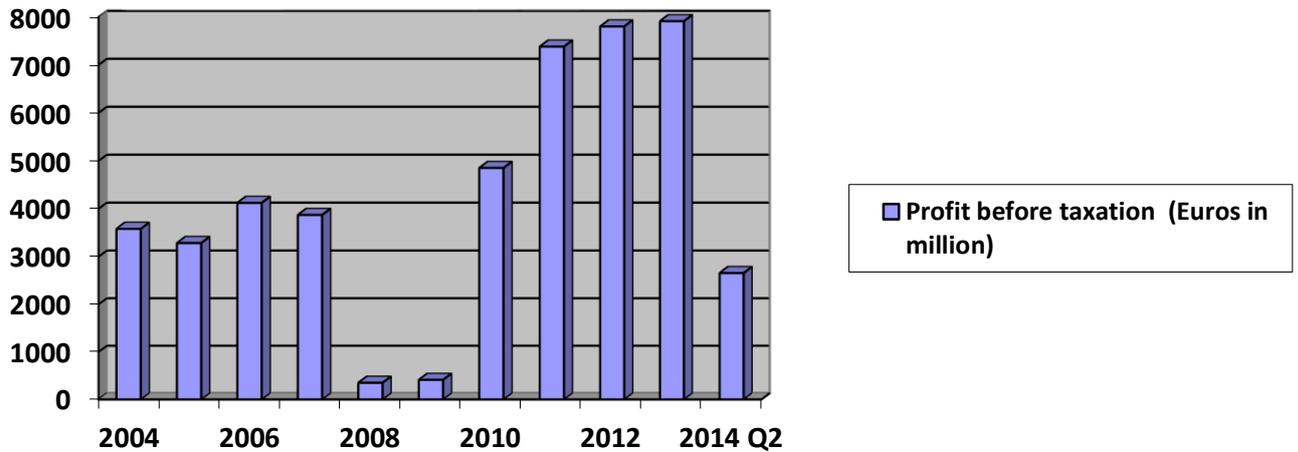
Source: Author calculation from data provided in
http://www.bmwgroup.com/e/0_0_www_bmwgroup_com/home/home.html (10.08.2014)

The figure shows that throughout the last 10 years, as well as in the first half of 2014. the BMW Group has been making profit. Though there is little inconsistency in 2008. and 2009 due to economic crisis with profits before taxation amounted 351 millions of Euro and 413 millions of Euro respectively. For fiscal period 2004. – 2007. profits before taxation amounted 3583 millions of Euro, 3287 million Euros, 4124 millions of Euro, 3873 millions of Euro. For fiscal period 2010. – 2014. profits before taxation amounted 4853 millions of Euro, 7383 million Euros, 7803 millions of Euro, 7913 millions of Euro respectively and 2660 millions of Euro in the first half of 2014.

Sales revenue

In order to have more comprehensive analysis on the financial performance of the BMW Group another tool can be trends analysis of revenue.

Figure 5: Sales revenue in period 2004 – 2013 and Q2-2014 respectively
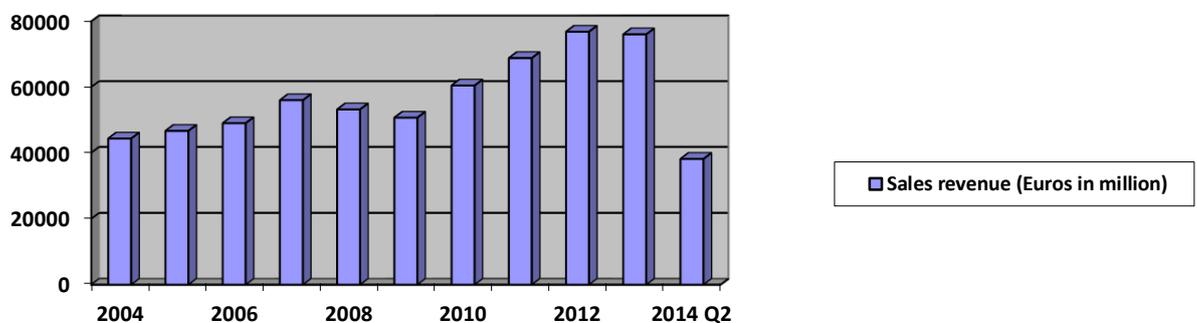
**Source:** Author calculation from data provided in
http://www.bmwgroup.com/e/0_0_www_bmwgroup_com/home/home.html (10.08.2014)

The figure shows that throughout the last 10 years, as well as in the first half of 2014. the BMW Group has increased sales revenue. Though there is significant little inconsistency in 2008. and 2009 due to economic crisis with sales revenue amounted 53197 millions of Euro and 50681 millions of Euro respectively. For fiscal period 2004. – 2007. sales revenue amounted 44335 millions of Euro, 46656 million Euros, 48999 millions of Euro, 56018 millions of Euro. For fiscal period 2010. – 2014. sales revenue amounted 60477 millions of Euro, 68821 million Euros, 76848 millions of Euro, 76058 millions of Euro respectively and 38140 millions of Euro in the first half of 2014.

Personnel

Probably most interesting analysis on the financial performance of the BMW Group is taking a look what is happening with personnel.

Figure 6: Personnel in period 2004 – 2013 and Q2-2014 respectively
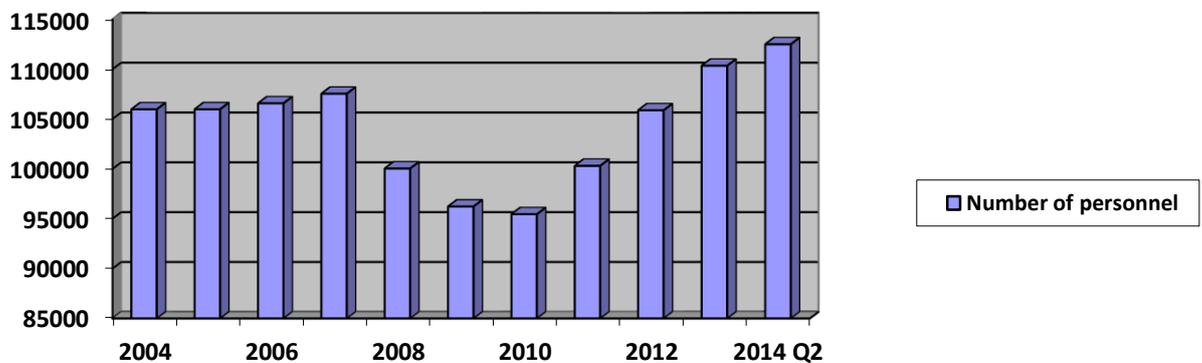

Source: Author calculation from data provided in
http://www.bmwgroup.com/e/0_0_www_bmwgroup_com/home/home.html (10.08.2014)

The figure shows that throughout the last 10 years, as well as in the first half of 2014. the BMW Group has increased number of personnel. Though there is big inconsistency in 2008. and 2009 due to economic crisis with personnel amounted 100041 and 96230 respectively. For fiscal period 2004. – 2007. personnel amounted 105972, 105798, 106575, 107539 respectively. For fiscal period 2010. – 2014. personnel amounted 95453, 100306, 105876, 110351 respectively and 112500 in the first half of 2014.

4. CONCLUSION

The financial year 2014 got off to a strong start in the BMW Group in the first quarter and is expected to continue. Demand for our fresh and attractive fleet of vehicles remains high worldwide. BMW Group profit before tax is expected to rise significantly. Despite a continuing volatile environment, and thus reflect the significantly higher level of deliveries to customers and revenues generated in the Automotive segment. The BMW Group aim to achieve profitable growth through a further solid increase in the size of the workforce across the Group. The Automotive segment's EBIT margin is set to remain within the target corridor of between 8 and 10 %. In view of the substantial volume of capital expenditure planned, the BMW Group

expect RoCE for the Automotive segment to be significantly down and RoE for the Financial Services segment to be slightly lower than in the preceding financial year. Both performance indicators will be nevertheless higher than their long-term targets of 26 % and 18 % respectively. Depending on the political and economic situation and the outcome of the risks and opportunities described below, actual business performance could, however, differ from our current forecasts. As a globally operating enterprise, the BMW Group is confronted with a broad range of risks, but also numerous opportunities. Making full use of these opportunities as they present themselves is the cornerstone of the BMW Group's entrepreneurial success. Risks are also taken on consciously in order to achieve growth, profitability, efficiency and sustainable levels of future business.

Figure 7: Development of BMW Stock compared to stock exchange indices
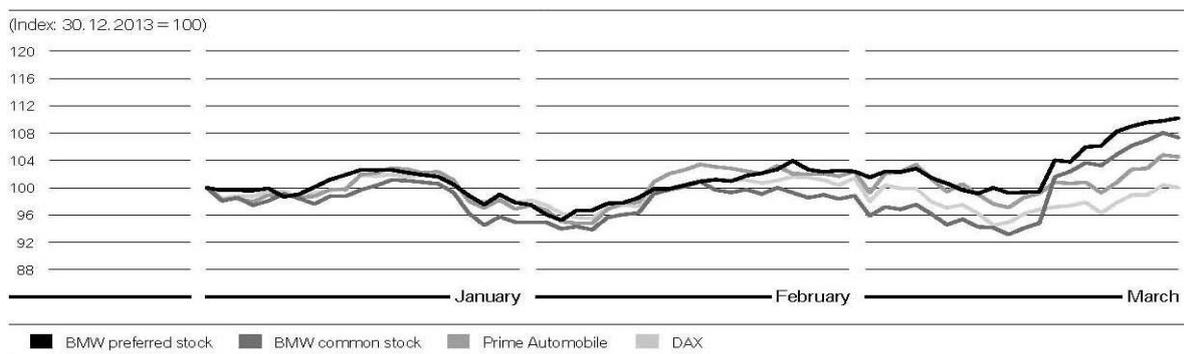
Source:

http://www.bmwgroup.com/bmwgroup_prod/e/0_0_www_bmwgroup_com/investor_relation s/finanzberichte/zwischenberichte/2014/0314/_pdf/Q1_2014_sw.pdf (10.08.2014)

Markets were also driven by positive fundamentals coming out of Europe and improved employment figures in the USA. The retaining of expansionary monetary policies by the ECB and the US Reserve Bank were also a cause for optimism. Good and bad news alike ensured continued market volatility. The German stock index, the DAX, finished the first quarter at 9,555.91 points, slightly up on the beginning of the year. Prior to that, the index had risen to an all-time high of 9,742.96 points on 17 January 2014. By contrast, the Prime Automobile Index continued to move upwards and finished the first quarter at 1,457.96 points, resulting in a gain for the sector index of 4.6 %, compared to its closing level at 30 December 2013. The index marked a new all-time high of 1,461.57 points on 28 March 2014. At the beginning of the year, prices of automobile stocks were affected by the general uncertainty prevailing on capital markets. An upward trend set in over the course of the quarter, however, as signs emerged that Europe's car markets were stabilising. Both categories of BMW stock recorded new highs during the first quarter and easily outperformed the DAX. BMW common stock stood at a new all-time high of € 91.62 at the end of the quarter, 7.5 % up on its closing price in 2013. BMW preferred stock was priced at a new all-time high of € 68.56 at the end of the reporting period, an increase of 10.4 % over its closing price in 2013.

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Enterprise in Turbulent Environment

THE PRINCIPLE OF THE GUARANTEED RESULT IN THE PROBLEM OF FACTORING RISK MANAGEMENT

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ABSTRACT
This article discusses the results of the development of factoring risk management algorithm based on the principle of guaranteed results
Keywords: *factoring, management, a principle of the guaranteed result, risk, vulnerability.*

1. INTRODUCTION
One of the financial instruments that provide such support small business and entrepreneurship is factoring - the financing of working capital provider of products and services under the assigned receivables.

However, this financial instrument is poorly distributed in Russia, although there is a positive dynamics of development of the market of factoring services testifies to the ever-growing interest in him on the part of the business environment. This is due to the possibility of accumulation within the factoring of several important functions for the provider, including not only the financing of economic activity, but also credit insurance, administrative management of receivables (Klapper Leora. May 2005.-39c.).

Factoring allows businesses to accurately plan revenues, effectively manage receivables, as well as provide buyers longer term commercial lending, thereby increasing their competitiveness. One of the constraints on the development of factoring in Russia is the presence of high risk for financial agents and inadequacy and the validity of the methods and models of factoring risk management systems.

The emergence and awareness of risk management of factoring necessitated identify and justify the selection of the risk management strategy of factoring companies.

2. DEVELOPMENT OF ALGORITHM FOR FACTORING RISK MANAGEMENT
Analysis of existing approaches to the problem of factoring risk management indicates that this question is open, as this subject area not sufficiently systematized. Existing models on the risk management of factoring allows to get evaluation, reliability and adequacy of which may not always be confirmed. To justify the formal setting of task management proposes a conceptual model for risk management of factoring, presented at fig. 1. This model reflects the most common form of interaction of aggregate subjective and objective internal and external elements and their interrelationship and impact on financial resources (Semin V. Sochi, 2006 - P. 256-259.)
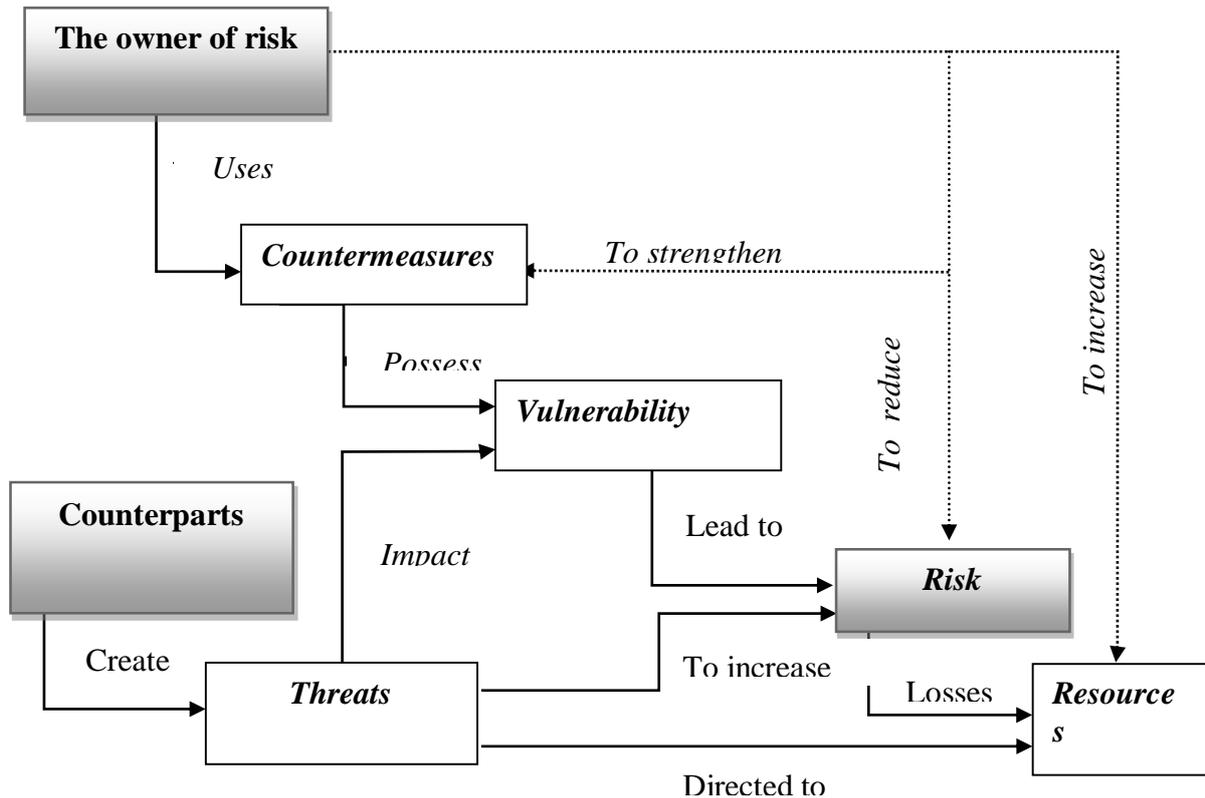
Figure. 1 Conceptual model of risk management of factoring

Consider the basic elements and concepts conceptual model:

- Risk owner - factoring company which realize monetary objectives and maintain its own resources.
- Counterparts - subjects, the infringers pursuing opposite objectives.
- Threats - a combination of factors and conditions that occur during interaction with other internal and external systems and elements, potentially have a negative impact on the result of factoring.
- Vulnerability - inherent weaknesses object study, affect the probability of the threat.
- Risk - is potentially possible state, denoting the possible damage to the Organization as a result of the realization of the threat, which ultimately reflects the probable direct or indirect financial loss.

In terms of operations research the given model can be treated as the description of elementary operation of a choice a side (the owner of risk), which is spending operation, the strategy maximizing financial result. However efficiency of such operation depends not only on actions factoring agent who is spending operation, but also from realization of the uncertain events caused by behaviour of other participants of factoring.

Thus, the owner of the risk should determine a strategy for an organization that maximizes the efficiency criterion chosen operations at least favorable impact of uncertainties and will ensure that a guaranteed result.

3. PROBABILITY-THEORETIC STATEMENT OF A PROBLEM FACTORING RISK- MANAGEMENT

Let operation is identified with a choice of strategy x, belonging set X and there is a set criterion of efficiency of execution of the operation. It is required to choose such strategy that the

criterion of efficiency had the maximal value. However at investigated conceptual model there are uncertain factors which pursue the objectives and can influence value of criterion of efficiency. Therefore, the criterion of efficiency will have the form K (X, Y), where X, is still permissible side of the Operation Strategy; Y - uncertainties. Since Y realizes the threat, then by definition a threat, there is no knowledge about the probabilistic structure defined on the set Y. In this case, assume that any value uncertain factors can actually be realized and the choice of strategy take into account the least favorable value of uncertain factors.

The strategy chosen so that at the least favorable value uncertainties objective function value is maximized.

This approach leads to the selection of strategy in accordance with the criterion.

$$\min_x \max_y K(X,Y) \tag{1}$$

In this case we say that the strategy chosen in accordance with the guaranteed result. The decision of an investigated problem in minimax statement allows to develop the generalized algorithm of management of factoring risk.

4. SYNTHESIS OF THE GENERALIZED ALGORITHM OF RISK MANAGEMENT OF FACTORING

For the task it is necessary to develop the structure of the risk management system, which would reflect the linkages between its elements, threats, risks and vulnerabilities.

In accordance with the conceptual model define the main elements of the structure in the following sets:

1. $G=\{G_i\}$, $i = (1,\ldots, I)$ - set of threats.

2. $R = \{\langle E_j, Q_j \rangle\}$, $j = (1,\ldots, J)$ - set of risks where E_j - event of risk, Q_j -size of damage.

3. $U=\{U_d\}$, $d = (1,\ldots,D)$ - set of vulnerabilities.

4. $S=\{S_k\}$, $k = (1,\ldots,K)$ - set of sources of threats.

5. $O=\{O_b\}$ $b = (1,\ldots,B)$ - set of objects of influence.

6. $Z = \{\langle F_n, C_n \rangle\}$, $n = (1,\ldots, N)$- set of ways of counteraction, where F_n -realizable function, C_n cost of realization.

By definition the problem of synthesis of structure comes down to setting many relationships on many elements of the system. Denote the set of possible principles of construction of factoring and its elements via P. Each set of tenets of corresponds to a set of functions $F(\pi)$, from which to choose such a subset $Z = \{\langle F_n, C_n \rangle\}$, necessary and sufficient to implement countermeasures to counter the threats of factoring. By definition a lot $O=\{O_b\}$ is a subset of the elements , each of which can be associated a set of threats $G=\{G_i\}$, as well as many vulnerabilities $U=\{U_d\}$.

Thus, generate model of threat of factoring, believing that the subordination of a set is specified in the form of a graph $G_э=\{j,\Gamma_j\}$, where Γ_j many elements, subordinate element of *j*. Then, taking into account this notation we can formulate general formal statement of the problem of synthesis of optimal structure of the risk management process, which will be to identify the operator A that implements the mapping operation $F(\pi) \to O$. Optimal mapping should provide some extremum of the objective function when the predefined limits.

371

Consequently, the total production of the desired structure synthesis tasks will be to identify (Semin V. Sochi. 2007. - P.104.):

$$\Phi\left\{\left[Z=\left\{\left\langle F_n,C_n\right\rangle\right\}\in F(\pi)\right]\hat{A}\left[U=\left\{U_d\right\}\in O=\left\{O_b\right\}\right]\right\}\to extr,$$

(2)

$$\pi\in P,$$

(3)

$$Z=\left\langle F_n,C_n\right\rangle\in F(\pi)$$

(4)

$$\overline{U=\left\{U_d\right\}}\in O$$

(5)

Thus, the solution to the problem of synthesis of structure, in terms of risk reduction objectives, makes it necessary to optimize the use of countermeasures to minimize vulnerabilities factoring. The significance of the specific processes of representation factoring services determines the need for the adoption of certain measures to reduce risks. These measures should be implemented by imparting certain properties to these processes and their inclusion in the relevant countermeasures.

Thus, we have the optimization problem of the following form (Semin V., Semin E.V. Sochi. 2009-S.73-74.):

$$\min_Z\max_G P_\Sigma$$

(6)

P_Σ - consolidated risk appraised the set $O=\left\{O_b\right\}$.

This should take into account the requirements of the potential risk of occurrence of certain events, the maximum damage and pragmatically acceptable cost methods of counteraction. The damage caused by the onset of risk events can be expressed in monetary terms, in the time-consuming process for the elimination of their consequences, some of the standard units, characterizing the degree of adverse effects. The cost of counter methods can be expressed in monetary terms, in the complexity of the maintenance processes for effective risk management algorithm factoring. Therefore, in the expression (6) is defined as a quality control test.

We introduce the following notation:

- $P_\Sigma = \{\langle P_\Sigma^{(E)}, P_\Sigma^{(Q)}\rangle\}$ - consolidated risk, taking into account the risks arising in all activities of a factoring company;
- $P_\Sigma^{(E)}$ - the degree of marketability risk event;
- $P_\Sigma^{(Q)}$ - consolidated loss.

From the point of view of the problem of minimizing the effects of risk events need to implement optimization measures and countermeasures factoring risks.

Lack of action could result in a high level of residual risk, and unnecessary steps, in turn, are associated with additional costs of financial, material and human resources.

Implementation of a set of risk-reduction function involves the decomposition of these functions into groups, forming an interconnected subsystem as part of factoring.

Let the degree of feasibility of a risk event in the system is defined as the maximum degree of feasibility of a risk event among all possible risk events:

$$P_\Sigma^{(E)} = \max_j P_j^{(E)},$$

(7)

where: $P_\Sigma^{(E)}$ - a degree of realization of j-event of risk.

Consolidated damage to the factoring company is defined as the total sum of the j-th damages associated risks in all indices j:

$$P_\Sigma^{(Q)} = \sum_{j=1}^{J} P_j^{(Q)}$$

(8)

where $P_j^{(Q)}$ - potential j-damage risk.

The degree of marketability j-risk event is a functional of the form:

$$P_j^{(E)} = P^{(E)}(T, R, U, S, O, Z)$$

(9)

Potential of damage of *j*- risk, as well as the feasibility and the degree of *j*-risk event is a functional form:

$$P_j^{(Q)} = P^{(Q)}(T, R, U, S, O, Z)$$

(10)

If the specified parameter values *G, R, U, S, O, Z,* as well as mappings, fully describe the multitude of functionals (9) and (10), the task of optimization (6) can be seen as a game with payment matrix $P_\Sigma^{I \times N}$, where the elements are determined according to the following rule $p_{i,n} = < P_\Sigma^{(E)}, P_\Sigma^{(Q)} >_{i,n}$.

Since the functional domain (9) and (10) coincide, then the game can be decomposed into two antagonistic games with payment matrices - $P_Q^{I \times N}, P_E^{I \times N}$ respectively, where

$$p_{i,n}^{q} = < P_\Sigma^{(Q)} >_{i,n}, \ p_{i,n}^{E} = < P_\Sigma^{(E)} >_{i,n} \text{ the respective matrix elements.}$$

Consequently, some consolidated risk factoring is a pair $\langle P_\Sigma^{(E)}, P_\Sigma^{(Q)} \rangle$ where the relevant elements of the pair are determined by formulas (7) and (8). It is known that the general solution of the problem (6) is reduced to a matrix game. At the same time, any matrix game can be reduced to a pair of dual linear programming problems. In this case, we considered antagonistic games with a win, so the solution is sufficient to consider one of the dual problems.

For the attention of the game to the problem of linear programming is introduced Boolean vector $X = (x_1, \dots, x_N)$, $x_n \in \{0,1\}$ which describes the optimal solution, in terms of the criteria (6).

Thus, the mathematical formulation of the optimization of the consolidated risk problem with constraints on the maximum probability of the resources and the possible damage in the form of factoring (Semin V., Semina E. Prague. 2014.- p. 420-422):

$$\min_{1 \le n \le N} \max_{1 \le i \le I} P_\Sigma$$

(11)

$$p_j^E \le P_{j_{max}}^E,$$

(12)

$$p_\Sigma^{(Q)} \le P_{\Sigma_{max}}^Q,$$

(13)

$$\sum_{n=1}^{N} X_n C_n \le C_{max}$$

(14)

where: $P_{j_{max}}^E$ - the maximum permissible degree of realization of the risk; $P_{\Sigma_{max}}^Q$ maximum damage in the implementation of risk; C_{max} - the maximum permissible value of the means to counter the risks.

The solution to this problem are those X for which the following restrictions (12) - (14). While x_n takes a value of 1, if the counter is applied to a set of threats counteraction function F_n with price C_n, i.e. given pair $\langle F_n, C_n \rangle$ and 0 - otherwise.

373

Thus, the results obtained are the solution to the problem of constructing a generalized algorithm for factoring risk management based on the principle of guaranteed result.

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THE ROLE OF HUMAN AND ENTERPRENEURSHIP CAPITAL ON ECONOMIC GROWTH   IN CROATIA

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ABSTRACT
The main objective of this paper is to examine the role of entrepreneurship and human capital on economic growth in Croatia. Following the neoclassical model of growth introduced by Robert Solow, Romer and others have expanded the model to include measures of human capital. More recently Audretsch and Keilbach introduced a new factor to the production function, entrepreneurship capital. In this paper a production function model including measures of human and entrepreneurship capital is estimated for Croatia. The results are then used to suggest a new direction for policy that focuses on instruments to enhance main factors of economic growth.
Keywords: *Croatia, economic growth, entrepreneurship capital, human capital, production function*

1. INTRODUCTION

> *"The biggest problem is not to let people accept new ideas,*
> *but to let them forget the old ones."*
> *John Maynard Keynes*

Economic growth has been inspiring economic theory and research since the beginning of modern economics. Factors influencing growth of productivity, as main determinant of living standard, have puzzled economists. To understand growth is one of the basic questions of the field of economics science. Driving forces behind economic growth have not yet been demystified. To see why this area of economics is still surrounded by a veil of mystery we must discuss the main pillars of economic growth theory. The building blocks of modern economic growth theory lay in the work of classical economists, such as Adam Smith (1776), David Ricardo (1817), and Thomas Malthus (1798), and, much later, Frank Ramsey (1928) and Joseph Schumpeter (1934). They introduced ideas of the role of diminishing returns to the accumulation of physical and human capital, technological progress in the forms of increased specialization of labor and discoveries of new goods and methods of production, and the role of monopoly power as an incentive for technological advance. (Barro and Sala – i – Martin, 1995).

The empirical study of economic growth began with the neoclassical growth model introduced by Solow (1956). In his seminal paper, Solow found that only 12% of economic growth could be attributed to the factor accumulation (labour force and capital), leaving 88% unexplained. This unexplained part became known as the Solow residual or technological change. Technological change was an exogenous variable, thus not explained by the model.

As a result of this incapability of neoclassical growth theory to resolve the growth puzzle, new growth theories emerged in the nineteen eighties. New growth theories, pioneered by Paul Romer (1986) and Robert Lucas (1988) tried to explain where technological change comes from. Technological change now became endogenous variable in the model. The new theory,

called the endogenous growth theory, emphasized the role of knowledge in explaining technological change. We will now briefly explain the main contributions of these new growth theories as they form the theoretical base for the empirical model in this paper. The main difference between the Solow model and the endogenous model is in returns to scale. The main assumption of neoclassical model is constant returns to all inputs, implying diminishing returns to produced inputs. The new models assume constant returns to produced inputs, thus, increasing returns to all inputs. Increasing returns are what makes endogenous growth possible. What make increasing returns on inputs possible are spillovers from knowledge and human capital. These models also incorporated R&D and imperfect competition in the growth framework. Technological progress is explained through investments in R&D, and in order to make investments in R&D interesting there must be monopoly power. The endogenous growth models imply a number of policies that a government can implant to influence long run growth rate of economy. These policies include R&D subsidies, tax incentives to promote R&D, protection of intellectual and property rights and other aspects of economy.

This paper is organised as follows. The paper starts with introduction in which the basic idea of the paper is elaborated. Second chapter provides review of literature in the research area of the paper. In the third chapter the model for the empirical research is specified and the data for the model are described. Empirical results are interpreted and discussed in the fourth chapter. In the final chapter the main conclusions of the paper are presented.

2. LITERATURE REVIEW

There is vast amount of research in the field of growth economics. Majority of this research followed the introduction of endogenous growth theory in the nineteen eighties. In this chapter we will discuss only the literature that addresses the role of human and entrepreneurship capital in economic growth. The concept of human capital is part of modern economic theory since Adam Smith but it was Schultz (1961), Becker (1960) and Mincer (1970, 1974) that revived the concept initiating new research in that field. According to Becker (1960) human capital is the form of capital that cannot be separated from people, such as their knowledge, skills, health, or values in the way they can be separated from their financial and physical assets. Economists regard expenditures on education, training, medical care, and so on as investments in human capital. Mincer (1974) created earnings function explaining wage differentials. Following the early work of Barro and others (Barro, 1991, Barro and Sala-I-Martin, 1995), a large number of growth regressions using human capital variables as explanatory variables have been estimated. Benhabib and Spiegel (1994) use a new set of data on human capital stock to test the augmented neoclassical model, and then modify the specification to an endogenous growth specification.

Krueger and Lindahl (1998) criticise the findings of both Benhabib and Spiegel (1994) and Barro (1997). In particular, they focus on the results which identify only the initial level or stock of educational attainment as the determinant of GDP growth and the failure to find growth in such attainment (the flow of educational investment) as a key determinant. Jenkins (1995) provides us with a time series approach for the UK. This paper uses annual data from 1971 to 1992. He uses three series measuring workforce qualifications as a proxy of the stock of human capital. The result confirms the finding that investment in human capital increases productivity. Using a similar approach Đukec and Tica (2008) found that human capital is not a significant factor of economic growth in Croatia. The biggest issue with such models is relatively small number of observations which means that such results cannot be regarded as robust. Most of the above mentioned empirical research confirms the significance of human capital in economic growth. The results vary with different measures of human capital showing that the quality of data is off great importance.

The idea of entrepreneurship as an engine of economic activity goes back to Joseph Schumperter (1942) and his theory of creative destruction. Audretsch and Keilbach (2004) argue that while it has become widely acknowledged that entrepreneurship is a vital force in the economies of developed countries, there is little consensus about what actually constitutes entrepreneurial activity. There is no generally accepted definition of entrepreneurship. The failure of a single definition of entrepreneurship to emerge undoubtedly reflects the fact that it is a multidimensional concept. Entrepreneurship capital therefore can contribute to output and growth in three different ways, through knowledge spillovers, increasing competition, and by boosting diversity. Audretsch and Keilbach (2004)

Endogenous growth theories established the relationship between knowledge and growth of output, suggesting that government could influence growth through activities promoting investment in R&D. However, the productivity slowdown during the nineteen nineties called the Solow paradox showed that the relationship beetwen R&D investments and growth is not so straightforward. During the slowdown the investments in R&D were growing but there was no effect on productivity. The empirical literature identifying mechanisms actually transmitting knowledge spillovers is sparse. According to Audretsch and Keilbach (2004) at least two major channels or mechanisms for knowledge spillovers have been identified in the literature. Both of these spillover mechanisms revolve around the issue of appropriability of new knowledge.

Van Stel, Car-ree, and Thurik (2005) investigated in a cross sectional analysis the effect from total entrepreneurial activity (TEA) on average GDP growth in the medium term (1999-2003) in 36 countries. They found an impact from entrepreneurial activity on average GDP growth. Koellinger and Thurik (2009) found that changes in the business ownership rate were leading the global business cycle. Using an OECD panel for 1972-2007 (COMPENDIA) over 22 countries, as well as a shorter panel based on GEM, they found that a positive impulse from global entrepreneurial activity was typically followed by a recovery of the world economy. This causal relationship seemed to disappear on a country-to-country basis for the majority of the countries. Another example of a country based study is that of Parker, Congregado, and Golpe (2012). They used quarterly time-series data for the UK 1978-2010. Their study also showed no straightforward relationship between entrepreneurship and economic change.

4. EMPRIRICAL RESULTS

In this paper we use two different models with two datasets to establish the effects of human and entrepreneurship capital on economic growth. The first model is the production function with human capital and the second model is entrepreneurship capital model. There are two separate models because of the availability of the data. The data used for the production function model are from Penn World Table for the period from 1990 to 2011. The measure of human capital is human capital index constructed by the authors of the table (Feenstra, Inklaar and Timmer, 2013) using average years of schooling and returns to education. The data for the second model are from Croatian Bureau of Statistics (www.dzs.hr) for GDP and Global Entrepreneurship Monitor (www.gem.hr) for entrepreneurship capital for the period from 2001 to 2013 because the data for entrepreneurship capital are available only from 2001. Entrepreneurship capital is measured by the TEA (Total Entrepreneurial Activity) index.

Thus, the first model used in this paper is based on the Cobb – Douglas production function with human capital:

$$Y = AK^{\alpha}L^{\beta}H^{\gamma} \tag{1}$$

Where Y is output, A is total factor productivity, K is capital, L is labour and H is human capital. The properties of the Cobb – Douglas production function are quite known. The α, β

and γ are elasticities of output with respect to labour, capital and human capital input. Based on the equation (1), an econometric model is derived:

$$Y = \beta_0 K^{\beta_1} L^{\beta_2} H^{\beta_3} \tag{2}$$

From the equation (2) it is clear that the model is not linear so we need to transform the model to a log – linear model:

$$\ln Y = \beta_0 + \beta_1 \ln K + \beta_2 \ln L + \beta_3 \ln H \tag{3}$$

For the second model, an econometric model is formulated:

$$\ln Y = \beta_0 + \beta_1 \ln EC \tag{4}$$

Where Y is output and EC is entrepreneurship capital. Next, we will discuss the results of regression analysis.

In the tables 1 and 2 we can see the descriptive statistics for the variables used in the models. Mean values and standard deviations for each variable are shown. Standard deviation is a measure of dispersion of the data (Gujarati, 2004). Analysing the values in the tables 1 and 2 we can conclude that the variation of the data is small. Also, the number of observations for each variable is shown.

Table 1: Descriptive statistics (output of the statistical programme SPSS)

	Mean	Std. Deviation	N
lnGDP	10,9226	,24234	22
lnL	,4239	,04973	22
lnK	12,1549	,29353	22
lnHC	,9664	,02879	22

Table 2: Descriptive statistics 1 (output of the statistical programme SPSS)

	Mean	Std. Deviation	N
lnGDP	10,6954	,06475	14
EC	6,4264	1,95234	14

In the tables 3 and 4 Pearson correlation coefficients between each pair of variables are shown. Analysing the correlation coefficients tells us about possible multicollinearity between predictors. We can see that there is multicollinearity between human and physical capital (the correlation coefficient between two variables is 0,9).

Table following on the next page

Table 3: Correlations (output of the statistical programme SPSS)

		lnGDP	lnL	lnK	lnHC
Pearson Correlation	lnGDP	1,000	,369	,900	,881
	lnL	,369	1,000	,227	,280
	lnK	,900	,227	1,000	,900
	lnHC	,881	,280	,900	1,000
Sig. (1-tailed)	lnGDP	.	,045	,000	,000
	lnL	,045	.	,155	,104
	lnK	,000	,155	.	,000
	lnHC	,000	,104	,000	.
N	lnGDP	22	22	22	22
	lnL	22	22	22	22
	lnK	22	22	22	22
	lnHC	22	22	22	22

Table 4: Correlations 1 (output of the statistical programme SPSS)

		lnGDP	EC
Pearson Correlation	lnGDP	1,000	,626
	EC	,626	1,000
Sig. (1-tailed)	lnGDP	.	,008
	EC	,008	.
N	lnGDP	14	14
	EC	14	14

Tables 5 and 6 show the model summary. Table 5 shows the determination coefficient $R^2 = 0.857$ which means that 85.7 per cent of GDP variations are explained by the model. Thus, 85.7 % of all GDP variations can be explained by the variations of the variables used in the model. Results of the regression analysis show that there is strong positive relationship between variables used in the model and GDP, which is also shown by the multiple correlation coefficient $R = 0.926$. Table 6 shows the determination coefficient $R^2 = 0.392$ which means that 32.9 per cent of GDP variations are explained by the model. Thus, 32.9 % of all GDP variations can be explained by the variations of entrepreneurship capital. Results of the regression analysis show that there is moderate positive relationship between entrepreneurship capital and GDP, which is also shown by the multiple correlation coefficient $R = 0.626$.

Table 5: Model Summary (output of the statistical programme SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,926[a]	,857	,834	,09886	,555

a. Predictors: (Constant), lnHC, lnL, lnK
b. Dependent Variable: lnGDP

Table 6: Model Summary 1 (output of the statistical programme SPSS)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,626[a]	,392	,341	,05256	,525

a. Predictors: (Constant), EC
b. Dependent Variable: lnGDP

Analysis of variance is shown in the tables 7 and 8. The tables contain the F ratio, which shows the significance of the predictors of the model. The value of the F ratio leads to the conclusion that at least one of the predictor is significant (with a significance level of $\alpha < 0.01$).

Table 7: ANOVA (output of the statistical programme SPSS)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,057	3	,352	36,066	,000[b]
	Residual	,176	18	,010		
	Total	1,233	21			

a. Dependent Variable: lnGDP
b. Predictors: (Constant), lnHC, lnL, lnK

Table 8: ANOVA 1 (output of the statistical programme SPSS)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,021	1	,021	7,729	,017[b]
	Residual	,033	12	,003		
	Total	,054	13			

a. Dependent Variable: lnGDP
b. Predictors: (Constant), EC

Tables 9 and 10 show the parameters of the model. With help of B coefficient, the equations of the models can be specified:

$$lnY = 2,195 + 0,485 \ lnK + 0,727 \ lnL + 2,614 \ lnH$$
(5)

$$lnY = 10,562 + 0,21 \ lnEC$$
(6)

The equation shows the impact of each predictor on GDP. For example, if the value of capital is increased by 1 unit, GDP will increase by 0.485 units. The table contains the t-ratios. The t-ratios show the significance of each predictor in the model. The results show that capital is significant variable in the first model. The variables labour and human capital are not significant in the model. For the second model t-ratio suggests that entrepreneurship capital is significant variable.

Beta coefficients can be used for analysis of significance of each predictor in the model. Beta coefficients show by how many standard deviations would GDP change if one of the predictors changes by one standard deviation. Because all beta coefficients are measured in standard deviations the impact of each predictor on GDP can be compared. If, for example, capital increases by one standard deviation, GDP will increase by 0.587 standard deviations. In addition, it shows that the predictor capital is more significant than the predictor labour.

Table following on the next page

Table 9: Model parameters (output of the statistical programme SPSS)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	2,195	,912		2,407	,027	,279	4,111
lnL	,727	,453	,149	1,606	,126	-,224	1,678
lnK	,485	,169	,587	2,875	,010	,131	,839
lnHC	2,614	1,744	,311	1,499	,151	-1,050	6,279

Table 10: Model parameters 1 (output of the statistical programme SPSS)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
1 (Constant)	10,562	,050		211,254	,000	10,453	10,671
EC	,021	,007	,626	2,780	,017	,004	,037

On the next figures partial regression scatterplots for the independent variables are shown. Scatterplots show the relationship between variables GDP and variables labour, capital, human capital and entrepreneurship capital. We can see strong positive relationship between variables GDP and capital (0,9), GDP and human capital (0,881) and GDP and entrepreneurship capital (0,626). The relationship between GDP and labour is positive and moderate (0,369).
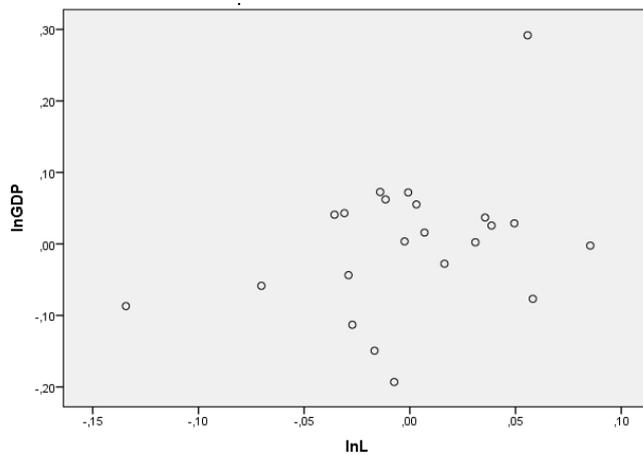
*Figure 1: Partial Regression Plot for variable L (output of the statistical programme SPSS)*

Figure following on the next page
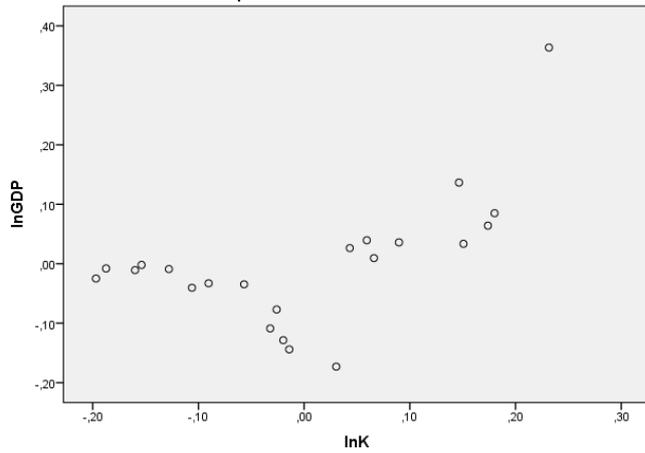
Figure 2: Partial Regression Plot for variable L (output of the statistical programme SPSS)
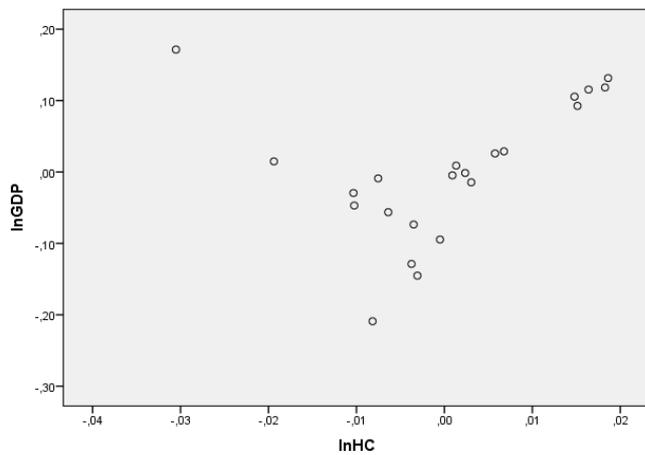

*Figure 3: Partial Regression Plot for variable L (output of the statistical programme SPSS)*
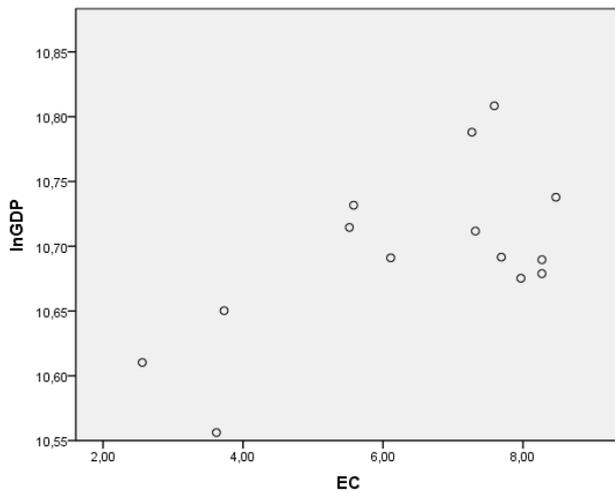
Figure 4: Partial Regression Plot for variable L (output of the statistical programme SPSS)

5. CONCLUSION

The main objective of this paper was to examine the effect of entrepreneurship and human capital on economic growth in Croatia. Using a regression analysis two models were analysed. The first model is augmented Cobb – Douglas function with human capital. The production function was estimated using Penn World Table data for the period from 1990 to 2011. The second model is a simple linear regression model with entrepreneurship capital. For entrepreneurship capital, data from Global Entrepreneurship Monitor on Total Entrepreneurial Activity were used. The results of regression analysis for the production function model show that 85.7 % of all GDP variations can be explained by the variations of the variables used in the model. For the entrepreneurship capital model, 32.9 % of all GDP variations can be explained by the variations of entrepreneurship capital. The results also suggest that entrepreneurship capital is a significant factor of economic growth in Croatia. In contrary to economic theory, but consistent with earlier research for Croatia, human capital seems to be insignificant factor of growth. The reasons why human capital is not a significant factor could be structural problems of labour market or lack of quality in education system, which are some of the well-known problems of Croatian economy. Since knowledge is a driving factor of modern economies, further research in the area of human capital in Croatia is necessary for establishing policy guidelines for long run economic growth.

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MAIN ASPECTS OF MEASUREMENT OF THE FAIR VALUE OF NONFINANCIAL ASSETS

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ABSTRACT

The Article considers the concept of the fair value, basics of measurement of nonfinancial assets, and the requirements to their disclosure in the financial reporting. A certain discrepancy existing in the requirements of the information on fair value and measurement thereof, has promoted to introduction of different approaches in the practice and, reduced a comparability of the information provided in the financial reporting, which contradicts to the reliability – one of the basic principle of drafting the financial reports. Introduction of new forms of financial instruments and financial institutions during the last decade, has preconditioned a determining role of the estimated economic benefit in terms of measurement of the elements of financial reporting. This role is realized in the IFRS-13 "Fair Value Measurement", by which a significant changes were made in the measurement of the elements of financial reporting. Definition of the "Fair Value" emphasizes that fair value is a measurement which is based upon the market data, where a priority is given to the information about the principal market, because it is characterized by the highest level and volume of the assets and the liabilities. In addition to the above, IFRS-13 "Fair Value Measurement" defines the meaning of the principal and convenient markets, reviews the recording of the operational and transport costs, describes in details the fair value measurement methods, introduces a concept of the fair value hierarchy, etc. It should be noted that as to the standard assets, which are the high-liquid assets, it is comparably easier to determine a fair value. But, in line with the standard assets, there exist also the unique (rare) assets, for which neither the active market nor a single deal may exist. The authors opinions are introduced here in connection to the above issues.

Keywords*: Estimated cash flows; Fair value; Principal market*

1. INTRODUCTION

Financial reporting takes an important position in the system of the economic information, the main users of which are investors and creditors. For the investors, which are providers of the risk capital, the information regarding the financial state of a company, is significant. Data provided in the financial reporting, must be true, transparent and sufficient, for enabling the investors to make decision on disposal of the resources hold by them. To this end, it seems to be especially actual to define an optimal model of evaluation of the some elements (assets, liabilities) of the financial statements, which would meet better the criteria of fair value of the assets and liabilities.

Most of the International Accounting Standards (IAS) contains the regulations for measurement of the fair value, however, in the explanatory notes on measurement of the fair value, the requirement of disclosure of the information, are not gathered and, in most cases, a

purpose of such measurements is not formulated clearly. These deficiencies are remedied in IAS 13, where the definition of the fair value, instructions for its application, methods of measurement, scheme, and other issues are specified

IFRS 13 establishes how an enterprise can measure the fair value and disclose the relevant information

According to IAS for the non-financial assets, the methods of measurement of the fair value of the main assets, investment property, and intangible property are used for measuring their initial value only, when they are to be exchanged on the non-monetary assets, and must be re-evaluated.

Fair value is not used factually for the commodity-and material inventory stock (IAS 2)

2. CONCEPT OF THE FAIR VALUE

According to IFRS-13, "Fair value is the price that would be received to sell an asset or paid to transfer a liability in a voluntary transaction between the market participants at the measurement date" [16]

IFRS-13 does not change fully the previous definition of the fair value, but clarifies it considerably

A purpose of the fair value is to determine a price at the date of measurement, that would be received to sell an asset or paid to transfer a liability in an voluntary transaction between the market participants in conditions of the active market, i.e. the fair value, by position of the market ;participant and/or the assets holder (or a liable individual) is the exit price of the asset as at the date of measurement thereof [IFRS-13, p. 638.].However, the Standard does not explain, which date is meant in the term "Measurement Date"

The meaning of exchange is maintained in the definition of the fair value, but the Open Hand" principle contained in the previous definition, is deleted.

Similarly to the previous definition of the fair value, the renewed definition of a voluntary transaction is implied (i.e. this is neither a factual sale nor a forced operation or a forced sale). However, in the previous definition:

a), it was established whether an enterprise was selling or purchasing the asset

b) it was not clear what "covering the obligation" means, because there were mentioned the informed participants of a desired deal, not the creditors; and

c) it was not clearly formulated, when the asset was measured – as at the date of exchange or as at any other date

In the definition provided by IFRS-13, it is explained more clearly that the fair value is the measurement based on the market data and, reflects the current market conditions, not the expectations of the enterprise regarding the future conditions of the market. The fair value is a price that would receive the sellers, not the price they wish to receive from selling the assets.

The asset's exit price envisages the expectations for money flow-in or flow-out from the position of the market participant who holds the asset as at the date of measurement thereof. The enterprise can receive the money flow in two ways: use or sale of the asset. Even if the enterprise intends to receive money by means of use and not by sale, the asset's exit price in any case envisages the expectation for the money flow, which is originated as a result of selling it to the market participant. A reason of the aforementioned is that the market participant buyer will pay for   that benefit only, which he plans to receive through use (or sale) of the asset. Thus, the asset's exit price is always a relevant determination of the fail value, whether or not the enterprise intends to use or sell it.

Measurement of the fair value is carried out for a specific asset. At the same time, when measuring the fair value of assets, the enterprise should foresee the following characteristics:

a) Conditions and location of the asset; and

b) The limitations (if any) related to sale or use of the assets

Measurement of the non-financial assets imply, that the transaction for selling the asset, is implemented on:

a), The principal market of such asset; or

b) The most advantageous market of such asset, if no principal market exists.

IFRS-13 determines the markets where the initial empiric data can be received regarding certain assets and liabilities, including:

- Stock markets, stock market closing prices, which are easy to obtain and which are the fair values of such assets. The London Stock Market is an example, for this case
- Dealers markets, to which the non-stock securities markets belong (the prices of which are published, openly)
- Intermediary markets where the sellers and buyers contact each other through the brokers
- "From Principal to Principal" markets, where the parties implement both the initial and sale transactions independently, without involvement of mediators

3. BASICS OF MEASUREMENT OF THE FAIR VALUE

Fair value is measurement based on the market data and reflecting the market conditions

In prevailing cases, the assets sale operations are implemented on the markets, which are most advantageous to the enterprises.

The principal market is the most advantageous one for both the assets and liabilities.

According to IFRS-13, the principal market is such a market of the assets and the liabilities, which:

- Is characterized with the greatest volume and level of activity for the asset or liability
- Is the most liquidated market for the given assets and liabilities;
- Provides the most significant information for measurement of the fair value [16]

The most advantageous market is a one, that maximizes the amount that would be received to sell the asset or minimizes the amount that would be paid to transfer the liability, after taking into account transaction costs and the transport costs

For instance: the as asset is sold on two different markets, at different prices. Both these markets are accessible for the company. The information on the market price, transaction costs, and transport costs, are given below, in the table:

Table 1: Information for determining the most advantageous market (conditional data)

Features of the asset	Market 1	Market 2
Price of the asset	33	30
Transport costs	(8)	(6)
Fair Value	25	24
Transaction costs	(3)	(1)
Total	22	23

Let's consider two cases:

1. If Market 1 is the principal market of the asset, (i.e. the market where the assets are introduced with the greatest volume), then he fair value of the given asset on this market is measured based on the market price. In our case, this will be 33-8=25,i.e. price of the asset minus transport costs

2. If neither Market 1 nor Market 2 are the principal market, we have to select the most advantageous market, with which price the fair value is measured. The most advantageous marker is determined by a net amount, after distracting from the market price the transport costs and the transaction costs Thus, it comes that Market 2 will be the most advantageous market, because 23>22, therefore, the fair value should be determined on this market. But, the fair value will not be 23, because it is always measured without the transport costs. The fair value of the asset on Market 2 will be 30-6=24.As to Market 1, the fair value of the asset will be 25 (32-8), thus, this market is neither the principal market nor the advantageous one, therefore its price will not be used for measurement of the fair value.

Definition of the most advantageous market or the asset envisages both the transaction costs and transport costs, however, when measuring the fair value, only the transport costs are taken into account and, not the transaction costs, which are the costs of sale deal and, are not the asset's characterizing phenomenon. They are the features of the transaction performed by an enterprise and may differ from case to case, taking into consideration the way by which a given enterprise implements operations.

When measuring the fair value, the price of the most advantageous market should be corrected by the expenses which are to be borne for transportation of the asset from its factual location to this market.

Taking into account the aforementioned, we can conclude that the price used for measuring the fair value, must not be reduced by the expenses borne by the enterprise for selling such an asset.

4. MEASUREMENT OF FAR VALUE OF NON-FINANCIAL ASSETS

When measuring the far value of non-financial asset, the skills of a market participant to receive the economic benefit from the maximal and the most effective use of the asset, should be envisaged.

The maximal and the most effective use of the non-financial asset implies such use of the asset, which:

1) is physically possible. It means that those physical features of the asset should be envisaged, upon which the market participants will be relied when determining the price of the asset (e.g. location or size of the asset);

2) is legally permitted, i.e. when determining the price of the asset the market participants should take into consideration any limitation involving the asset (e.g. the zones regulating norms established for a given asset);

3) Is financially implementable. Here the following aspects should be taken into account: whether a physical possibility and legally permitted use create such volume of income, which will be sufficient for investment payback the market participants require from implementation of the investment into the given asset.

The maximal and the most effective use of the non-financial asset establish a certain precondition for measurement of the fair value of the asset, namely: The maximal and the most effective use of the non-financial asset may ensure for the market participants receive of a maximal value by use thereof, but not separately, but in line with other assets.

If the maximal and the most effective use of the non-financial asset implies used of the given asset together with another ones, then the fair value of such asset will be the price which would be possible to receive as a result of its sale through the transaction implemented at the current moment. Here a certain assumption is that the asset in-question will be used together with other assets and, these other assets are accessible to the market participants.

For example, an enterprise purchases the assets and takes liabilities through integration of several enterprises. One of the groups of the assets consists of "a", "b", and "c" assets. Asset "c" is the software for business management developed by the purchased enterprise for its own use of the "a" and the "b" assets (i.e. the associated assets)

The enterprises measures the far value of each asset separately according to the accounting unit established for these assets and determines that the maximal and the most effective use of these assets is their current use, in which case each of such assets would give maximal price to the market participants with using them together with other groups of the assets.

There exists no evidence, that a current use of these assets is their maximal and the most effective use.

We should make difference between the exit price of the asset, that is the far value, and the entry price, which would be paid to buy the assert in a voluntary transaction between the market participants at the measurement date

When the asset is purchased as a result of the exchange transaction, the price of such transaction will be a price paid for purchasing the asset, i.e. the entry price of the asset is the price of transaction.

And vice versa, the fair value of the asset is the price at which it would be sold received by its sale. An enterprise not always sells the asset at a price it had paid when purchased it.

5. METHODS OF MEASUREMENT OF THE FAIR VALUE

The methods to be used for measurement of the fair value, should ensure a maximal use of the relevant initial empiric data and, such methods should be minimally relied upon the initial non-empiric information.

There exist three the most widely spread methods of measurement: Market approach, Expenditures approach, and Revenues approach.

In case of the market approach, those prices are used, which are received by the market transactions implemented on the identical or similar assets, liabilities, or the groups of assets and liabilities (like an enterprise).

The expenditures approach reflects the amount which would be sufficient for substituting the maintenance capacity of the asset at the given moment, i.e. this is current value of substitution of the asset.

In case of the revenues approach, the future amount of sums (e.g. the cash flows or the incomes and expenses) are transformed into one current (i./e. discounted) amount. When the enterprise applies the revenues method, measurement of the fair value reflects the expectations of the active market regarding the future sums.

Such methods are:

a) Methods of the discounted value;

b) Price-fixing Options Models, which cover the methods of the discounted value and reflect the value of the option at the given moment and the own value of such option; and

c) Method of multi-periodical excess incomes (one of the type of the method of the discounted cash flows) which is used for measuring the fair value of some intangible assets.

6. FAIR VALUE HIERARCHY

For the purposes of achieving at a higher compatibility and comparability in measurement of the fair value and disclosure of the relevant information, IFRS 13 identifies the fair value hierarchy, according to which the input data to be used for measuring the fair value, are divided into three levels. The hierarchy gives the highest priority to (unadjusted) quoted prices in active markets for identical assets or liabilities (1st Level Input Data) and the lowest priority to unobservable inputs (3rd Level Input Data)

The 1st Level Input Data are quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.AS a rule, a quoted market price in an active market provides the most reliable evidence of the fair value and is used without adjustment to measure the fair value.

Within the scopes of the 1st level, a special attention should be paid to identifying the following issues:

   a) Identification of the principal market of the assets or liabilities, or, if the principal market exists - to identify the most advantageous market;

   b) Whether an entity can participate in the asset- or liability-related transaction at the price established on the market at the date of a relevant transaction.

In the 2nd Level Input data there are given the all the data from Level 1, except for the quoted prices, which are empiric directly and indirectly.

Level 3 inputs are unobservable inputs for the asset or liability

7. CONCLUSION

* If the fair value is measured for a standard assets, which is traded on the market in high volumes and correspondingly, they are thre high-liquid assets,it is comparably easier to measure the fair value thereof on the basis of the information on the most advantageous market. It is named as the market-based measurement and, is deemed to the most reliable method. But, in line with the standard assets, there are also the unique (rare) assets, for which neither an active market nor a single deal may exist. How to measure a fair value of such assets? The Standard says nothing about the means of measurement of fair value of such assets

* IFRS 13 does not establish also a method for measurement for the assets received free-of-charge and the assets revealed as a result of the inventory stock records.

By our view, a fair value of such assets may be measured based on a reasonable discussion, namely:

   1) By a discounted value of the cash flows to be received in future though use of such assets; or

   2) Expenditures-based measurement.

However, measurement of the fair value by the discounted value of the cash flow, involves some uncertainties, because the discounted cash flows are the assessed values assets not the known amounts. In many cases, neither a size of the cash flow nor the terms of receiving thereof, are known. Even in cases where the cash flow is determined by agreement for instance the sums to be repaid for loans, their size remains undetermined if a threat of insolvency exists. The market-based measurement of the fair value requires from all market participants, including auditors and regulating bodies, more detailed analysis of principles and assumptions when drafting the financial reporting, that, in its part, requires perfection and qualification of the information to be provided in the financial reports. The financial reports prepared on the basis of measurement of fair value, will make such the information more transparent.

Measurement of the fair value his long p has been used for a long time zas one of the form of measurement, however, this method is still remained one of the most actual issue for discussions in the scientific circles

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ROLE OF TECHNOLOGICAL INFRASTRUCTURE IN ORGANIZATIONAL INNOVATION

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ABSTRACT
Organizational learning provides a humanistic and optimistic solution, and it lays emphasis on teamwork, communication, managerial vision and leadership within human systems. This is where technology factors in, as it makes the main difference between the industrial-age era and modern business environments. Technology comes in handy in allowing for successful testing of an innovation through simulation so as to determine the areas where there may be loopholes, and it facilitates testing of innovations to measure their performance. Given the immense capabilities that it incorporates, information technology seems to have an larger potential or capability for supporting organizational learning via retrieval, capture, storage and representation of structured data, models, images, texts and diagrams in electronic databases. Generally, technology can enhance organizational learning or hinder it depending on the manner in which it is incorporated or embedded in the organizational structure, mainly by increasing the ability of business entities to learn.
Keywords: Learning Capability, Organizational Innovation, Technology

1. INTRODUCTION

At the heart of innovation in any business entity in the contemporary human society is technology. Indeed, innovation is more often than not viewed within the spectrum of technology, especially as far as technical innovation is concerned. However, it should be noted that innovation is not exclusive to technical elements of a business entity, rather service firms can also innovate (Damanpour et al, 2009). Scholars have acknowledged that service firms have been responsible for an immense component of GDP across the globe, with the trend indicating that its role is increasing within the developing countries. There are varied roles that technology plays in the non-technical innovation (Walling, 2014). First, technology has been playing a key role as a major source of innovation, particularly given the fact that it is enabling and facilitating creativity in the service firms. This comes out clearly in the case of computers and the internet which allows individuals in the workplace to share ideas and research on varied issues that may be plaguing the company at any given time, thereby enabling them to come up with customized solutions for the problems that they may be encountering in the workplace. In addition, technology comes in handy in allowing for successful testing of an innovation through simulation so as to determine the areas where there may be loopholes. This is particularly the case in instances where the marketers need to determine the efficacy and viability of a business idea (Argyris & Schön, 2008). The only viable way of examining and testing it before real-life application would be to have it simulated. However, there are variations in the manner in which technology is used in small firms and big firms. Scholars have noted that as much as all companies aim at using technology in creating a competitive advantage, there are variations in the manner in which this is achieved for small firms and big firms (Walker et al, 2010). In small firms, the competitive advantage is usually created through streamlining the production process, the introduction of novel products or technology processes that entice new customers (Walker et al, 2010). While big firms can do this as well, there is always the likelihood that they will create the competitive advantage through the creation of barriers that would hinder rivals from getting into the market or even changing the rules of competition within their respective industry.

2. RELATION BETWEEN ORGANIZATIONAL LEARNING AND INFORMATION TECHNOLOGY

As much as the connection between organizational learning and information technology has only recently started being explored, there have emerged two interconnected research streams. First, there is the stream that perceives organizational learning as a way for resolving and explaining problems pertaining to the implementation and usage of new information technology within business entities. The approach was based on the understanding of the crucial nature of organizational learning to the overcoming of implementation problems. While this approach may have had an authoritative appeal, business entities have persistently been struggling on a regular basis in their efforts to effectively utilize new technologies. In essence, research that explores the manner in which business entities learn to effectively utilize information technology has likelihood for contributing in the resolution of such problems or issues. The second approach to research has come up with information technology applications that support processes pertaining to knowledge management and organizational learning. For instance, technologies such as best-practice databases, expert systems and data warehousing, as well as intranet and internet systems have the potential for incorporating valuable resources for organizational memory, while the wide-band and groupware communication networks can facilitate the usage of and access to the memory (Hanvanich et al, 2006). This underlines the potentially crucial nature of information technology as an ingredient in the crafting and design of learning organizations through the provision of infrastructure for accessing, storing, as well as revised varied elements pertaining to organizational memory. While these streams are pursued autonomously, they have a close conceptual link. Indeed, scholars have acknowledged that prior to the leveraging of information technology to allow for organizational learning in a business entity, it is imperative that appropriate technologies are implemented and used (Hanvanich et al, 2006). It is ironical, however, that the successful development and implementation of technologies that allow for organizational learning would be dependent on the present capacity of the business entity's present ability to learn. In essence, business entities that already demonstrate or display learning capabilities would have a far much easier time in enhancing their capacity to learn since they have a higher likelihood for experimenting and seeking out new technologies. On the other hand, business entities that are in desperate need for developing and implementing learning capacity would be likely to have a difficult time implementing the necessary technologies (Hanvanich et al, 2006). The concept of organizational learning is based in the consideration or the perception that business entities are cognitive entities that have the capacity to observe their actions, take part in experiments so as to determine the effects of other courses of actions, as well as modifying or changing their actions so as to enhance performance. Organizational improvement relies on the revision of organizational memory, which underlines the understandings that members of organizations share particularly the cognitive maps that link the actions of organizations to their outcomes (Nasution et al, 2011). It should be noted, however, that in instances where the organizational memory is already well in place, the residual memory could impede new learning unless there exists established values or norms pertaining to change and experimentation. Modifications in the organizational memory would never be achieved through the simple exchange or replacement of old knowledge for new one since there exists immense difficulty in organizations unlearning the things of which they are already aware. As noted, some researchers have sought to comprehend the manner in which technology is implemented and used in organizations using organizational learning. This inquiry is based on the acknowledgement of the fact that there are numerous instances where information technology causes disappointing results such as dissatisfied users, low payoffs, financial losses, as well as

inability to enhance the effectiveness of the organization (Nasution et al, 2011). Of particular note, however, is the fact that these failures are not uniformly experienced with numerous studies demonstrating sharply contrasting consequences that comparable organizations experience while implementing the same technologies. In essence, the organization's relative capability to learn on how these technologies can be used would be a way for explaining these differences. Business entities learn to effectively implement information technologies on basis or under the guidance of their own experience (Nasution et al, 2011). Research has demonstrated the crucial nature of experience with the technologies similar to those that are being adopted in the current times. Researchers undertook a survey examining the manner in which the experiences of the managers with certain strategic information technology affected their interpretation of the new systems and applications (Nasution et al, 2011). It was demonstrated that managers that had more favorable experiences with the information technology often interpreted the new information technologies as chances or opportunities and incorporated higher expectations for increase in profits and enhanced effectiveness from their utilization. The results underline the importance of the prior experience of managers in making interpretations or predicting their receptivity to the innovative forms of information technologies. In essence, the retrospective interpretations may underline the conclusion that the experience of an organization with information technology would also affect the success in implementation of the same or the organizational learning in the future. However, there exists a major problem with experience as the basis for technological innovation. Scholars have noted that older experience is disproportionately powerful to the extent that in instances where a certain technology is successful, business entities may continue using it long after it has become ineffective (Nasution et al, 2011). This competency trap takes place in cases where favorable performance of a particular technology or procedure causes an organization to accumulate considerably more experience with it, thereby hindering the utilization of other technologies or procedures that may be more effective. In a large number of cases, the old experiences may have become such a fundamental component of organizational memory to the extent that it is extremely difficult for new experiences to modify the contours pertaining to organizational action (Nasution et al, 2011). As much as knowledge that is acquired via experience would always form the basis for future action, some of the older knowledge may be rendered irrelevant to contemporary problems, in which case they could be creating barriers to acquisition of considerably more relevant knowledge that is founded on more relevant and recent experience (Nasution et al, 2011). Similarly, there has been immense attention to the approach where information technology is designed to enable or facilitate organizational learning. Indeed, a large proportion of research on organizational learning and information technology has been seeking to direct the application or implementation of technologies that allow for organizational learning (Gera & Gu, 2004). Such research supports conventional prescriptions pertaining to designing learning organizations through the provision of advanced technologies that would improve the organizational memory and facilitate discourse and communication among individuals in the organization (Camisón & Villar-López, 2010). As much as these functions may be carried out without the supporting applications pertaining to information technology, it is evident that technology in itself may enable these functions to be carried out in a more effective manner. Research, on the other hand, has demonstrated that information technologies may unintentionally hinder organizational learning through the induction of dependence on formal and inflexible systems.

3. SYSTEMS' DESIGN THAT FACILITATE ORGANIZATIONAL MEMORY

Research pertaining to the conceptual design of organizational memory information systems breaks the organizational memory into the related subprocesses. Scholars have outlined the processes of retrieval, retention, acquisition, search and maintenance as mnemonic functions

that make the basis or foundation of the system. The connection between functions and their relationship to the storage repositories make up the conceptual design, which may then be facilitated through certain application or implementation of information technology (Camisón & Villar-López, 2010). However, it should be noted that varying situations may necessitate varying organizational memory systems, in which case a specialized modeling methodology. In knowledge representation, it is knowledge that the design could incorporate easy coupling and flexible capture of structured and unstructured data. The data may include the information represented, the manner in which the information is created, the stakeholders that played fundamental roles in its utilization, creation and maintenance, the time in which the information was modified, captured or evolved, areas of representation, as well as information on why particular memory components were created (Camisón & Villar-López, 2010). Formal models pertaining to unstructured data may also be maintained so as to allow for easy access to the components and allow for automated reasoning with regard to the characteristics. The creation of equal global access to rich types of product knowledge comes in handy in enhancing the quality of knowledge representations, enhancing the strength of the corporate knowledge nexus, as well as effectively passing complex technical knowledge across the global organization. The creation or development of the virtual nexus for visual knowledge representation offers universal access to sophisticated technical knowledge pertaining to the products of the company (Camisón & Villar-López, 2010). With regard to the retrieval and utilization, systems have been designed in a way that allow for direct retrieval and utilization of data in the organizational memory without any intervention or input from human beings. In order to support or facilitate retrieval of information, the structure can be created through the isolation of tasks in which the data formats are reasonably manageable and predictable.

As much as group support systems are designed in a way that they would enable organizational learning through the support of distributed cognition and common or shared comprehension, varied studies have indicated that in reality, these systems have different interpretations and meanings in varying parts of the business entity (Gera & Gu, 2004). Given that the interpretations of technology that is designed to facilitate discourse and communication are different within business entities, the utilizations of such technologies would be unlikely to cause a uniformly shared organizational memory (Nasution et al, 2011). Nevertheless, the provision of a vehicle or medium of communication regarding the differences, these collaborative technologies could support discussions and debates that allow for the surfacing of assumptions and the proposition of alternative ideas and courses of action. Similarly, the support of discourse that emanates in varying frames of reference allows the technologies to facilitate organizational learning process. It should be noted, however, that they would not necessarily result in enhanced collaboration given that they may not be fitting to the expectations of the members or the organizational norms (Nasution et al, 2011).

However, there are instances where technology can hinder or stand in the way of organizational learning (Argyris, 2009). Indeed, studies have underlined the fact that organizations or business entities can become overly reliant on the formal systems and, therefore, fail to appreciate the less formal representations pertaining to organizational memory such as the experience of employees who have served the business entity for long periods of time (Argyris, 2009). Researchers particularly acknowledge that the deeper the intelligent routines become components of computer systems, the less the potential or likelihood that they would be assessed or monitored and revised in instances where the business entity needs to change. In essence, information technology can stand in the way of organizational learning can support relatively rigid systems that cannot be changed or that are not adaptable to the changing conditions that are being used (Damanpour et al, 2009). There have been instances where companies incorporate information technology with the aim of enhancing flexibility and

learning. Initially, the systems offer competitive advantage through the automation of crucial managerial functions and allowing for radical changes in the structure of the organizations. However, as time goes by, the firms had a decline in their market shares, an aspect that was explained in the statement that the information systems eventually replaced people whose duties included evaluating the environment so as to detect any regulatory or market changes (Damanpour et al, 2009). As much as the information technology ably processed structured information in the same way that it always had, the systems offered no capacity or chance for obtaining and gathering the unstructured information. In this cases, the organizations or business entities were not aware of that it was necessary to change the systems and practices that had supported them. A similar pattern was also seen in the automation of an energy-auditing process (Argyris, 2009). The formalization of the tasks of producing or generating audit reports allowed information technology to get rid of or eliminate the need for users to have perfect knowledge regarding carrying out an audit report. This knowledge was substituted for the comprehension of manner in which information systems are manipulated to produce the desired results in spite of the technology. Similar observations were made in the study of CASE tools that were utilized in systems consulting. The tools were a form of organizational memory that resulted in the standardization of the work processes pertaining to system developers into simple routines (Argyris, 2009). As much as this was aimed at the enhancement of the effectiveness of consultants through the embedment of rules in the software, CASE tools were also seen to produce or generate a "trained incapacity" to carry out systems consulting in other ways (Argyris, 2009). Essentially, information technology hinders organizational learning through the induction of actors to forget the things that they already knew and through failing to signal the required modifications in the technical systems that support their tasks. As much as the embedment of processes in automated systems may disable organizational learning, the undesirable effects may be mitigated. Scholars came up with the white-box approach which is aimed at counteracting the negative impacts of freezing knowledge pertaining to the work domains in inaccessible software routines (Argyris, 2009). The approach underlines or lays emphasis on the notion of generating or creating application that are transparent to users rather than burying knowledge in inaccessible boxes (Argyris, 2009). In essence, the human agents can view the logical structure via graphic interface that display the context of every function in the overall process, thereby allowing for the inspection of data sources and logic that technologies employ. This would allow for the auditing of organizational memory that is incorporated in the software prior to its acceptance as the foundation or basis for organizational decisions.

In essence, technology can enhance organizational learning or hinder it depending on the manner in which it is incorporated or embedded in the organizational structure. Information technologies, for instance, enhance the organizational learning through enhancing the capacity of members to communicate, as well as supporting discourse among them (Easterby-Smith, 2001). This process would be advantageous to the organization through enhancing access to organizational memory for individuals in the business entity particularly in instances where they are in remote locations, as well as increasing the opportunity for testing and challenging the current routines and assumptions that are made in the business entity. It should be noted that supporting discourse would not simply mean the provision of electronic access to centralized organizational memory rather it would also entail the generation of new organizational knowledge via the discourse. Research has demonstrated that collaborative systems have varying subject to the organizational context within which they are used (Easterby-Smith, 2001). In essence, users that operate varying contexts have a high likelihood for drawing varying meanings from the centralized information bins (Easterby-Smith, 2001). It is also noted that systems that facilitate organizational learning through the incorporation or

embedment of routines in the memory and the storage of historical information would be useful to the business entity as long as the assumptions on which they have been founded are still relevant and have not become obsolete. In instances where there is a modification of business conditions, the technologies can constrain or restrict the search for and incorporation of new information, as well as hide the logic that predisposes the intelligent routines (Easterby-Smith, 2001). Essentially, information technology can increase the ability of business entities to learn and, at the same time, the learning capacity can have a bearing on the extent to which the new technologies are adopted, as well as effectively put to use. Scholars note that that the most optimistic scenarios would involve the two effects reinforcing each other with the capacity to learn increasing steadily via enhanced adoption and utilization of technology (Nasution et al, 2011). For a large number of business entities, the learning capacity cannot be enhanced as a result of the difficulties that exist in the adoption and utilization of information technology. As a consequence, a large number of organizations can experience persistent difficulty in the adoption of technologies that are needed so as to compete in the dynamic business environments (Nasution et al, 2011).

However, it is also imperative that one pays attention to the manner in which the technologies are adopted into the routines of business entities. Indeed, the capacity of any form of technology to have a positive impact on organizational learning is, with no doubt, dependent on the acceptance of the same by the employees in that business entity. Indeed, there are numerous cases where technologies are resisted by employees in spite of the potential positive effects to the business entity (Damanpour et al, 2009). This may be caused by the manner in which the technology is introduced into the organization. Researchers note that employees often prefer to learn the varied aspects pertaining to the utilization of information technology from their close colleagues who have perfect comprehension of the relevant details pertaining to the tasks as practiced (Easterby-Smith, 2001). The situational learning is based on the comprehension of the fact that learning is an inseparable and integral component of social practice. In essence, information technology users have a high likelihood for learning about the new technologies via leaning situated in their work structures instead of learning through formal training programs. Since work practice is fundamentally different from the manner in which organizations outline their operations in training programs and manuals, situated learning is a crucial consequential process (Damanpour et al, 2009).

4. CONCLUSION
It is imperative that the business entity positions itself appropriately so as to attract the right talent, which will drive the innovation process. This must be complemented by the incorporation of proper management team and infrastructure that does not stymie innovation but rather seeks ways of nurturing it for the benefit of the organization in the long-term.

In fact, business entities primarily depend on their workers to have and pass on the knowledge to other people within the business entity in the current times and the future. This presents a problem in varied ways. People are dynamic and there is a possibility that the individuals tasked with provision of the information would be moving out of the organization in a few years' time. This means that the information and knowledge would be lost on the organization, which affects its competitive advantage, profitability and sustainability.

It is imperative that organizations combine or incorporate technology and use it in storing and dispensing the organizational knowledge. As noted, many people may come into the entity and leave it, but their knowledge is stored in technology for use in the future. Scholars acknowledge that in instances where knowledge is stored in processes and systems, it has greater inherent value compared to instances where it is stored in the heads of individuals.

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CULTURE CHANGE IN A ROMANIAN COMPANY

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ABSTRACT
Change management is a difficult and arduous process, but if it is addressed properly by the manager or by those charged with the change, it can be a success. In this context, change management must be based on an entire arsenal of tools and skills meant to facilitate change. Modern societies experience a long process of global change, encompassing all sectors of the economy. Regardless of the level of development of a country, it faces the phenomenon of change in all its structures. If Western countries continue speaking of change, evolution or progress, in the eastern countries, as it is the case of Romania, managers talk about the phenomenon of "transition", which broadly defines another level of change.
Thus, the paper aims to track how it works in practice a model proposed by two specialists, Kameron S. Kim and Robert E. Quinn on the example of an organization in Romania. Using a tool developed by the two specialists managers can identify a pattern in terms of organizational culture change, which can be applied to a wide network of organizations belonging to the public sector or to the private sector. The instrument aims at identifying current culture, the sectors where that specific type of culture manifests more strongly, outlining a change strategy depending on the nature of culture identified. The company which is the subject of the study is Dante International eMAG, the largest retail company in Romania that has recently been expanded to other markets in Europe. The aim of this study is to identify the dominant culture that characterizes this company, the discrepancies between current and desired culture for employees and the aspects in which the manager in charge with change has to act.
Keywords: change, current culture, organizational culture

1. INTRODUCTION

Many managers deal with change management in a superficial manner, seeing change as a decision that should be imposed to and accepted by employees, not necessarily assimilated. In such cases, change proves to be difficult, a range of major issues appear during implementation, which create various obstacles or even stop the process, and the outcome is hardly as expected.

Although the managers of many companies tend to remain sceptical regarding change, rather seeing it as the enemy of stability and balance, change has proven to be necessary, as a survival guarantee for many industries. For this reason, establishing the need to change implies a detailed radiography of the company's status. Some of the most important elements justifying the need to change at a corporate level include: low productivity, unjustified absenteeism, the need to adapt to an emancipated market, reduced profits.

Another significant aspect regarding changes is closely related to the absence of material or human resources. Many projects are abandoned for lack of time, for lack of significant capitals, or for lack of suitably trained persons, that might implement the proposed change. Capital immobilisation is closely related to the lack of resources. Many large companies, disposing of a certain capital, tend to immobilise this capital in assets that they can no longer use thereafter.

Former socialist countries, like Romania, usually are more opposed to change. Starting from the idea that social order is well established, and changes were considered to be only turbulent

factors that disturb the balance of economy, this reticent attitude is still maintained at the moment and is prevalent in Romanian organisations.

If structural changes have experienced a certain development, even in Romanian economy, mental changes have remained deeply rooted among staff.

2. TRIGGERING A CULTURAL CHANGE IN EMAG

The hereby study is an analysis of corporate culture in eMag and its main research goal is to identify the corporate culture of eMag and its particularities.

The main methodological tool used for diagnosing corporate culture in eMag Romania is the OCAI test (The Organizational Culture Assessment Instrument), allowing for an objective assessment of quality and quantity aspects not identified by the members of the organisation.

The OCAI test was created by specialists Kim S. Cameron and Robert E. Quinn, who supported the enhancement and modernisation of a method to diagnose corporate culture. They identified a practical method, that can be implemented within an organisation by its manager himself/herself, that is effective and that deals with a range of dimensions responsible for corporate performance. Thus, six basic corporate culture elements were identified (dominant features, leadership, relation with employees, corporate values, corporate strategy and success criteria), that are considered to be the most representative in the diagnosis of an organisation. The OCAI test assesses how the current corporate culture is harmonized with the employees' preferences, the extent to which such preferences may be highly different from the current situation and, implicitly, the employees' resistance in case of a possible change.

According to the two authors, Kim Cameron and Robert Quinn, the OCAI test helps achieve a cultural profile whose interpretation involves at least four corporate culture aspects:

1. The type of corporate culture prevailing within the organisation
2. The differences between the current and the recommended corporate culture
3. The intensity of corporate culture as a dominant factor of the organisation method
4. Comparing the cultural profile of the organisation with the average profile of the industry it is included in.

The study was performed on the programming department of eMag. A number of 32 employees, of which 27 men and 5 women, answered the questionnaire.

Dante International Emag is a Romanian retail company dealing with the online sale of IT equipment and components, electronics, domestic appliances, personal care items, car products, sports products, books, music, movies, home and gardening items, pet shop, children items.

As for corporate change in eMag, it was firstly necessary to establish the type of culture the company is a part of, as well as the cultural typology the employees tend toward. Thus, the score shows that eMag falls within an autocratic typology, which also has a good score in terms of the situation wanted by the employees; this means that the current strategy must be maintained to a very high extent. An organisation with such a culture is a highly dynamic and innovative environment, an energetic workspace, more and more focused on the entrepreneurial spirit and the creative side of employees.

The members of an autocratic organisation are willing to take high risks and have various initiatives.

The leaders of such a culture are creative persons, with a strong entrepreneurial character, a well-established vision on the future, and an initiative spirit.

The connecting force between the members of the organisation is their commitment towards innovation and development.

If we consider the current projects promoted by eMag, we may say that the current strategy approached by the company managers fully falls within this type of culture.

In just 10 years, eMag has gradually established itself as a leader in Romania, in front of other stores with tradition, such as Flamingo, Media Galaxy, DOMO or Altex.

Likewise, eMag has initiated and still initiates modern projects, validating its ever higher openness towards Western markets, which are continuously changing and adjusting with a view to surprising their customers. Any renowned company in Europe tries to adjust to the realities of American marketing, where companies are continuously developing and provide more and more facilities or elements of novelty, as the market is fraught with companies and the competition is strong. eMag implements modern strategies, providing new concepts, new products or new services.

Such a modern concept appeared in 2011, as eMag acquainted the Romanian market with the concept of Black Friday, borrowed from the American market as well. Black Friday provides discounts of 30-60% in a wide range of products.

As the new concept introduced by eMag was a strong success, the company extended its portfolio of products sold on Black Friday and, in 2013, eMag also sold cars. Thus, a number of 63 motor vehicles with a total value of EUR 1 million, from manufacturers such as Dacia, Ford, Mitsubishi, Hyundai and Mercedes Benz, were provided to customers.

Another premiere marked by eMag within Black Friday referred to the sale of completely novel products in 2015, i.e. 24 carat gold bullions and 22 carat gold coins, with a discount of 10% from the total cost of the concerned product, as posted at the branches of Piraeus Bank on the day prior to the campaign. Black Friday is a marketing strategy, as every year employees include a novel product in the offer of eMag, that aims at placing the company on a new segment.

When analysing the extent and multitude of projects eMag has been involved in, within a short amount of time, we notice that the scored answers, respectively the obtained results, fully validate eMag's cultural typology.

3. DOMINANT CULTURE VS PREFERRED CULTURE AT eMAG

The application of questionnaires to the employees of the Programming Department of eMag showed that autocratic culture is representative. As for the situation desired by employees, most of them noticed that a clan-type cultural typology would better fit their needs. An organisation with such a culture is a very "personal" place, with a familiar atmosphere, where people know each other very well and share their personal issues.

The leaders of such a culture adopt behaviours of facilitator, mentor, and can sometimes even approach parental behaviour.

The connecting force between the organisation's members is loyalty, mutual trust. Commitment in such organisations is very strong.

This discrepancy between the current state and the one desired by employees may be explained by the fact that a continuous, permanent innovation process can sometimes be hard to

implement to the end, as it highly challenges the employees' energy, attention, imagination and creativity. Managers tend to forget the psychological needs related to mental relaxation and can even disturb psychological balance and comfort by always wanting to be a modern, top-flight company, a market leader. Thus, a manager should insist on forming teams, on the achievement of goals by teams, not by individuals, on their ever more intense preparation and the organisation of trainings meeting the psychological comfort needs of employees.

Another major aspect that should be taken into account is that the study was performed within the programming department, that is with people working in the IT field. To this purpose, we agree that there is a perception that programmers, by the very nature of their activity, are introverted, connect with one another in a more difficult manner and tend not to socialise outside working hours. Thus, special programmes may be implemented, dealing both with the employees' training and the development of social skills. It should be noted that this need to establish social relations, as identified in Maslow's pyramid, results even from the answers provided by employees. Thus, a difference of more than 10 points can be identified between the current culture (30.83) and the one wanted by employees (41.67), which means that a manager should focus on issues related to inter-human relations.

	NOW	**PREFERRED**
CLAN	**30.83**	**41.67**
ADHOCRACY	**34.17**	**31.67**
MARKET	**10.00**	**8.33**
HIERARCHY	**25.00**	**18.33**

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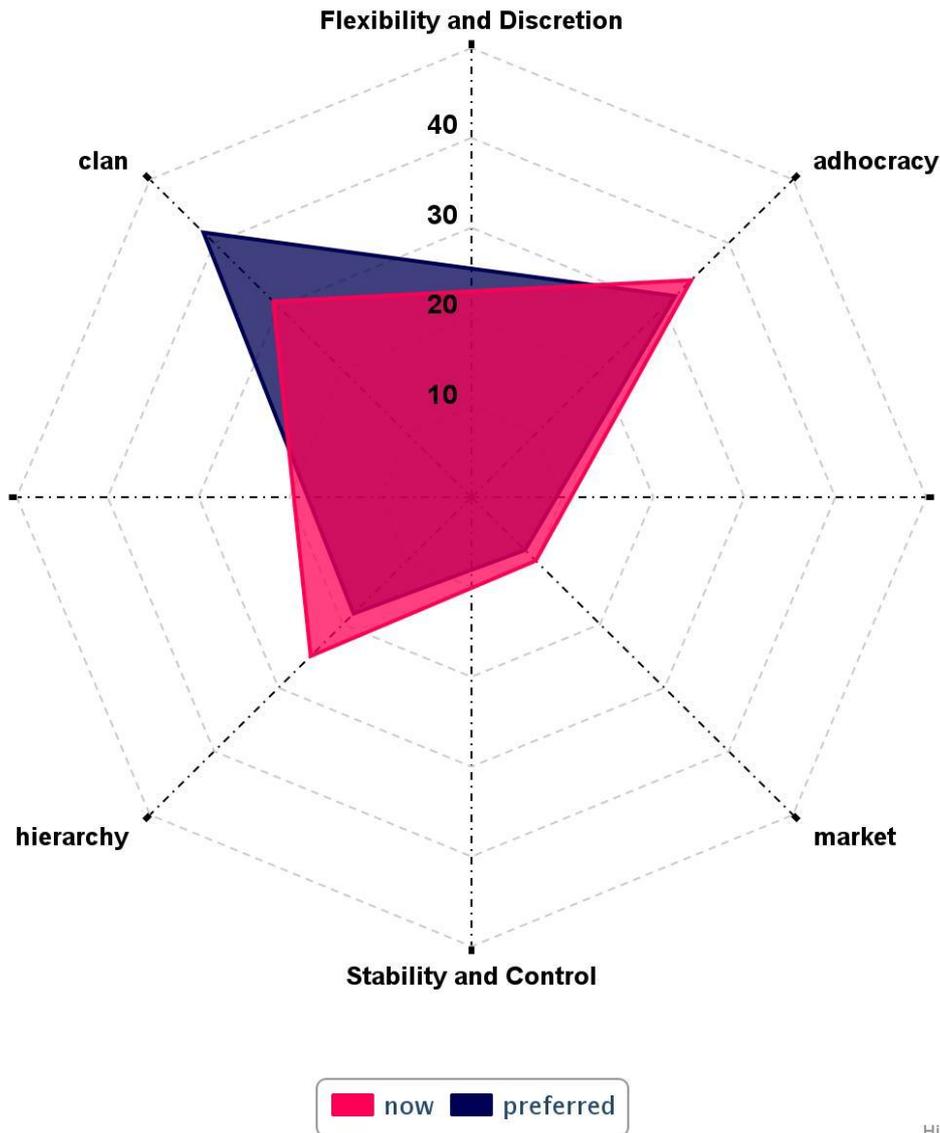
Figure no. 1. The culture identified in eMag

4. CONCLUSION

In conclusion, processing any information regarding corporate culture needs effort. For an accurate understanding of the concept, managers should widen their horizon, examine their current position and accept new approaches regarding management activities.

Scientific works deal with this component of the management process as "cultural intelligence", i.e. the acquisition by which a manager defines his/her role and better understands the organisation. Things become clearer, conflicts are easier to manage, deviations from guidelines and rules are easy to explain, change resistance can be understood and approached in an efficient manner. In this context, a manager develops his/her capacity to work and cooperate better with employees whose opinions and needs may contrast with those of managers to a very high extent.

To this purpose, specialists have developed a range of tools, methods and techniques through which a manager could better understand his/her organisation, having a starting point when

s/he feels that employees no longer share the same goals or when s/he wants to integrate a new change. Such a tool is OCAI (Organizational Culture Assessment Instrument), which records the employees' perception on the dominant culture, as well as their wish regarding the direction of change.

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IDENTIFICATION OF FACTORS THAT AFFECT SUPPLY CHAIN PERFORMANCE

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ABSTRACT
This paper aims to highlight the factors that influence the supply chain (SC) performance. SC performance is an aggregate of the performance of every company operating in the chain. The relationship between the companies in the SC plays a key role in the SC overall performance. There are different factors that may influence directly a company's performance but indirectly they affect the entire chain. Some of these factors are: longevity of the relationship, supply base reduction, supplier involvement, information sharing, cross-functional teams, trust and commitment. In addition, this paper identifies several other factors that influence the SC performance, such as: environmental uncertainty, top-management support, customer focus, information technology, strategic purchasing, logistic integration and supply network structure. By knowing them, strategies can be build to overcome problems, the opportunities offered can be exploit and lastly these factors can be used to develop SC models with focus on SC performance.
Keywords: *Performance, Supply Chain, Supply Chain Performance*

1. INTRODUCTION

SC performance is an aggregate of the performance of every company operating in the chain. If one particular company has problems, it slows down the entire chain. Consequently, all the other companies will be affected. According to Lambert and Cooper (2000), the overall performance of the SC is a synergy of the integrated companies in the process of supply chain management (SCM). Aramyan (2007) would emphasize that *SC performance is an overall performance measure that depends on the performance of the supply chain stages*. There are different factors that may influence directly a company's performance but indirectly they affect the entire chain. Other factors are not linked with one company only but with the entire network. Therefore, it is very important to know and understand the factors that affect the SC performance. Based on these factors strategies can be built to overcome different problems, and these factors can be used to develop SC models with focus on SC performance.

2. THE RELATIONSHIP BETWEEN CHAIN MEMBERS AND SUPPLY CHAIN PERFORMANCE

The SC networks are composed of interdependent relationship developed with the goal of deriving mutual benefits (Chen and Paulraj, 2004). These relationships are based on the theory of strategic management, which stresses the "collaborative advantage" (Kanter, 1994) as opposed to "competitive advantage". The relationship aspect is critically important to the effective management of the SC. As a result, the relationship between the companies in the SC plays a key role in the SC overall performance. The concept of SCM and the relationship between the members in the SC were more adversarial than cooperative. As a result, the production costs were high, the product development cycle was long, order fulfilment was long, transportation costs were high, etc. After manufactures realized the benefits of the cooperative relationship, their performance increased. Consequently, this gave a bigger boost to the performance of the entire SC more than just the sum of the increased performance of the individual members. According to Lambert and Cooper (2000), the overall performance of the

SC is a synergy of the integrated companies in the process of SCM. Based on the literature of SCM, the relationships between the members of the SC incorporate some key aspects that have an influence on SC performance, which are:

- Longevity of the relationship (i.e. long-term or short-term)
- Supply base reduction
- Supplier involvement
- Information sharing
- Cross-functional teams
- Trust and Commitment

2.1. Longevity of the relationship and performance implications

Suppliers contracts have increasingly become long-term, buyer-supplier are creating strategic alliances. Consequently, the overall performance of the SC has increased. One way to explain this is by implementing the transaction cost theory (Williamson, 1979). The transaction cost emerges from the assumption of opportunism behaviour and bounded rationality (Williamson, 1975). According to Williamson (1975), some economic agents are rational by intention, but subject to shortcomings that influence their decisions. Due to these shortcomings, some economic agents will pursue opportunistic behaviour like stealing, lying, cheating, distorting, misleading, etc (Williamson 1975 and 1979). In the case of short-term relationship, the supplier has incentives to engage in opportunistic behaviour since it can achieve short-term benefits. Burt and Collins (2006) argue that in the long-term relationship or strategic alliances both the supplier and buyer have made specific investment in their relationship. In this case none of the party engaged in the relationship do not have incentives to pursue opportunistic behaviour because the short-term benefits of these behaviours, are smaller than the net present value of the benefits generated by the long-term relationship. As a result, the SC performances increase in terms of product quality, cost reduction, etc. Some other benefits of the long term-relationship that influence the SC performance are:

- Increased intensity of buyer-supplier coordination (De Toni and Nassimbeni, 1999).
- According to Kotable *et al* (2003), suppliers will become part of a well-managed chain, through long-term relationships and will have a long lasting effect on the competitiveness of the entire chain.

2.2. Supply base reduction and performance implication

According to Newman (1988), the contemporary buyer - supplier relationship has shifted from contracting a large number of suppliers to the use of fewer qualified/certified suppliers. This shift has multiple benefits in terms of SC performance (Chen and Paulraj, 2004b):

- Reduced inventory management cost
- Increased economies of scale based on order volume
- Reduced time of order fulfilment due to dedicated capacity
- Work-in-process inventory from suppliers, and
- Volume consolidation and quantity discount

The two words that best summarises the above benefits are increased efficiency and reduced cost of the SC.

2.3. Supplier involvement and performance implications

The practice of involving the supplier to the product development process, according to Burton (1988), is attributed to the fact that supplier's accounts for 80% of product lead time problems

and 30% of quality problems. Some of the benefits of involving the supplier in the product development process to the SC performance are (Cuthil *et al*, 1997):

- Reduced time of product development
- Increased product quality, and
- Cost reduction

2.4. Information sharing and performance implications

Information sharing changes the way the SC is managed and these changes may lead to, among other things, lower inventories (Simchi-Levi *et al,* 2003). According to Simchi-Levi *et al* (2003), one can design and operate the SC much more effectively and efficiently by effectively use of information available in the SC. One of the benefits of sharing information in the SC is the reduction of the so-called bullwhip effect. First, it is important to explain the bullwhip effect than understand the role of information sharing in reducing it. Simchi-Levi *et al* (2003) describe the bullwhip effect as the increased variability in orders placed as we travel up in the SC. This means that even if the customers demand for specific product does not fluctuate much, inventory and back-order levels fluctuate significantly across the SC.

2.5. Cross-functional teams, trust & commitment and performance implications

SCM encompasses a wide range of activities because of this; expertise is required from various functions (Chen and Paulraj, 2004). According to Ellram and Pearson (1993) cross-functional teams contribute to cost reduction, supplier selection, improved communication, product design and total quality initiatives. As a result, SC performance should improve with the increase use of cross-functional teams. Trust and commitment is a factor that does not have a direct impact on SC performance. However, cooperation relationships arise directly from trust and commitment (Morgan and Hunt 1994). Without these two key elements, the relationship between SC members will be inefficient in the best case and will cease to exist at worst case. In a situation where trust and commitment misses in the relationship, both of the parties will have initiatives to engage in opportunistic behaviour (Williamson, 1975 and 1979). As a result, the SC performance should decrease.

3. OTHER FACTORS THAT AFFECT SUPPLY CHAIN PERFORMANCE

In the SCM literature exist other factor that influences the SC performance. Some of them are:

- Environmental uncertainty
- Top-management support
- Customer focus
- Information Technology (IT)
- Strategic Purchasing
- Logistic integration
- Supply network structure

3.1 Environmental uncertainty

Chen and Paulraj (2004b) consider in their study three different sources of environmental uncertainty that plague supply chains: demand uncertainty, supply uncertainty and technological uncertainty. Demand uncertainty has to do with the fluctuation in demand (e.g. customer demand, orders placed by retailers, etc). Supply uncertainty includes indicators of timeliness, supplied product quality, etc. Technological uncertainty measures the extent of technological changes over time. From the above discussion of the bullwhip effect, we can link the demand uncertainty with the bullwhip effect. The higher the demand uncertainty is the

higher the fluctuation should be. As a result, the bullwhip effect should be bigger. From this simple explanation, the author deducts that the environmental uncertainty is linked in a negative way with the SC performance. When it increases the SC performance should decrease.

3.2. Top-management support

By top-level managers support the author means all the activities of the top-managers to implement the philosophy of SCM in the company like: contribution to strategic purchasing, adoption of advance information technology, logistic integration, supplier relationship development, etc. Day and Lord (1988) found that top-level managers have a considerable impact on company performance. In the introduction part of this paper the author mentioned that the SC performance is an aggregate of every entity operating in the chain. Each of this entities performance is an independent variable of their top managers leading skills and abilities. By linking Day and Lord (1988) findings with this statement, it can be deduced that top-management support has a positive relationship with SC performance. Increase level of top management support should lead to increase SC performance.

3.3. Customer focus

It is a well know fact that satisfying customers' needs is key element in a company success. In order to understand the customers' needs a company must research its customer base. The more it focuses on the customers, the more rewarding the exchange transaction in the SC will be for that company (Carson *et al* 1998). The same concept can be applied to the SC, considering the SC as a big entity composed by different companies localised in different levels of the chain. If the entire chain is customer focused, it will better understand the customers' needs. This will lead to improved customer satisfaction (Mentzer, 2001). In terms of performance, customer satisfaction can be used as metric for measuring SC performance (Mentzer, 2001). Thus, when customer focus increases the customer satisfaction should rise, as result SC performance increases as well.

3.4. Information Technology (IT)

Information is vital for every SC to function properly. Implementation of the IT systems in managing the SC has impacted not only the evolution of the SCM but also the SC performance. Information technology enhances SC performance by providing real time information regarding inventory level, production requirement, product availability, and shipment status (Salcedo and Grackin, 2000).

3.5. Strategic Purchasing

To understand the role of strategic purchasing in the context of SC performance, its evolution must be considered first. Mentezer (2001) argues in his book about the changing role of purchasing in firms SC management. He presents a framework of the evolution stages of purchasing. According Mentezer (2001) purchasing has gone through four evolution stages, which are:

- Traditional
- Partnership/Relational
- Operation approach (Materials Logistic Management)
- Strategic approach/ Strategic purchasing (Integrated value Added

It is not the aim of this literature review to examine the evolution of the role of purchasing but by looking at these, the way strategic purchasing impacts SC performance can be better understood. The focus of traditional purchasing was to buy from the supplier that offered the

lowest price; the relationship between buyer-supplier was mainly short-term (Giunipero and Brand, 1996). On the other hand, Giunipero and Brand, (1996) argues that strategic purchasing focuses on joint product innovation for competitive advantages in meeting customers demand, reducing system cycle time and cost by joint process design. Consequently, SC performance is related positively with strategic purchasing. The more the companies in the chain are focused on strategic purchasing the higher the SC performance should be. One more thing that should be noted in the context of purchasing evolution is that, the relationship longevity buyer-supplier has shifted from short-term relations (Traditional) to long-term relations (Strategic).

3.6. Logistic Integration
As it has been discussed in the previous parts of this literature review the relationship among the members in the SC has shifted toward strategic alliance, as a result logistic integration has extended outside the boundaries of the individual firm (Chen and Paulraj, 2004b). According to Stock *et al* (2000) higher levels of integration are characterized by greater coordination of the focal company's logistics activities with those of its customer and supplier, increased logistic related communication, and less clean distinction between the logistic activities of the firm and those of its customer and supplier. This increased level of logistic integration has led to greater SC performance.

3.7. Supply network Structure
Supply network structure has to do with the governance type of buyer-supplier relationships. As discussed in the previous part of this paper, when the buyer and supplier start/or are in a relationship there is the chance that they may engage in opportunistic behaviour. This opportunistic behaviour reduces the benefits of the party that is suffering it. Collins and Burt (2003), show some instruments to protect from opportunistic behaviour, which are monitoring, incentives, selection, and socialization. Each of these instruments varies in terms of effectiveness and implementation cost. As the cost to protect the benefits increase, the appropriate governance mode evolves from market contracting, through relational exchange, to hierarchy (Collins and Burt, 2006). Each of these types of governance has different outcomes in terms of SC performance. Thorelli (1986) suggests that network structure (relational exchange) is the best governance type, since in this type of governance there is a lack of power influence among the members of the supply chain. This is personified in terms of interdependence and strong linkages between SC members.

4. CONCLUSION
This paper reviewed the factors that affect SC performance and the way they affect it. The factor mentioned were: Longevity of the relationship, Supply base Reduction, Supplier involvement, Information sharing, Cross-functional teams, Trust and Commitment, Environmental uncertainty, Top-management support, Customer focus, Information Technology (IT), Strategic Purchasing, Logistic integration, and Supply network structure. It should be noted that some of these factors are interrelated with each other. It can be said that SC performance is a function of the factors mentioned above. Where the SCM is the dependent variable and the factors that influence it are the independent variables. A possible option for future research would be to quantify in a regression model the relationship between the factors identified here and SC performance.

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INVESTING IN COMPANY'S INNOVATION CAPACITY: THE CASE OF CROATIA

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ABSTRACT
Innovation is considered as an important generator of growth and development of a company, industry and the whole economy, so there is no doubt that innovation must become a priority for each company. The main purpose of this paper is to reveal the propensity to innovate among Croatian companies, examine what types of innovation are implemented and assess planned investments in innovation in the future. The aim of this paper is to explore investment in innovation of Croatian companies by emphasising the importance of systematic and planned investments in innovation, with special focus on new or significantly improved organisational methods (Knowledge Management or internal organisational structure). The study uses the data of the European Commission (Flash Eurobarometer 415), and applies descriptive analysis and inferential statistics as primary statistical procedures. The results show that large companies in Croatia and companies with higher turnover generally invest more in innovation. Medium-sized companies that are part of a group and are present in the market for more than five years are more prone to implement innovation in terms of new or significantly improved organisational methods.
Keywords: innovation, investment, organisational methods, Republic of Croatia, total turnover

1. INTRODUCTION

Modern consumers are very demanding and their needs never changed so quickly. Keeping up with these is no longer a sufficient strategy so there is necessity to anticipate them by proactive planning and actions. Therefore, flexibility and velocity are key to success in the modern market. Flexibility, i.e. adaptability, assumes constant changes in shaping different types of innovation. When it comes to innovation, most frequently we refer to technology or products, less frequently to marketing and almost never to organisation. However, innovation in organisational methods should not be neglected in comparison to other types of innovations because only an adequate organisational structure allows the implementation of all other types of innovation. Consequently, special emphasis is placed on innovations that present new or significantly improved organisational methods (Knowledge Management or internal organisational structure).

In addition to the aforementioned innovations, this paper observes different types of innovations, i.e., new or significantly improved products, new or significantly improved services, new or significantly improved production processes or distribution methods and new or significantly improved marketing strategies.

2. LITERATURE REVIEW

Innovation is the implementation of a new product or a significant change in the existing product or service, new marketing strategies, new organisational strategies or a new business strategy (Maier et al., 2015). In the service sector, innovation is called "service innovation" and it represents a completely new service or renovation of the existing ensuring benefit to the organisation in the form of added value (Meigounpoory et al., 2015 cited in Toivonen, Tuominen, 2006). Innovation in a company is actually every novelty in the business. Kaplinsky and Paulino Santos (2005) state that innovation is the centre of a sustainable source of income. Economists estimate that 50-80% of economic growth is a product of innovation and new knowledge (Cichorzewska, Cholewa-Wiktor, 2015). By achieving market competitiveness, the economy is improving and thus also the standard of living. Innovation is a change that brings novelty. Sikavica (2011) mentions that R. Kreitner and A. Kinickisve divide changes into adaptive, innovative and radically innovative changes. They differ according to the degree of complexity, cost, uncertainty and potential resistance, but also by the degree of novelty. Adaptive changes cannot be considered innovative because they are just "a re-introduction of a familiar practice" (Sikavica, 2011, p. 695), while innovation occurs in innovative and radically innovative changes that bring news for the organisation and news for the entire industry. Given that innovation really affects the entire industry, it increasingly involves various "stakeholders" from consumers and partners to suppliers. Therefore, in recent years, we often deal with the phenomenon of "open innovation" (Sorli, Stokic, 2011; Bel, 2013; Daft, 2013; Mitkova, 2013). Open innovation means that the process of generating ideas, development, research and commercialisation of research, take place outside of the company. The whole innovation process was previously taking place inside the company and was finally represented in the market when it was completed, but now the benefits of cooperation with other companies and consumers are recognised. Advantages of "open innovation" are reflected in the basic requirements for innovation, i.e., flexibility, velocity and lower costs. By scanning the environment and the use of its advantages (purchasing or leasing of technology that is cheaper than making one's own, buying and analysing competing products, considering consumer's ideas), innovations are created in a more efficient way.

Szczepańska-Wloszczyna (2014) states that innovation is not only an economic instrument, but also a social phenomenon that motivates employees in striving for success. Social approval is crucial for innovation because it brings novelty in terms of new ways of thinking, production, organisation and management, and ultimately, the consumer. Each innovation is a kind of infusion for a company and the whole economy, so systematic monitoring, measuring and analysis are necessary. It is part of organisational culture, which is also measurable, so instilling innovation in organisational culture is vitally important. Innovation is mostly a result of random activities, but letting innovation to coincidence implies organisational risk. Research of the Croatian Innovation Quotient points to the fact that in the Republic of Croatia innovation is not recognised as an important strategy of development among employees. "A large number of companies do not give sufficient importance to innovation in business strategy, and have a low rate of success with commercialisation of innovative products. In most of them, there is no system that would support and develop innovation among employees, or contribution to faster and easier commercialisation of products or services. Most companies do not have an organised system for the collection, evaluation and selection of ideas, they seldom commercialise ideas

successfully, and within the company there is no person responsible for innovation" (Antoljak et al., 2013, p. 2). Problems encountered by companies in investing in innovation are the existing competitors in the market, lack of funding and the complexity of regulations and standards (European Commission, 2015). It was pointed once that the reasons for a lack of investment in innovation in the Republic of Croatia are "low technology readiness of small businesses, but also a low level of involvement in export-oriented activities and the level of knowledge in new markets" (HamagBicro). "According to the results of measuring innovation performance of the European Commission, Croatia is considered to be a "moderate innovator" as it is in 25th place of the 34 EU countries, with 44% of all companies in Croatia which are classified as active in terms of innovation, while the European Union average is 52%" (Draft of the Innovation Strategy Proposal of the Republic of Croatia 2014-2020, p. 4). Most innovation-oriented economic activities in Croatia are mechanical engineering, shipbuilding, aviation, ICT, energy and the environment, medicine, biomedicine and pharmaceuticals (HamagBicro, results of Phase II of the full evaluation of projects under the STPI, Program II - RAZUM and Program III - IRCRO).

A company's innovation tendency depends on its geographical location. Companies that are geographically isolated from other companies are less innovative and they meet with many difficulties in the process of innovation. The immediate vicinity of other companies provides overflow and external knowledge, data and information in their own company which increases internal knowledge (Funk, 2014). Also, proximity of other companies, in particular the competing ones, encourages companies to be innovation-orientated because the competition then seems to be more tangible and in such environment it is easier to be proactive. In addition to the local environment, investing in innovation depends largely on the organisational structure (Mitkova, 2013; Sáenz-Royo et al., 2015). Flexible organisational structures implement more innovations than classic organisational structures (Glor, 2014). This does not mean that less flexible organisational structures are not able to strengthen their market position by innovation, but the leadership must systematically build a culture of innovation. In hybrid organisational structures innovation commonly remains at the proposal stage, leaving the possibility of unintended results open, so innovation is there mostly due to chance (Jay, 2013). It is necessary to bear in mind that the decision to invest in innovation depends primarily on one person, but all employees feel it and it is implemented by them so they are naturally inclined to resist novelty and change. Hence, it is important to build a culture of adaptation to changes so that all employees could become aware of the importance of innovation and finally become part thereof. For example, Japanese management promotes a creative culture of innovation at all organisational levels (Takeuchi et al., 2008). However, top management plays an important role in the process of innovation and change (Chiaroni et al., 2010). Much depends on the managerial style, but what is desirable for the culture of innovation are the democratic management style and an intrapreneurship atmosphere (Szczepańska-Woszczyna, 2014). Although the final decision about investing in innovation depends on the owner of the company and/or the the idea of innovation does not have to come from the top, but it must be managed from the top. The importance of the person or department responsible for innovation is therefore unquestionable. Namely, in as many as 72% of cases, innovative ideas are commercialised if the innovation office exists in the company, either formally or informally (Antoljak et al., 2013). The existence of the department or person responsible for innovation increases the likelihood of the realisation of ideas. Out of 3,000 initial ideas, only one actually outlives and achieves real commercial success (Bel, 2013).

Companies certified by the ISO9000 standard consider that innovation increases productivity and reduces production costs in the company so that they award a high average value to the importance of the budget intended for research and development (Lertpachin et al., 2013). The

most common source of innovation investments of domestic companies are their own funds or loans (Antoljak et al., 2013). Results of a study conducted on 104 companies shows that in 58% of companies, the innovation process is considered as very important, but in 17% of companies, innovation is not considered important at all (Maier et al., 2015). The attitude towards innovation in Croatia is not enviable as 47% of Croatian companies do not place innovation in the top 10 business priorities (Antoljak et al., 2013).

Company size plays an important role in organisational innovation policy. The greater the company, the greater the likelihood of its investment in innovation (Moohammad et al., 2014; European Commission, 2015). As shown by research among Croatian companies, more than half of large Croatian companies define an innovation budget, while this is not the case for small and medium companies (Antoljak et al., 2013). It is understandable that large companies can "afford" innovation more easily because of more resources so that they can more easily tolerate the risk of failure. Still, smaller companies cannot allow themselves this excuse. Perhaps their financial resources are less available, but they do not reduce the value of intangible resources, in particular human. Indeed, smaller companies are in a better dynamic position because they are more flexible and they could implement innovation faster due to insufficient and poor communication and more visible leadership (Innovation – the Next Level of Sustainable Competitive Advantage for Your Organisation, and YOU! (2015)). Also, smaller and younger companies more easily apply the aforementioned "open innovation" (Michelino et al., 2014). Organisational size certainly correlates with innovation, but in terms of the number of employees, the bond is stronger than with the financial aspect (Michelino et al., 2014), which shows that more emphasis should be put on intangible resources.

The paper observes the following types of innovation: new or significantly improved products, new or significantly improved services, new or significantly improved production processes or distribution methods, new or significantly improved marketing strategies and new or significantly improved organisational methods (Knowledge Management or internal organisational structure). Among these types, companies opt to invest more or less in some groups of innovation, but in real cases, there is often no even informal budget intended for individual or all types of innovation. Product innovations are especially challenging since they require a high degree of creativity. A new or significantly better product must be supported by progressive investment and generating a lot of ideas is often very expensive (Bel, 2013). The products are changing more quickly thanks to technological changes and competitive pressure. When a lot of competitive innovations try to penetrate the market at the same time with a new or significantly improved product, only the most dominant idea becomes industry standard (Gopalakrishnan et al., 2010). New trends that press product innovations are certainly environmental orientation (Bleischwitz, 2010), lean production, and the aforementioned phenomenon of "open innovation" (Sorli, Stokic, 2011). The vast majority of companies (92%) consider that innovation in products and services is the most important type of innovation in organisations (Maier et al., 2015). Production and distribution processes usually refer to technological changes in the organisation. Today's technological changes are less tangible and increasingly recognised in IT innovation. To the companies, they seem to be complex, but it is proved that despite complexity in relation to the implementation of technological innovations, the world does not stop, so they are inevitable (Hameed, Counsell, 2014). Changes in organisational methods are particularly important in developing a culture of innovation because they are the foundation for all other kinds of innovation in the organisation. Employees can be creative and produce brilliant ideas, but enthusiasm and passion often do not see the light of day due to organisational obstacles as creativity is often hindered by processes, rules and bureaucracy (Innovation – the Next Level of Sustainable Competitive Advantage for Your Organisation, and YOU! (2015)). New or significantly improved organisational methods are

also called administrative innovation. They include new organisational structures and processes, the allocation of resources, new ways of recruiting potential employees, a new rotation of existing jobs, etc. (Gopalakrishnan et al., 2010). There is a significant correlation between administrative innovation and transformational leadership as companies that employ transformational leaders apply more innovations in the field of organisation (Jaskyte, 2011). When it comes to company size, large companies invest in innovation of organisational methods more frequently than medium and small companies (Michelino et al., 2014). The specificity of organisational innovation is hidden in the fact that they always move in "top-down" direction. There is no problem to get an idea at other organisational levels, but idea management and its implementation, especially in the field of organisational methods, must start from the top. Innovation is an integral part of organisational culture, which is created by leadership. Moreover, it is advisable that in terms of organisational innovations, the power remains in the hands of top management as it is then easier to implement such innovations (Jaskyte, 2011). There is an increasing influence of technological changes on organisational innovation, particularly in the ways of making decisions. It is a matter of time when companies will be divided into those that use Big Data in business processes and those that do not (Finley et al., 2015). Companies that raise the possibility of recording, processing, analysis and distribution of data for the purpose of decision-making are likely to outperform their competitors and respond faster to the needs of their customers. In the period between 2012 and 2014, 38% of European companies invested in new or significantly improved organisational methods, and 48% of Croatian companies did the same (European Commission, 2015). This data shows that Croatia is above the standard of the European Union regarding the issue of recognising the need for investment in innovation of organisational methods.

3. METHODOLOGY

Secondary data collected by the European Commission (European Commission, Brussels (2015): Flash Eurobarometer 415 (Innobarometer 2015 - The Innovation Trends at EU Enterprises). TNS Political & Social [producer]. GESIS Data Archive, Cologne. ZA6589 Data file Version 1.0.0, doi:10.4232/1.12383) are used for data collection. The survey was created by the TNS Political & Social Network and implemented within the 28 EU Member States, including Switzerland and the United States. The data were collected in the period between 2 February 2015 and 18 February 2015. The overall data show that more than 14,118 companies were interviewed, 13,117 of which are European Union members. Interviews with key decision makers in companies were conducted over the phone in their native language and they comply with all methodological and communication rules of research. The entire research includes N=41,773.418; n=14,118, while the figures for Croatia are N=330,279; n=501. For the purpose of this study, exclusively data concerning the Republic of Croatia were extracted and particles of questionnaires that meet the needs of this paper were isolated.

Data were analysed by statistical software package SPSS Statistics Desktop, V23.00, while in the study methods of descriptive statistical analysis of data were used to describe the pattern (frequency, percentage, arithmetic mean, standard deviation). Also, the procedures of inferential statistics were used to determine the probability that the conclusions based on information are valid. When it comes to nonparametric tests, a chi-square test (χ^2 - test) was used, the independent-samples t-test (independent-test) and a simple analysis of variance (one-way ANOVA) were calculated. According to data from the Ministry of Entrepreneurship and Crafts of the Republic of Croatia, given their size, companies are divided into small companies (with up to 50 employees), medium-sized companies (with up to 250 employees) and large companies (with more than 250 employees) (European Commission: Official Journal of the European Union L 124, p. 36, 20 May 2003).

4. RESULTS AND DISCUSSION

72.1% of the total number of surveyed companies represent small companies, 21.6% are medium-sized companies and there are 6.4% large companies. 95.6% of all companies were established before 1 January 2009, 4% of companies between 1 January 2009 and 1 January 2014, while only 0.4% of companies were established after 1 January 2014. Almost 81.4% of companies reported that they are not part of a group, which indicates that only 18.6% of the companies are within the group. By the nonparametric chi square test we wanted to establish the differences between investment in innovation activities through the improvement of the organisation or business process (the percentage of total turnover) and investment in new or significantly improved organizstional methods (eg. Knowledge Management or internal organisational structure) with respect to the basic features of surveyed companies.

Table 1. Investment in improving the organisation or business process (as a percentage of total turnover) (Source: Research results)

	n	%	0%	Less than 1%	1-5%	More than 5%	χ^2 – *test*	df	sig.
When was your company founded?	483	96.4	28.8	20.3	34.0	17.0	**13.228**	6	**0.040***
Before 1 January 2009			28.4	21.0	34.7	15.8			
Between 1 January 2009 and 1 January 2014			35.0	5.0	20.0	40.0			
After 1 January 2014			50.00	0.00	0.00	50.00			
Is your company part of a group?	483	96.4	28.8	20.3	34.0	17.0	**7.369**	3	0.061
Yes			19.3	17.0	43.2	20.5			
No			30.9	21.0	31.9	16.2			
Company size	483	96.4	28.8	20.3	34.0	17.0	**23.65**	6	**0.001****
Small			33.9	17.8	32.5	15.8			
Medium-sized			17.2	30.3	34.3	18.2			
Large			6.7	16.7	50.0	26.7			

Column header: "What percentage of your total turnover has your company invested in improving the organisation or business process since January 2012?"

(*p<0.05; **p<0.01).

Table 1. shows that investment in the improvement of the organisation or business process by 1-5% is mainly represented in the companies established before 1 January 2009. If we look at the same kind of investment, given the size of the company, it is evident that small companies invest in the improvement of the organisation and business processes the least, while medium-sized companies record slightly higher investment. Large companies stand out due to the amount of investment in the improvement of the organisation or business process. Around 50% of large companies invested between 1% and 5% of total turnover in listed investment, 26.7% invested more than 5% of turnover, while only 6.7% of large companies did not record investments in any type of innovation.

Table 2. Innovation - new or significantly improved organisational methods
(Source: Research results)

	n	%	Yes	No	χ^2 – test	df	sig.
When was your company founded?	500	99.8	57.2	42.8	**5.63**	**2**	**0.06**
Before 1 January 2009			57.9	52.1			
Between 1 January 2009 and 1 January 2014			35.0	65.0			
After 1 January 2014			100.0	0.00			
Is your company part of a group?	500	99.8	57.2	42.8	**8.846**	**1**	**0.003****
Yes			71.0	29.0			
No			54.1	45.9			
Company size	500	99.8	51.4	48.6	**12.37**	**2**	**0.002****
Small			46.6	53.4			
Medium-sized			62.7	37.3			
Large			51.4	48.6			

(*p<0.05; **p<0.01).

Companies that have introduced innovation of new or significantly improved organisational methods (e.g. Knowledge Management or internal organisational structure) can be characterised as companies that are founded before 1 January 2009, companies that are part of the group and mostly medium-sized companies (62.7%). Looking at total turnover of companies in 2014 and the introduction of different types of innovation (new or significantly improved products, new or significantly improved methods of production or distribution methods, new or significantly improved marketing strategies or new or significantly improved organisational methods (Knowledge Management and internal organisational structure)), the t-test was carried out to verify the existence of statistically significant differences with respect to the observed particles.

Table 3. Innovation with respect to total turnover of the company (Source: Research results)

Introduction of various types of innovation		Total turnover in 2014					
		N	Mean	SD	t	df	p
New or significantly improved products	Yes	128	7,759.45	13,952.068	3.462	172.125	0.001**
	No	150	3,121.77	6,411.051			
New or significantly improved services	Yes	178	6,302.88	12,598.911	2.801	270.152	0.005**
	No	102	3,183.13	5,964.240			
New or significantly improved production processes or methods of distribution	Yes	149	6,444.10	12,097.72	2.129	269.349	0.034*
	No	134	3,787.26	8,782.029			
New or significantly improved marketing strategies	Yes	113	6,610.05	13,669.770	1.844	161.722	0.067
	No	167	3,988.90	7,818.328			
New or significantly improved organisational methods	Yes	157	7,207.17	13,443.247	3.924	202.229	0.000**
	No	125	2,681.26	4,735.158			

(*p<0.05; **p<0.01).

By analysing the results with respect to the company's total turnover recorded in 2014, statistically significant differences were observed in the introduction of new or significantly improved organisational methods (Knowledge Management or internal organisational structure) (t=3.924, p<0.01, M=7,207, 17>M=2,681, 26), and the introduction of new and significantly improved new products (t=3.462, p<0.01, M=7759.45> M=3121.77).

Table 4. Percentage of investment of total turnover in the improvement of organisation or business process activity (Source: Research results)

Percentage of investment of total turnover in the improvement of organisation or business process activity	Total turnover in 2014					
	N	Mean	SD	ANOVA		
				df	F	p
0%	79	2,246.57	5,404.220	3	2.984	**0.032***
Less than 1%	54	5,597.89	9,136.835			
1-5%	98	6,042.30	10,063.256			
More than 5%	47	7,462.32	17,608.417			

(*p<0.05; **p<0.01).

At a 5% significance level, a statistically significant difference was found between the average amount of the company's total turnover according to the level of investment (%) in the improvement of organisation or business process activity (F=2.984, df=3, p=0.032 X=2246.57). This indicates that groups of companies that invest 0% in the observed activity (lack of investment in this activity) on average experience lower total turnover than those companies that invest some funds in this activity. The average total turnover increases for each observed group of variables (i.e., 0%; less than 1%, 1-5%, and more than 5%). Ultimately, it can be noticed that companies in the final study group, the one that invests more than 5% in the improvement of the organisation and business processes, have the highest total turnover (i.e., 0% X=2,246.57HRK, less than 1% X=5,597.89HRK, 1-5% X=6,042.30HRK, more than 5% 7,462.32HRK. Logically, the higher the average total turnover of the company, the higher investments in innovation of organisations or business processes.
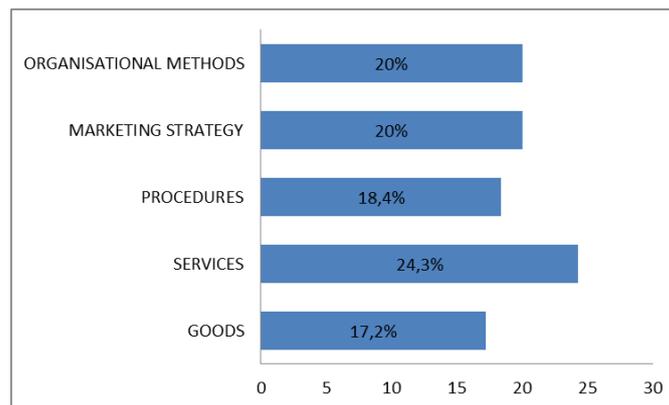

Figure 1. Planned investment in innovation in the next 12 months (Source: Research results)

In the European Union, in the next 12 months 27% of companies intend to invest in innovation (European Commission, 2015). Figure 1 indicates the planned investment in innovation in the next 12 months, where the examined companies could have given multiple answers. By eliminating the respondents who did not provide any answer, the following information were provided: in the next 12 months companies believe they will mostly invest in services (24.3%). Similarly, 20% of companies reported that they will invest in innovation related to

organisational methods and a marketing strategy, which is followed by investments in goods (17.2%). Innobarometer 2015 (The innovation trends at EU enterprises, 2015) shows that the future is not so bad indicating that the percentage of investment in innovation in the period between 2012 and 2014 rose in the Republic of Croatia compared to all previous years, so, regardless of the type of innovation companies intend to invest in, it can be seen that domestic companies are not so averse to innovation. Indeed, according to the Global Innovation Index, in 2015 Croatia was ranked 40th among 141 nations included in the study, which means that it moved up by two places compared to the previous year 2014 (Global Innovation Index: Croatia on 40th place, 2015).

5. CONCLUSION

Investing in innovation must be constantly and systematically planned, not spontaneous. State aid, and above all, support of the European Union are not exploited enough, especially in the case of small companies. Being a follower on the market should no longer be a priority. Nanotechnology, ethical interests, challenges of modern society, pressures of globalisation and sustainable development, largely shape the attitudes to innovation (Gopalakrishnan et al., 2010) that should give results in building a culture of innovation. Modern companies are strongly supported by technology, but a new technology or any other innovation can only be created by humans. Intellectual capital and creative power are priority catalysts for innovation. Therefore, it is necessary to build an organisational culture in which innovation among employees will be recognised as a possibility for new opportunities, rather than a tool for reducing threats and risks. The higher the company's average total turnover, the higher its investment in innovation in the organisation or business processes. Larger companies in Croatia invest significantly more in innovation than middle-sized and small companies. For companies that invest in innovation of new or significantly improved organisational methods (e.g. Knowledge Management or internal organisational structure) it can be said that they have existed for more than five years, as part of a group, and are mostly medium-sized companies. Investing in a new organisational method is extremely important because more flexible companies are more innovation-oriented, and a culture of innovation in all types of innovations is achieved at entire organisational system levels. The results of this research indicate the necessity of investing in the organisation of work and organisational methods, or can be used as an objective critique of small companies that, under the pretext of financial difficulties, hesitate to make a decision to invest in innovation. The number of small companies in Croatia is the largest, so that their business activity to a large extent forms an economic situation. Of course, it is difficult to set aside some funds for innovation from small turnover, but only successful innovation can increase turnover. The Croatian vision is that by the year 2020 Croatia will be "internationally recognised by scientific research excellence and positioned as a valuable partner in the global innovation value chain" (Draft of Innovation Strategy Proposal of the Republic of Croatia 2014-2020, p. 29).

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THE HUMAN RESOURCE ISSUES OF THE INTERNATIONAL EXPANSION OF THE MULTINATIONAL ENTERPRISES IN THE AGRIBUSINESS SECTOR IN HUNGARY

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ABSTRACT
Hungary is a traditionally agricultural country which has an important primary sector, characterized by the different size of agricultural farmers, integrators, traders and processors. The sector in the country suffers from different kinds of problems such as land fragmentation, the ageing human capital of the sector and the low level of education of human resource. Today's accelerating globalization of the agricultural sector is giving a strategic role to the human resource management for multinational firms.
In case of international expansions, the mode of market entry is among the key decisions and the immensely important strategic moves for the multinational enterprises. The choice of a market entry is basically the first step of a long term commitment by the enterprises to do business on the targeted markets. In case of agribusiness sector, the market expansion in Hungary may face special issues originated from the history of the area. The paper looks for answers new firms which try to enter must face on the former Soviet Union agribusiness market and the transition period of the 90s in Hungary, since the sector is still characterized by factors carried over from the previous system and after the regime change.
Keywords: *agribusiness, agriculture, human resource, market entry, multinational enterprise*

1. INTRODUCTION
During the past decades the Hungarian agriculture and the whole economy have gone through significant changes. The former Soviet Union system collapsed and its stable market disappeared. The country needed to face a deep-rooted economic transition period in the 90s which changed the socialist economy to a free market system. The agriculture and the agro-food sector were deeply affected by these changes. The privatization and the appearance of the investments of foreign investors caused significant changes between the players of the sector. According to Horváth (2014) the period was characterized by privatization, free market competition and fast market entry and exit from the players' side of the sector. The foreign shareholders were typical but not dominant characters of the agricultural sector at that time.
After 2004 when the new countries, including Hungary joined the European Union and the former Soviet Union states needed to face new challenges and get familiar with another system. New regulations and further changes were implemented in the agricultural sector thanks to the Common Agricultural Policy of the EU. This period affected mainly the life of the processors and traders and brought changes in it since the multinational enterprises entered these fields of the sector. There were many new players on the market and many old firms left the agriculture as well as. It was a kind of purification process where the appearance of the multinational firms had both negative and positive effects.

2. CURRENT HUNGARIAN AGRICULTURAL MARKET
Based on Hungary's geographical and climatic capabilities, its area has good opportunities for agricultural production. A significant proportion of the GDP of modern Hungary can be connected to the agriculture or the agro-food sector (Ottó, 2015) but according to Kiss (2002) due to the significant changes that happened in the sector and agriculture lost its huge importance by the millennium. In 1989 almost 14% of the GDP was produced and 17% of the

employed people worked there while in 2004 4.1% and in 2014 3.7% of the Hungarian GDP was generated by agriculture. On the European level it means that the sector produced the 2% of the whole agricultural production of the EU. The crop production has more than 50% weight in the total agriculture, which is a usual trend between the countries that entered the EU later. While the situation is the opposite and animal breeding is more dominant within the sector in case of the western countries. The shares of grains within the total sowing area of the country is around 70% and out of this territory wheat and corn took almost 60% as the most dominant cereals. During the past years corn has been the most dominant grain product after wheat and barley, but statistics shows increasing sowing areas year by year in case of different oilseeds such as sunflower and rapeseed (KSH, 2016). In case of livestock the country was able to stop the decreasing tendency of the different animals and first the cattle and later the pig and poultry livestock started to increase during the past years. Hungary has 5.3 million hectare land only for agriculture out of the total 7.4 million hectare arable land of the country. In 2014 almost 60% of the total territory of Hungary was used as agricultural land (KSH, 2015).

Both the export and the import markets of agricultural products of Hungary have been quite concentrated during the past years according to KSH (2015). All the dominant agricultural trading partners have been situated within the EU during the past years. The most important export products were cereals and cereal products, meat and meat products, fruit and vegetables and animal feed. The main export markets were the countries situated around the boarders of Hungary, along the Rhine-Main-Danube Canal and Italy. In case of import the most important products are meat and meat products, fruit and vegetables, animal feed and coffee, tea, cocoa and spices coming from neighboring countries, Poland and countries situated along the Rhine-Main-Danube Canal. The most important partner both from export and import point of view is traditionally Germany.

3. AGRIBUSINESS IN HUNGARY

The agribusiness in the national economies contains not only the agriculture but also other sectors which are closely connected to and dependent on it (food processing, milling, distributor and trader industries). The attention of multinational organizations, policymakers and civil society have turned towards the agribusiness sector during the past years because of several reasons such as food security and climate change (Garcia, 2005). Today with a broadly interpreted explanation agribusiness contains (Vidékfejlesztési Minisztérium, 2012):

a; the agricultural sector itself which contains agriculture, forestry, fishing, hunting, manufacture of food and tobacco products,
b; other sectors which produce inputs for the agricultural (eg.: fertilizers, chemicals),
c; the processors and traders who are using the agricultural products connected to their activities (eg. textiles manufacturing, wood processing, food retail and wholesale trade, catering, transport).

During the second half of the previous century, Hungary as a part of the former Soviet Union had a relatively developed agriculture and agro-food sector (Toth–Lakner, 2014). Agribusiness developed during the Soviet area and helped to solve the complex issues of agriculture in the new system. A large farm structure was stabilized in the agriculture and it played an important role in food supply and the employment of the people as well as in the daily life of the families. The agriculture followed the general trends of the national economy of the country and the most important export markets of its products were the member states of the Eastern Block (Nagy, 2006). After the Soviet system collapsed in Central-East Europe during the 90s there was a transition period in the economy as well as in the agriculture and agribusiness sector. In the region the decade was characterized by the collapse of the previous system, changing of

export markets and getting closer to the European Union (Fertő, 2006). Privatization started and new dominant players arrived in the sector. In case of land privatization the formerly nationalized lands were given back the Hungarian citizens. A new structure came into being as it was a mixture of small family farms and big farms of thousand hectares owned by companies. Many new Hungarian and also multinational firms built their business in the country at that time. The dominance of the foreign investors and multinational got even bigger after Hungary joined the European Union. Agriculture needed to face new challenges again after 2004. During the last decades agriculture has lost its weight in the national economy while in the meantime agribusiness could increase its dominance as a more complex sector.

Table 1: The importance of agribusiness in the national economy of Hungary where 100% is the national economy in total (The author's own construction based on data of Videkfejlesztési Minisztárium,2012)

	Performance		Gross value added		Employment	
	millio Huf	%	millio Huf	%	person	%
2008	8.700.822	15,5	2.619.990	11,6	582.618	15,0
2011	9.570.707	16,0	2.849.174	12,0	601.932	15,5

Table 1 shows all the three economic indicators increased between 2008 and 2011. The agribusiness sector of the country could increase its performance by more than 800 000 million Huf during the economic crisis of the past years. Its performance also increased compared to the national economy from 15.5% to 16%. Compared to the national economy the gross value added by agribusiness is higher both in absolute terms and in percentage also as it reached the 12% from 11,6% between 2008 and 2011. In case of employment Table 1 shows that number of people working in agribusiness has also increased by almost 20 000 people which means that in 2011 15.5% of Hungary's employment was connected to the sector.

The position of Hungary would probably increase on the agribusiness market of the region which is supported by the commitment of the national government as well since they signed the Europe 2020 Strategy with the following future aims for the period of 2014-2020 (European Commission, n.d.):

- Increasing competitiveness of Hungary via agriculture
- Development of sustainable management, management of the problems of climate change
- Regional development which strengthens rural economies, communities and create jobs.

4. HUMAN RESOURCE ISSUES OF THE AGRIBUSINESS SECTOR

The importance of industry and agriculture is becoming less dominant while the importance of service and employment has increased in the past years. Today the economists are telling that problem solving skills and competence-based economy have important role in the economies. The Hungarian agriculture is not an exception, the quality and value of human resource is an open question in the near future in front of the sector (Nótári,Berde,Ferencz, 2013).
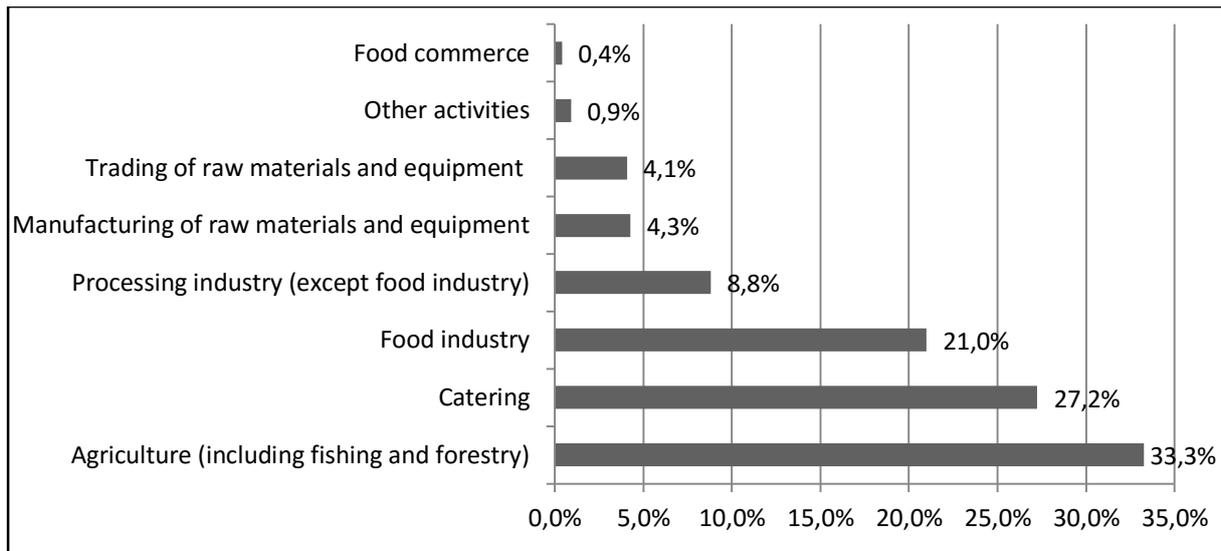
Figure 1: People employed in the agribusiness sector in Hungary in 2012. (The author's own construction based on data of Videkfejlesztési Minisztárium,2012)

As Figure 1 shows the largest labor needs were still connected to the agricultural production itself as one third of the people employed in the agribusiness sector worked here in 2012. The labor intensity of catering (27%) and food industry (21%) is also significant in the sector while processing industry and manufacturing and trading of raw materials and equipment were far behind from the employment point of view. Even though commerce and other activities are important part of the sector but the people employed here did not reach 1% of the agribusiness sector of the country.

5. HR QUESTIONS OF MARKET ENTRY TO THE AGRIBUSINESS SECTOR
One of the most important issues the decision makers of the foreign investors should face is the choice of market entry mode. There are a large number of studies analyzing the different options of it (Ming-Yuan, Jing-Yun, 2011). As agribusiness is a complex sector the questions of market entry are even more significant.
In the chapter, the author shows the key issues of market entry to the Hungarian agribusiness sector from the human resource point of view via the experiences of former companies which were owned by Hungarians at the moment of their foundation but today the main shareholders are foreign multinational firms.

5.1. Issues of acquisition
During the transition period of the 90s many companies which were competitive in the previous system went bankrupt and many new appeared on the market. On the market there were people who had knowledge and experience in the sector and at that time they needed to find their place in the new system. Many of the privatized old companies and the freshly established ones suffered on the market because of the lack of capital. At the same time foreign investors and companies were already looking towards the Hungarian agricultural and agribusiness sector as it was dominant in the region. A typical problem of those years was that there was no stable system, changes were fast and nobody knew what direction the country would go forward to, even though the negotiations with the EU already started at that time. In contrast to the mistrustful issues of the system, entering the Hungarian market was an attractive move for the investors. Because of the lack of capital from the Hungarian side and the potential market

penetration opportunities the typical move was the establishment of joint venture companies or buying shares in a Hungarian company.

Until 2004 when Hungary joined the EU, the decision makers and most cases the main shareholders were the Hungarians within the firms. When Hungary became an EU member state and the agricultural market and system seemed stable the foreign shareholders increased their shares or even became the main shareholders in many companies in the sector.

5.2. Company strategy changes

Usually the changes of the company strategy followed the changes of the shareholder structure. Strategies, visions, missions at the time of the establishment of a company are set to satisfy local or domestic needs and to fit in the actual system. It was also a general idea in the agribusiness sector in the 90s. In parallel with the closer integration to the international firms and foreign shareholders the original ideas changed. Hungarian firms needed to face two-sided pressure. On the one side there was the original strategy and corporate culture, while on the other side there was the regional or global strategy of the multinationals. As Hungary was part of the global agricultural markets and its market power was not dominant on the global level, the better idea was to integrate the Hungarian firm step by step into the operation system of the international. Integration of the subsidiaries caused energy and resources from both sides, but it was an important move to increase the international competitiveness. From the multinational company's point of view the main strategy was entering the market and increases its share in the sector step by step with the help of local companies with proper domestic market information and system.

5.3. Authority: jurisdictional relations

The changes on the shareholder side followed changes in the decision making power and jurisdictional relations on the management side. The more shares somebody has the bigger its power on the decision making side. Originally local management of the companies made all the important decisions and they took the risks with it as well as. After they became a subsidiary of a foreign company their influence decreased at the decision making as there was another main shareholder and they became one piece of a pie in a bigger firm. On the other side the risk of decisions was also distributed within the firm.

5.4. Resources

Questions of resources are always a cardinal issues in a life of a company. In the 90s the companies of the agribusiness sector in Hungary suffered mostly from financial and infrastructural resources. Agriculture is traditionally a capital intense sector of which characteristics were even more dominant at that time. Qualified people with years of experience suffered because of these issues. On the other side foreign investors had capital, operation system and markets but they were missing local knowledge and experience. Because of these demands from both sides the foreign acquisitions of Hungarian companies seemed a satisfying decision at that time. Multinational companies could get their place on the domestic market with qualified employees and local market information. On the other side the new structure gave potential new export markets for the Hungarian firms with additional international market information, new technology, distribution of operational risks and stable financial situation.

5.5. Human resource questions

In case of foreign investments or acquisitions one of the key issues is always the human resources. In the Hungarian agriculture and agribusiness human resource is one of the elements where an investment can turn into a success or a failure. In the sector the value of personal relations and trust was traditionally on a high level and even nowadays it is an important part

of the business. That was one of the reasons why the foreign investors came to the market and increase their shares within the firm and on the market as well step by step. It was also important for the local companies to keep the employment structure as it was a key element of their competitive business. The main issue according to the author was the position of the Hungarian CEO. Keeping this person and motivating him was a strategic decision as the CEO of the company was the link between the domestic operation and the foreign investors. He built and kept together the domestic workers and was the one who could integrate and change the elements of the new strategy made by the main shareholders inside the company. Besides the CEO, the positions on the management level and other employees of the firm were questionable as well. The number of employees should fit into the new strategy of the company which caused conversions in the system and firing and hiring people. Generally the CEO's aim was to keep the job of the employees or even increase their number in parallel with the enlargement of the company. To move a foreign manager from the mother company to the subsidiaries was not a usual act in most parts of the sector as it would cause changes in the everyday operation and people must face language barriers as many people had and have even today problems with speaking foreign languages.

5.6. Organization culture
The difference of corporate cultures is an important part of the acquisitions. From one side the differences of the corporate cultures make the units successful at their operation, but on the other hand differences can cause problems in the everyday communication, operation, business and implementation of strategies of decisions. In Central-Eastern Europe the corporate cultures were influenced by the local traditions and also by the former Soviet regime. On the other side the investors who came to the country at that time were mainly western ones with a completely other type of corporate cultures. The changes in corporate culture took years to fit in the corporate culture of the mother company. Keeping the local characteristic and fitting in a global system was a difficult issue of the acquisitions in the sector.

6. CONCLUSION
The Hungarian and foreign companies of the agribusiness sector have needed to face continuous and dramatic changes and challenges in the recent decades. Thanks to the investment of the foreign companies and the sturdiness, knowledge and experience of the Hungarian people who worked in the sector nowadays agribusiness is increasing its importance domestically within the national economy and Hungarian firms have a stable position and influence on the regional agricultural market in Central-Easter Europe. The different indicators such as employment and gross value added by agribusiness have been increasing during the past years. The paper might serve as a good basic for further research in the agribusiness of the country or the region as there are still many open issues in the sector such as the today changes in the farm structure, in the sowing area or even financing problems of everyday working capital.

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HRM CHOICES FOR BUSINESS STRATEGY SUPPORT: HOW TO RESOLVE THE MOST IMPORTANT HRM STRATEGIC DILEMMAS?

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ABSTRACT

Human ability, knowledge, creativity, motivation is the most valuable strategical tool, so human power can achieve business excellence and competitiveness. To accomplish this aim it is very important to define business strategy and implement such HRM praxis which are the maximal support to the business strategy. The purpose of this paper is to resolve the conceptual and implementation problems of HRM praxis, and so to achieve optimal business strategy support, i.e. by means of HR achieve organizational competitivenes. The aim of this paper is to answer on the question: „What should be done in every HRM praxis to make HR the engine of business strategy i.e. organizational competitiveness and how to resolve most important HRM dilemmas? In this paper this is achieved through explication of basic strategic HRM area and through the explication of basic dilemmas which arise in the frame of mentioned functional/praxis HRM areas such as: a) SHRM in employment; b) SHRM in training, education & development; c) SHRM in motivation & compensations (material rewarding system); d) SHRM in employer-employee's relationships & e) SHRM in work safey & improvement of living&working life.
This paper deals with basic strategical choices and dilemmas on mentioned HRM functional areas, so enable short and clear insight in rational personal politics, which than can be operationalized by means of concrete HR praxis. The practical value of this paper is dichotomous:
  a) advanced level of thinking from operative/technical thinking about HRM functions, as jobs who should be done but are mainly of administrative, time consuming nature, in the same time activities with unknown/unclear value added - to the strategical thinking about HRM functions as crucial support to value adding business strategy.
  b) clear insight what can be done to achieve maximal benefits from HRM functions in the business, and how can be resolved the most dubious strategical dilemmas in each of 5 basic explicated HRM functions.
Keywords: Business Strategy and Human Resources (HR); Competitiveness; Human Resource Management (HRM); Personal Politics; Strategic HRM (SHRM); Strategic Choices of HR, Strategic HRM Dilemmas

"Take me the people and leave me factories and soon will the grass grow through the factory floors. Take me the factories and leave the people and soon we will have the new and better factories."

(Andrew Carnegie, 1835.-1919.)

1. INTRODUCTION

Contemporary enterprise which has the infinite need for effectiveness (Bogdanović, Cingula & Marijan, 2015, p. 281), and competitiveness should their survival and development base on the engagement of all the resourses they have and can engage. In this purposely utilization, human resources, e. g. experience, skills, knowledge, creativity, intelligence, engagement are at least equal important element of business combination, near phisical resources e.g. factory, equipment, technology, geographical location, and organizational resourses e.g. structure, planning, controlling, coordination systems and collective relationships (Noe at all. 2006, p. 42). About quality and engagement of HR, i.e. correct HR handling according the business strategy, depends the using efficacy of every other resources, so not even the best assets without appropriate HR engagement will not bring positive results. In the company organization and management HR are the connectivity (glue) factor of optimal engagement of all the resources, where also management can be treated as important part of HR. Therefore HR have strategic role in achieving the business competitiveness which can be seen in several key points such as: adaptation to enlarged turbulence and uncertainity of business environment, adaptation to continous changes and uncertain future, assuring the mental orientation on permanent improvement and innovation, assuring the orientation on consumers, creation the competitivenss ability and advantages by means of HR, implementation the cognitions of superior praxis of HRM in concrete business organization, what is only possible by means of effective HR (Bahtijarević-Šiber, 1999., p. 127-130). Also, HR managers are becoming more and more involved in formulating and implementing strategy in their organizations because it has been understud that key elements of organizational success are: mission and strategy; organizational structure and HRM which requires their close connection. HRM thus become the main protagonist in strategic plan development and organizational and HR plans are inextricably linked (Ivanchevic, 1994, p. 7). In fact the task of HRM is achieving the actual/current, development and strategic organization goals. At the same time one of the most important task of HRM is exactly strategic one, i.e. putting HR directly and immediately in the function of achieving the organization strategy, i.e. pragmatically, deliberately put the people in the function of achieving the strategic goals of the enterprise. For example there are possible three basic business strategies, and each of elected business strategy should be professionaly connected with HR (cf. Schuler & Jackson, 1995 according to Bahtijarević- Šiber, 1999., p. 162-163):

a) *Innovation strategy* (production of new product and services who are different from the competition);
b) *Strategy of quality improvement* (continous improvement of quality of products and services);
c) *Strategy of lowering the costs* (strategy of leading in low costs what means lowest investment and so lowest costs).

Accordingly this three business strategies needs different HRM approaches and employee behavior, e.g.:

aa) *Innovation strategy* needs people who works different. Different behavior means the creative behavior, high level of cooperativeness in the work, longterm direction, average concern for qualiy and quantity, equal concern for the process and result, high level of risk

taking, high tolerance for uncertainity. The HRM strategy should be so conceived that supports such employee's behavior (e. g. strenghten the teamwork, performance management who is directed on longterm teamwork, activities that enables development of individual skills usefull also for other company positions, compensation system which emphasise more the internal justice than external market equality, lower salaries and greater variabile part; stimulus through the shareholding and flexibile, individualised system of awarding in which each person chose his „package of awards").

bb) *Quality improvement strategy* needs people who works more skillful and better. The behavior who should be internalized to the employee's is: relatively repetive and predictible behavior, middle to longterm direction, average level of cooperation and interdependent behavior, high concern for quality, average concern for quantity, high concern for process, low level risk, attachment to the organizational goals. The HRM strategy should internalize high level of employee's participation in decision about the job and working condition, mix of individual and group criterions of job evaluation mainly oriented on shortterm results, relatively egalitarian employee treatment with some guarantee of job security, extensive and continous training and employee development.

cc) *Lowering cost strategy* needs people who works more i.e. more harder for the same salary. The needed employee behavior has the characteristics: it is relatively repetitive and predictible behavior, oriented shortterm, the work acitivity is primary individual and autonomous, average concern for quality, high concern for quantity, acitivity of low risk with relatively high aspiration for stability. The HRM strategy which suport this business strategy should: have relatively fixed and explicite job description which gives little space for unclearness, narrow designed jobs and narrow carrer path which stimulates specialisations and efficacy, performance evaluation is oriented on short term results, wages and compensations are determined by the criterions of wage levels on the market, minimal training and development of employee's.

The purpose of this paper is conceptualy to resolve the implementation problem of HRM praxis so to achieve optimal business strategy support. The aim of this paper is to answer on the question: „What should be done in every HRM praxis to make HR the engine of business strategy i.e. organizational competitiveness and how to resolve the most important HRM strategic dilemmas? This is achieved through explication of basic strategic HRM areas and through the insight in basic SHRM dilemmas which arise in the frame of mentioned functional/praxis HRM areas:

1) Strategic approach to employment (HR planning, recruitment and selection process);
2) Strategic approach to the training, education and development (deciding which training, development is needed for achieving the strategical goals of enterprise);
3) Strategic approach to employee's motivation and compensations (is it needed to have motivation programs or not and how to choose motivation package?; how to solve the problem of defining the appropriate and efficient compensation package?);
4) Strategic approach to the employer/employee's relationships (how to create effective/productive relationships between employer and employee's?);
5) Strategic approach to work safety and improvement of living and working life of employee's (defining how much of work safety, health and quality of life improvement is appropriate to optimal achieve strategic goals of an enterprise).

2. STRATEGIC APPROACH TO EMPLOYMENT (HR PLANNING, RECRUITMENT & SELECTION PROCESS)

To determine HR employment strategy important are basic 4 strategic areas: a) Planning the quality of needed employee's; b) Planning the needed number of employee's; c) Planning the strategy for dealing with surpluses or deficit of employee's; d) Strategy of recruitment and selection.

2.1. Planning the quality of needed employee's

For good planning in the HRM are important good developed business plans of the enterprises. Business plans of an enterprise should have incorporated strategic directions of business strategy. So, to have appropriate strategic planning of HR, an enterprise should have also good planning of the whole business. This is of course not possible if strategic business planning and/or strategic planning of HR miss the top management support. Strategic purpose of the whole HRM is to answer on the question which people an enterprise need and actually want. E.g. this can be people who are creative, active, professional, which create jobs, who independently (i.e. proactive)[1] do it, or on the other hand obedient, hard-working, somewhat passive (not proactive). Strategy of HR quality has also two basic aspects:

a) Objective aspect (from the organizational poin of view, i.e. organizational objective needs;
b) Subjective aspects (from the managerial point of view, i.e. manager personality (psychology) needs.

In objective sense it should answer what people are the best for the organization, and in subjective sense what people are the best for him manager itself. Namely, top people can be bad organizational solution even in objective sense because lower level jobs do not need such people neither in obective nor in subjective sense (e.g. on simple job it is wrong to engage excellent professionals). If such top competent people are engaged, the most probably situation is that they will soon leave the organization, which gives them the working place unter their abilities. Not secondary question is subjective management opinion/attitude. Namely, management itself should answer to himself what people is the best to hire in objective and subjective sense. From subjective point of view (subjective manager human view) are:

- The people who are very capable, and with powerful critical thinking is hard to manage.
- It is easier to manage the people who know less and think less, who are less competent.
- The need (feeling) of power is very important for people on managerial positions, so it is easier to achieve this feeling with submissive people (cf. Bauer & Erdogan, 2012, p. 621).
- There is also high possibility that high competent people can make manager less important and less powerful or even take the manager position what every manager will try to avoid, so such competent and ambitious people can be inappropriate from managers psychology (point of view).

So managers should very carefully think which people they really want in the enterprise. Some of possibilities are presented in the table 1.:

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[1] Proactive people actively seek, find and resolve the problems.

Table 1. Two examples of employee's strategical choices which can be the strategy support

Exaple of HR strategy choice A	Example of HR strategy choice B
Individualists	Team players
Specialists	Generalists
Actually very useful people	People with high developmental potential
People who should be adopted to job	Job should be adopted to the people
Engagement of experienced people	Engagement of beginners which have high potential and good perspective
Recruitment source inside the enterprise	Recruitment source outside the enterprise
High professional, capable, independant, inteligent, innovative, proactive people.	Specific professional quality is less important, more important are the people who are hard-working, concentrated and obedient.
Talented people which are able to create, develop new products and services, able to develop the enterprise.	Enough qualified people able to do precisely the given work, but no more than that.
People with high ability to change and ready for permanent professional improvement and investment in themselves. Strategy of the enterprise is strenghten the human potential for „every cost."	People by which is the capacity for change less important, because the strategy of the enterprise is not strenghten the human potential for „every cost".
Promotion from inside and outside.	Promotion from inside.

Finnaly, the ideal strategical solution is that engaged people satisfy objective and subjective needs, i.e. organizational and managers ones.

2.2. Planning the needed number of employee's
By the planning of needed number of employee's it is needed to define the methods of such planning. The worst is the situation in which is not used professional planning i.e. without formal methods (so called „non formal methods). Also one-side or inapropriate methods of planning of needed number of employee's can result with high cost because of surpluses or deficits of employee's. An enterprise usually by personal planning should use:

a) Quantitatie methods who can be unappropriate if they are not connected with the reality in which is actually the enterprice. If they are connected with the reality this methods can be very usefull. In strategic sense it should be used the methods like normative method of planning the HR on the ground of work study or method of regression analysis (Buble, 2006., p. 371-372).

b) Qualitative methods are very good suplement to the quantitative methods, but it is not good strategy only to use them in decision of needed number of employees. Typical example is on the ground of questionnaire between functional managers to define the needed number in some organizational function, by which are substituted the estimation methods of the experts (e.g. Delphy method). Such approach can be far from the optimal one.

In strategical sense it is the best approach to combine the both i.e. quantitative ane qualitative methods of planning the needed number of employee's.

2.3. Planning the strategy for facing with surplus or deficits of employee's

An enterprise in the reality should define basic option in its strategy of resolving the problems of surpluses or deficits of employee's. There are three basic strategic option in which management can plan/forecast the contingent activities. They are:

a) *Strategic option of employee's deficit.* In this option management can choose the employee' with parttime engagement, working overtime, rent the employee's, engage the employee on call.

b) *Strategic option of employee's surplus.* Management can choose firing, shortening the working time, deviding the working place, nonpayed holidays, stimulating the voluntary leave from the enterprise, earlier retirement, lowering or „freezing" the salary, demotion, transfer on another working places and natural mould.

c) *Strategic option of the same number of employee's.* It is also possible that the wanted state demand the same number of employee's but different classification structure or the same number or different profiles (qualitative different) employee's. In this case it should make such wanted changes to achieve such HR strategic goal.

The deficits, surpluses or suboptimal structure of employee's are the permanent challenge of an enterprise, so it should be strategically defined the way an organization will deal with it in order to achieve minimum inefficacy.

2.4. Strategy of HRM recruitment and professional selection

To enable the recruitment of optimal HR, the recruitment process should be organized as long-term process, and that it reflect consistency of doing/procedure in long term time. Namely key employee's can not be recruited „ad hoc", but it should be planned their identification and planned their engagement. For some enterprises some employee should be in advance educated and payed their education so that the enterprise has this employee's when needed. Also it is important the regrutation process adopt to aimed groups, answer on needs/wants of potential employment candidates, educate the recruitment staff, give real picture about the organization. It is important to note that there do not exist optimal solution for every enterprise (this process depends about the enterprise position/situation and about attitudes of the management).

For professional selection strategy very important are the questions:
a) How much is organization ready to invest in the whole selection process, the needed people, also the whole further development of the needed people?
b) Which are the criterions and instruments of professional selection process? (e.g. is the main criterion of selection past achievments in enterprise (working experience in enterprise is very important) or main criterion of selection is defined by professional selection procedure i.e. „selection throat").

By the selection strategy it is important to define if an organization will decide for cheap and simple professional selection, i.e. considering only the job application and/or CV, perhaps an final interview or it will engage assessment center with complex and numerious psychophisical measurements, evaluations and strong selection procedure.

3. STRATEGIC APPROACHT TO THE TRAINING, EDUCATION & DEVELOPMENT

The next HR strategic question is: „What an enterprise should strategicaly choose with regard to the training, education, employee's development?" Which training, education and development is needed (i.e. which people for organization need) depends about designed

working places/jobs. Therefore strategic choices in the phase of creating and designing the jobs will significantly impact the strategical choice in the araea of training and development. If this is clear managament of an enterprise can better decide what it will chose in the area of training, education and development. For example there are possible different levels of qualifing mentioned in the table 2.

Table 2. *Strategic types of qualifing in an enterprise*

Type of qualifing	Example
Qualifing for actual/operative jobs	Probationary employee's
Widening and deepening the knowledge and skills for adaptation to job and technology changes (for new jobs)	Qualifing for work with new equipment, new computer progams, languages, etc.
Career development, preparing for advancement and doing more complex and more responsible jobs	Preparation and education for the Head of the Department
Education and preparation for future changes and tasks, education for flexibility	Training for selling on the Internet, creation of the Agency for temporary employment

The knowledge for job purposes can not be acquired instantly, but this in longer process who should be programmed. Strategically speaking training, education and development should be directed in the future, not in the present. What is actually needed, useful in an organization people know or do not know, so they are seeking who is knowing, therefore a reasonable strategy should be life long learning-because it is not possible everything to know in advance. This is important not only because of competences but also for employee's motivation. Namely, if people in organization are engaged in learnig, they are more motivated. This is especially present by the knowledge worker and learning organizations, where is no border between job execution and learning. Learning and adopting are the only strategic HR factors which can assure the organizational ability of affronting with challenges and changes.

4. STRATEGIC APPROACH TO MOTIVATION & COMPENSATION (MATERIAL REWARDING)
### 4.1. Strategic approach to the motivation
Motivation strategy (this is basic managerial job) should raise individual, group and organizational efficacy. The main strategic question here is: „How to designate the optimal strategy of the motivation in an enterprise?" The basis of motivation is always individual, i.e. individual behavior and from this level should start the motivation system building. The fact is that if the individual / people do not see the fulfilment of his/their individual motives, it can not be expected the fulfilment of organizational goals. But, human motivation in organizational settings is very complex area because of several reasons:
   a) the nature of human motivation (a dozen of theories/approaches explain human motivation, every shows a part of truth, so it is not easy to exactly know how to optimal motivate different human beings in short, middle and longterm time-human motivation is also very variable);
   b) broad spectrum of motivation possibilites (which approach, theory, combination of theories/approaches to apply, on whom, how and when);
   c) the efficacy of specific strategic motivation choices (what motivation strategy will result with maximum organizational outcome e.g. profit?) (cf. Bogdanović & Filipović, 2013).

This problems and qualitative answers should resolve each organization, i.e. their managers in cooperation with HR professionals.
How to designate motivation strategy show us the picture 1.

Picture 1. *Flow diagram of questions who should be considered in definition of motivation strategies*
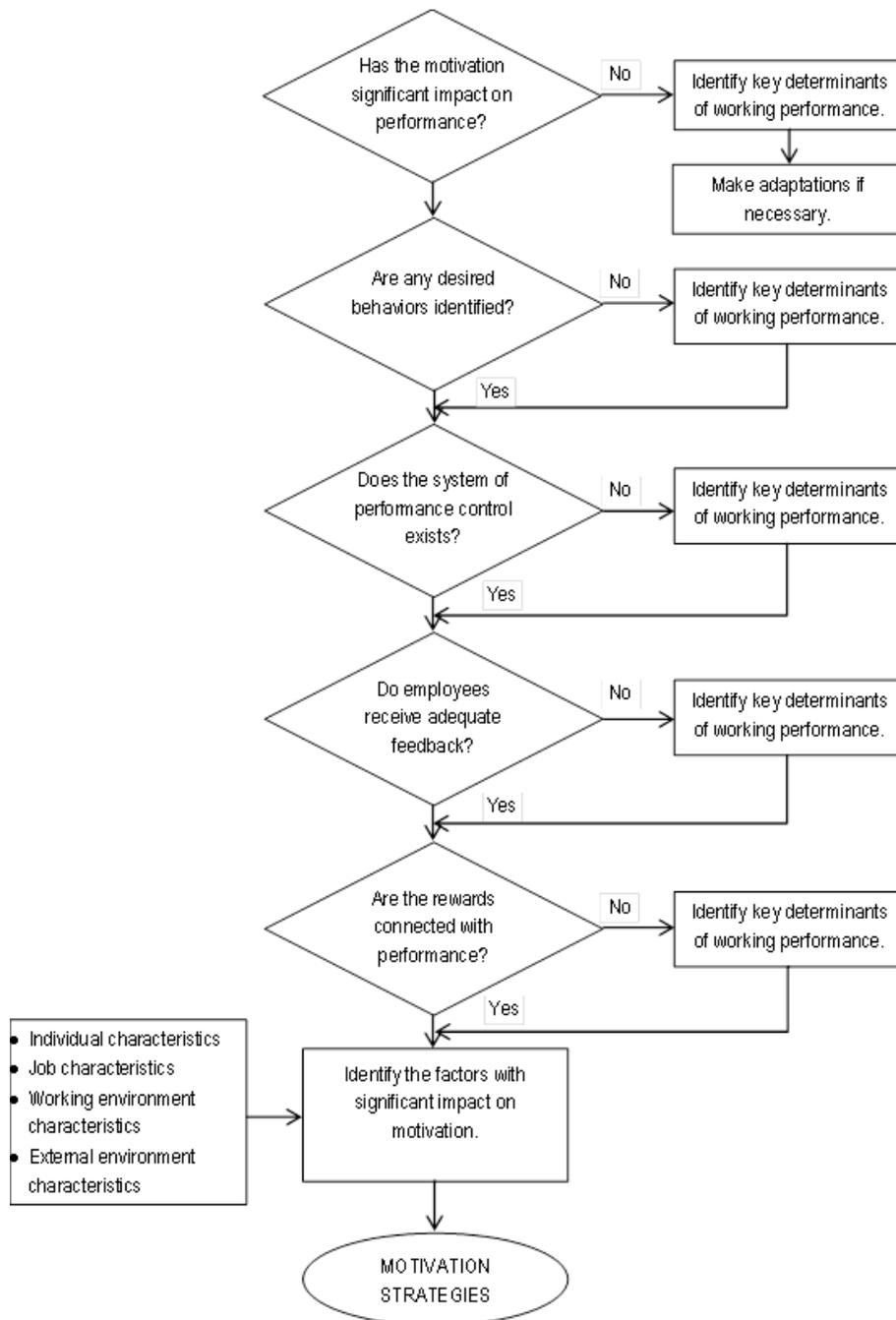
Source: Bahtijarević-Šiber, F. (1999)., p. 604.

Every motivation system who should be applied in the companies should be based on important knowledge from the behavioral sciences (concretely psychology):

1. The most of human needs and motivation factors are nonmaterial in its nature. So every organization near the material needs and aspirations should satisfy psychological needs like status, respect, recognition, authonomy, self-actualisation and development.
2. Motivation strategy should have very different but simultaneous ways and strategies of motivating and here is basic the rule: „Even more individual needs, goals and aspirations can an organization satisfy, so is the greater possibility of high motivation and job identification."
3. By the motivation strategy it should define if motivation significantly impact on working efficacy (Picture 1). If it has not any impact of working efficacy, than this enterprise should not have motivation as strategical or even not functional HR area. After that it should define wanted behaviors which should be designed. Basically is, that it should stimulate the things enterprise want to have more: e.g. quality, quantity, innovations, cooperaton, identification with superior (manager), obedience, loyality, clan behavior, creativity, learning, etc.

There is a large number of motivation options and system should use more approaches. Every motivation strategies can be devided into two large pools: a) *Material i.e. financial motivation strategies*; b) *Nonmaterial i.e. nonfinancial or psychological motivation strategies*, so enterprises today have a lot of of verified and applicable motivation strategies/techniques such as: material (financial) stimulation, re-designing and job enrichment, management style, employees participation, management by objectives, flexible working time, organizational culture, recognition and positive feedback, education, carrer development and else strategies. Material rewarding is aimed for satisfing basic primary needs, and for extraordinary working achievments (quality especially) it should be satisfied the needs of higher level (so called psychological needs).

Management motivation can be strategicaly with stimulating them on entrepreneurial behavior (internal entrepreneurial behavior) i.e. innovative and organization improvement towards strategical goals of enterprise and their managerial work.

4.2. Strategic approach to compensations

Strategic goal of establishing the compensation system is the support to the enterprise business strategy in the way to answer on the key question: „How can the salary and compensation mix system help to achieve enterprise competitiveness?"

Management in the area of strategic compensation approach should decide about two basic areas: a) establishing the salary system: b) establishing an effective compensation mix.

In strategic sense there are three important attitudes about the salaries:

a) It should achieve external equality (balance of the salary high in comparison with external work force market). So if the key workforce is mobile (has alternative/choice to be easy re-employed) and on some working place in company X the salary is 5.000 and on the same working place in company Y is 8.000, the person probably would go on the workpalce with 8000 salary. So it should make this salary equal.
b) It should achieve internal equality (balanced relationship between relative values of working places in the enterprice). E.g. the salary balance between marketing manager HRM manager or IT manager, although there could be discussion should their salaries be equal from the economic/strategic point of view (Noe at all., 2006., p. 398).

c) It should achieve individual equality (the compensation should be according the contribution/performance).

According Milkovich, Newman & Gerhart (2014., p. 240-241) the wages should be strategic arranged according the following criterions:
a) *Efficiency* - wage should improve the business (e.g. quality, client satisfaction, control the cost of work). So the wrong is wage system who pays good wages the people and do not stimulate them on the productivity.
b) *Fairness* - the wage should be payed according the contribution, but also according the employee's needs (fair pay and fair procedure in calculating the pay).
c) *Compliance* - means that the wage system should continuosly be so adjusted, that it is in accordance with normative regulations (laws and normative acts).

For managerial staff (sometimes not only managerial but also professional and all staff) often is important (strategical question) to define efficient strategic compensation mix on the relation salary/benefits/profit share, to stimulate them on strategic (wanted) behavior.

5. STRATEGIC APPROACH TO THE RELATIONSHIPS BETWEEN EMPLOYER AND EMPLOYEE'S

Without satisfying relationships on the relation between employer-employee's, employer-management (employer representative) and mangement-employee it is not possible effective management. Good relationships are the enterprise power. The relationship between them are basically in the relation of COOPERATION-CONFLICT. By the strategic approach to the relationships it should be decided about two basic areas: Stategic attitude (phylosophy) the relationship between employer-employee; b) strategies of participation (i.e. level of participation) the employee's in decision making.

5.1. Strategic possibilities (philosophy) of relationships between employer and employee's

There are different strategic attitudes (philosophies) about the nature of employer and employee relationship. The simpliest usable typology (cf. Craden, 2011.) have three frames:
a) *Unitaristic view.* An enterprise is enlarged family-every in the enterprise is on the same job and we all distribute good and evil. The basic assumption of the nature of this relation is cooperation. Critique of this approach is that complete cooperation is possible only if all are the same (managers, employers and workers) what is at present level of socio-economic development and human evolution not realistic (practically is not possible). In such approach who is present in great extent in Japan there is no substantial conflict (only in seeking the together values and goals), so everybody in enterprise has the same goals, the people work together as enlarged family, team, and the created value is fairly devided. In such a cultural strategic choice union is in fact not needed (if they exist they are very cooperative, loyal to the company). Management here should have the role of head of the family (team leader) to leed the family, team, enterprise. So this is possible in the culture where employee's comes in the enterprise with such attitudes. It is to note that such japanise HRM culture perhaps is not applicable in EU and USA.
b) *Pluralistic view.* There are more sides in relationship, large number of interests which are in the same extent legitime (every side has right to be different with different interests). Conflict is logical and acceptable phenomenon. Because every side has right be different with different interests-it should be found the balance, which will satisfy these of interests (find a compromise). The basic nature of this relationship is conflict but can be resolved in compormis (balance of different interests). Union is the

representative of one interest category and partner in solution seeking. This is the approach of developed capitalism e.g. many of German enterprises have such cultural approach.

c) *Radical view.* Capital relationship create two deeply confrontated sides (work and capital) what is an uncompromising relationship. Such relationship result with class fight – so explain the marxist ideology. Union leeds the fight around the new created value. This is also today the main position of world unions, e.g. Italian and French union with communist orientation, capitalist has interest to increase their profit and workers, quite opposite, to increase their salaries. Although such view was politicaly characteristic for the end of 19. century, also today such views are not seldom. Basic nature of this relationship is conflict who can not be resloved, until exist the society with classes.

According the basic type of existing relationship in society (culture) can be formed the basic relationship strategy (cf. Harzing & Pinnington, 2014, p. 12-27). Key points in strategic releationships of employers and employee's can be presented in following points:

a) Resolving the conflict of the conception of traditional industrial relationships and contemporary HRM approach. Politics, dominant ideology, state government, law system have significant impact on industrial relationships in the society, so have impact on real organizational processes and solutions in the enterprises (especially in the large ones). Also important is the social and economic context, i.e. culture, tradition, juridical system, market of work and in general the situation on the market can impact the system of relationships between employers and employee's in developed countries. Pure economical HRM approach (approach what is most profitable for the company) is limited by the cultural and legal factors, who should be taken into account in designing the appropriate employer and employee's relationship.

b) Collective relationships. This are relationships between employer and unions and collective negotiation. Union activity is much more present in state and public sector, and in private is much less. In USA it is present the decline of unions.

c) Participation of employee's (management and non-management employee's) in decision making. Management operatively and strategicaly represent the employers, but has the employee status (lives dominantly from their work not capital). Management is directed on colaboration with other employee's, but is agent of employer. Management can have two rolles: I) agent with technical role-not strategical role; II) initiators, creators, entrepreneurs, carrier of ideas and solutions-strategical role. Also non-management emloyee's (professional and others) can have this two roles (operative participation and strategic participation).

d) Relationships between employer and employee's in non-unioned enterprises. In smaller enterprises the unionisation is lower, there is less industrial conflict (strike and other forms of rights fight). The relationships there are more harmonised, nonformal because of direct contact and familiar cooperation. Real protection of employee's is much lower (then in middle and large enterprises), often is present authoritary and paternalistic organizational culture (owners are often the managers), and the praxis of HRM is almost weak developed.

Another type of relationships are everyday nonformal human relationships between management (first line) and workers which should be also strategicaly projected as „good and cooperative ones" because of normal continuation of business process. Here is important the participation of employee's through special mechanisms (e.g. organizational culture and climate), with or without unions.

5.2. Strategies of workers participation in decision making
In this strategic area employers (with or without management) basically should decide about the types and levels of employee's participation. The employee's participation can be:
   a) Employee's participation as legal right/duty
   b) Participation as contractual/agreement between employer and empoyee's
   c) Participation as a managerial tool/praxis

It is to decide from what source employee's participation should rise. According the critical article of Strauss and Rosenstein, 1970, models and variants of employee's participation can be devided on:
   a) On the *technical level* so called operative participation. It refers on the level of techical improvements, i.e. empowerment where employee's are engaged in the questions how they will work. Namely it is much easier in technical sense to organize the business if the employee's are included, have also here their interests, improve their working conditions, feel sense in work they do.
   b) On the *political level* so called strategic decision/participation. This means that employee's are included in strategic decision making in important company things like decision about investment, profit share, enterprise development, enterprise enlargement, etc. This political dimension of employee's participation often produce conflict situation. Also this was the noble idea of Yugoslav self-government system and workers self-management.[2]

Here is important to note that every mentioned strategic relationship view has its limitation, and that employers are the main limitations of its employee's. Politics of the company in the relationship area should be the compromise between maximal use of human resources (profitability), cultural-legal appropriateness and humanity, so it is to find the appropriate balance. The experience showed that the employee's participation has tendency to shoutdown if it is leaved on its own, e.g. if employee's give his proposals and nothing in enterprise happen, such system will collapse from its own. Therefore should be also developed the systems of support to employees participation, if the enterprise wants to benefit from this HR strategic area.

6. STRATEGY APPROACH TO THE WORK SAFETY AND IMPROVEMENT OF WORKING AND LIVING CONDITIONS OF EMPLOYEE'S
The rational thinking in this SHRM area is the assumption that if the employee's feel better they will achieve the better results. Therefore the protection of working ability is from the strategical importance for the enterprise. That fact is quite clear in army organization because injured, diseased, psychic disabled soldiers are not optimal choice for the battle.
On this functional SHRM area the basic is strategical thinking which include two basic different philosophies/thinking:
   a) Should HR be treated as addition to the company from which should be received the most possible benefit/profit. If the dominant approach (thinking) is that it should to

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[2] Horvat, B. (1983). The Political Economy of Socialism: A Marxist Social Theoriy. Mainly for this work this croatian economist (1928.-2003.) was nominated for the Nobel price in economics in 1987.

invest what is possible less because people are cost, which should be what is possible less, than is appropriate this strategic approach.

b) Should HR be treated as most important, developmental resource. If the dominant approach is that people are the most valuable asset which can give more and better, the people should be prepared for better working performance and should persevere and improve their working ability-this is than the strategicaly appropriate choice. Some sources mention that this should be contemporary approach because tangible asset respresent only ¼ of company value, and the rest of the value ley in the people: their knowledge, abilities and creativities expressed through work (Pureta, 2009).

The smart strategical thinking is that about this strategic area should be thinked in a way that every employee should be in good health[3], phisical and psychical condition and motivated for work, otherwise can not be expected longterm high performances. In such context as strategic questions should be professionaly treated: a) security/safety on the work; b) health protection; c) protection of employee's rights.

6.1. Strategic approach to the protection and security/safety on the work

Strategically speaking work safety has important economic consideration which is reflected in the problem of cost and benefits for the enterprice. On the cost side there are cost of worksafety, health improvement and insurance. On the benefit side from the good health are increased or very good persevered longterm performance. Namely the strategic dilemma here is: „On one hand big investment in e.g. work safety, worker protection will result with low or absent profit, on the other hand (but it is very possible in some industries) not existing and bad work safety/protection can mean also significant costs, e.g. in the case of employees injuries and professional deseases. This dilemma can be resolved in compromise of investment in work safety because perfect work safety is very expensive and can destroy the company strategic goal (e.g. profit). So the strategical goal should be to protect the employee's from different causes of accidents (work accidents, professional deseases and other deseases). In the operative sense strategical goals of the business organization can be devided into smaller goals/imperatives such as: a) protect the live and health of employee's; b) deminish the number of the accidents and minimize their heaviness/consequences; c) increase the feeling of work safety; d) increase the work efficacy and e) eliminate the consequences of accidents and causalty on the work.

Strategic approach to the work safety can include the activities in the following areas:
1. Safe and healthy working systems. This means projecing the healthy, safe and stimulatie working environment, working space, technology and procedures.
2. Positive management attitude towards worksafety (positive climate about that issue in business organization).
3. Professional treatment of worksafety questions.
4. Procedures and control of implementation should be continous and systematic praxis.
5. Programms of employee's training. The employee's should be trained for safe working, and the ways of maximal decreasing the danger.

It is to remember that each company (depending from their activities should find the appropriate level of worksafety), because for some industries e.g. building industry worksafety is strategic HRM issue, and for some administrative duties (e.g. loyers, parlament members) is

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[3] In this context health can be treated as joyful readiness for work.

not a strategic HRM issue, perhaps only operative HRM issue (individual productivity in the office), and worksafety in working with personal computer (PC) (Directive 90/270/EEC, 1990. about minimal demands for safety and health in PC work).

6.2. Strategic approach to the health protection

According the famous „health" definition of World Health Organization (WHO) (1946) *„Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"*, which told us about the complexity of the healthy state of human beings. Namely, to be healthy human beeing means optimal phisio-psycho-social functioning. For example if an employee is in uncertainity will he lose his job or not, this can be treated as health endanger, because according to WHO health definition this is the state of psychological pressure. Strategic health protection means protection from organizational cost who can arise as a fact of professional deseases and other deseases such as: infective (prevention and vactination); psycho-somatic (i.e. preventing the workplace bullying, protection of right of employee's); way of living (e.g. smoking, excessive alcohol drinking, obesity); environmental (e.g. polution of ear, water, food). Protection of healh means the protection of working ability so it is from strategical importance. Cotemporary organizations nowdays are more aware about e.g. smoking, obesity, infective deseases costs, so can treat this employees problems as strategical ones.

6.3. Strategical approach to employee's right protection

This employee's protection is somewhat nonspecific because it is most difficult to treat it as health problem (wellfare in physical sense), but health is more then only physical well-being (cf. WHO definition of health, 1946.). Also, respecting the employee's rights in fact enable the wellfaire of them. The protection of employee's rights can start from the basic rights of human being (UN declaration about human rights) to the national legislations which regulates this matter, e.g. rights of employee's, rights from the working relationship, individual rights of employee's. The general rights of human being should come first and that working rights. It should protect the following rights of employee's:

a) Rights based on the law i.e complex law system (Constitution, Laws, Under-low normatives).
b) Rights based on collective agreements.
c) Rights based on unilateral normative acts of the enterprise.
d) Rites (nonwriten rules).

It would be out of question that rights who are guarenteed by low are protected because law is above individual (even employeers) will and wish, but in practice this is often violated especially in transition societies and economies, because of weaknes of protection mechanisms. Namely protection of employee's rights often is not enough protected by the working law, working courts and working minimal wage (i.e. easy possibility of achieving this rights although the normative part can be good). It is the fact that that the apsolute rights protection do not exist and that the best right protection is given to the employee's who has the alternative i.e. the possibility to change the job and employer (precognition is good developed workforce market) who will not violate the employee's rights. If the employer do not want to have fluctuation costs of good workers than he should protect the employee's mostly from himself, because of health/productivity of employee's on the one hand, and because of wellfare of his business on the other hand. Namely, good workers (here is meant also managerial staff) are valuable, although they have costs, and to them should be behaved with respect (without violating their rights). So if employer wants to keep good workers (also good managers), and so keep their performances, their rights should be treated in strategical sense.

6.4. Strategic approach to the improvement of employee's living

The area of improvement of employee's living is not present in every socio-economic systems, but it can be treated as humanistic (living the live which is honourable to human being) and strategical question of workforce quality and their performance improvement. Namely with improvement of general employee's wellbeing is also improving their quality and possiblity to perform, although this is not shortterm process. Ways of improvement of employee's living can be strategicaly treated in following areas:

a) Pension-invalidity protection (project such system who protect the employee's in the period when they have right not to work any more or can not work any more, but still will have living needs and therefore costs);

b) Social protection (project and have such protection system for special employee's categories). This categories of employee's who has special needs and is useful (from performance or legal point of view) for enterprise to have such treatment are the employee's with some behavioral problems (alcohol abuse, drug abuse, agressive/bizarre behavior) and special groups who are normatively defined e.g. very young employee's below full adult age, women and maternity protection, professionaly deseased and invalid employee's, employee's who are national, ethnic minorities.

c) Protection of employee living standards, e.g. accomodation, alimentation, transportation, culture, sport, recreation (Goić, 2016; Merćep, 2003).

This HRM areas improves the quality of employee's live, improve and free the energy for working activities, so can be also treated as strategic health and motivation factors.

7. CONCLUSION

To be efficient in todays very competitive environment it is neccesary to implement the logic of HR on the business. Namely there is no organization which should not work by means of the people and through the other people on the efficient way. Concurent ability of business organization is direct consequence of efficient HR praxis in the function of achieving the business strategy i.e. integration of the strategic management and efficient praxis of HR. Human ability, knowledge, creativity and motivation shows us, as the most valuable strategical tools.

In this paper it is explicated the key strategic HR areas with choices what can and should be implemented to give optimal support to business strategy of an business organizations. This important SHRM areas are: a) SHRM in employment; b) SHRM in training, education & development; c) SHRM in motivation & compensations (material rewarding system), d) SHRM in employer-employee's relationships & e) SHRM in work safey & improvement of living & working life.

Every enterprise should decide which HRM functions are from the strategic importance according to the estimation of the added value which they have for the business. This is not simple task which can be simple measured, and in some extent depends on the estimation of importance of each HRM function in value creation/contribution e.g. profit, market share, achieving some other strategical goals, achieving some short-term profitable tactical not defined strategic goal, etc.).

The practical value of this paper is dichotomous:

a) advanced level of thinking from operative/technical thinking about HRM functions, as jobs who should be done but are mainly of administrative, time consuming nature, in the same time activities with unknown/unclear value added (metaphorised they consume 80% of time and give only 20% of value) to the strategical thinking about HRM functions as crucial support to value adding business strategy (metaphorised they consume 20% of time and add 80% of value).

b) clear insight what can be done to achive maximal benefits from HRM functions in the business, and insight how can be resolved the most dubious strategical dilemmas in each of 5 basic explicated HRM functions.

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IMPACT OF CORPORATE GOVERNANCE AND FIRM-LEVEL CONTROL VARIABLES ON DIVIDEND POLICY OF SERVICE TRADE SECTOR OF MALAYSIA

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ABSTRACT

This paper empirically investigates the impact of corporate governance factors (i.e. board size, board independence and CEO ownership) and firm-level control variables (i.e. firm size, firm growth and firm profitability) on the dividend payout policy among the service sector companies of Malaysia that are listed on Bursa Malaysia. Ordinary least square model was used to estimate the results. Sample consisted of 113 service sector firms from the period of 2009 to 2013. The results show that the profitable companies with large boards and less growth tend to pay higher dividends. Findings can be interpreted as that the profitable companies are sharing their profits with their shareholders in terms of dividends to give positive message to the market.

Keywords: Corporate governance, dividend payout policy, control variables, service sector

1. INTRODUCTION

Financial crisis of 1990s proved that the good and efficient corporate governance matters. Then the attention of various agencies operating in Asian countries, including Malaysia, has attracted towards this issue (Mohamad, 2007). This is for the reason that poor standard of corporate governance has been held responsible for leading to the Asian financial crisis took place in 1997 and 1998 (Liew, 2006).

As explained by Broni and Velentzas (2012), corporate governance is actually the process, system, custom, law, and policy that will have an impact on how a corporate or company is regulated and controlled. The principles of Organization of Economic Co-operation and Development (OECD) further explicates that corporate governance involves a number of relationships between the management level of a company along with all of the shareholders,

board of directors, and stakeholders as well that have the company's interest. It presents a general rule for deciding the objectives of a firm.

Generally, corporate governance is deemed as the board's governance. Board of directors of a corporation are the vital facet of a corporation's internal governance which is in charge of offering strategic direction (Lefort & Urzua, 2008). Furthermore, another function of board of director is to separate the control and ownership which is in charge of managing the agency problem between management team and disperse shareholders in a firm (Fama & Jensen, 1983). They are actually the control mechanism in support of monitoring the top management's behaviour. It is stated by Corporate Governance Blue Print (2011) that the formation of a corporate culture is the major task of a board. Therefore, the role of a board in governance is crucial. The constituents of corporate governance generally compute as in the size of control board and also board independence.

This article enriches the literature available on the corporate governance factors (i.e. board size, board independence, CEO ownership, CEO duality and CEO tenure) and firm-level control variables (firm size, firm growth and firm profitability) on dividend policy among the service trade sector of Malaysia. Service sector is large and fast growing sector of Malaysia, which contributed 50.4% to the GDP of the country in 2014 (Source: World Bank Online Database; http://data.worldbank.org/indicator/NV.SRV.TETC.ZS). However, there are quite a few studies available which have comprehensively investigated this sector in terms of corporate governance.

2. LITERATURE REVIEW

This section discusses the literature and findings of previous studies between corporate governance, firm variables and dividend policy of Malaysia service sector companies. Some theories have also been proposed here which have assisted us in hypothesis development and empirical investigation.

2.1 Agency Cost Theory

An important theory explained by the literature is agency cost theory, which was developed by Jensen and Meckling (1976). According to this theory, debt should be considered the important factor that creates conflict between managers and equity holders. Jensen and Meckling (1976) argue that the firm provides the probability distribution of cash flows that cannot be separated from its ownership structure, and that is the piece of information which may explain the optimal capital structure.

Furthermore, some theoretical summary on agency cost theory has been provided by Ryen et al. (1997). According to them, firms faced two sets of agency problems; conflict between stockholders and bondholders, and conflict between managers and stockholders. Regarding managers-stockholders conflict, over-expenditures are made by managers or they use less leverage, which do not benefit stockholders. Managers choose less leverage to avoid risk; risk of losing job, wealth and reputation. Many studies have been carried out to investigate the solutions to tackle agency problems between stockholders and managers.

2.2 Signalling Theory

There are some issues of imperfection information in company profitability and capital gains have lower tax rate compare with cash dividends (Bhattacharya, 1979). In the research, the author have stated that the dividend payout have effect on the investor planning period.

Basoglu and Hess (2014) have stated that signalling theory giving a structure to the both parties (shareholders and executives) so they can understand each other by exchanging information that they have or improve in their relationship. Besides that, this theory also reducing received the incorrect information for investing intention. This signalling theory have been apply in the many sectors like finance, marketing, administrative, information system and accounting literature. Dionne and Ouederni (2011) said that signalling theory is able to modify in the dividend policy when receiving the information that talks about the movement in future cash flow. They believed that dividend signalling will give positive correlation between the inequality of information and dividend policy.

Independent Variables

2.3 Board Size and Dividend Policy

The three reasons were provided by Guest (2009) with regard to why outsized board will fail to perform better; communicational problems (Guest, 2009), reduction in cohesiveness (Casey-Campbell & Martens, 2009) and free-riders problem (Eckel & Grossman, 2005). A company's CEO probably supervises the board directors, which may possibly augment the cost of agency (Lipton & Lorsch, 1992). Guest (2009) made an effort to wrap up these results and elucidated that if boards are small in size they may possibly perform well. It is further clarified by the author that dividend and board are substitute for one another in order to manage the cost of agency and when the size of the board is large the payments of dividends will be higher.

In accordance with Kiel and Nicholsan (2003), boards that are large in size are better able to keep an eye on the resources, which eventually improves a firm's performance. This is for the reason that different individuals may have dissimilar knowledge and backgrounds. On the other hand, small size of the board facilitates in monitoring all members, which assists in making efficient and quick decisions (Haniffa & Hudaib, 2006). In addition, an undersized board proficiently makes the decisions about the policy of dividend payout. Both large and small boards have benefits and drawbacks. Though, it does not rationalize that the board's size is of great importance when it comes to decision making regarding dividends.

2.4 Board Independence and Dividend Policy

In line with Fama and Jensen (1983), board of directors plays an important role in controlling the cost of agency. The effectiveness of the board is augmented by the inclusion of independent directors for the purpose of administering the managers and implement control.

In accordance with Batool and Javid (2014), the independence of board did not have an impact on the dividend policy. The research explicated that firms in Pakistan pay lesser amount of dividends in comparison to other rising economies because Pakistani firms rely on the external financing. The similar findings were also reported by Meher (2005) and an explanation is also

made that in Pakistan dividend policy is standardized for managers rather than supporting shareholders.

Moreover, another research carried out by Uwuigbe (2013) on the sample containing 50 firms that were listed on Nigerian Stock Exchange during the time period of 2006 to 2011. He applied method of regression analysis and discovered that the independence of a board positively affects the policy of dividend payout. By taking a look at the work that has been done on the board independence, this research also anticipates the positive association between board independence and dividend payout policy.

2.5 CEO Ownership and Dividend Policy
A research carried out by Haye (2014) did investigation on 120 financial services firms trading on AMEX, NYSE and NASDAQ in the year 2011. He learned that corporations with low ownership of CEO disburse higher dividend amounts to the shareholders. So, it can be stated that a negative relationship is present between dividend payout policy and CEO ownership.

The ownership of executive stock might act as a key device in the diminution of agency discord in circumstances where asymmetries of information stop the board from efficiently observing the company's capital spending deeds and cash management.

By studying the impact of CEO ownership over the dividend policy, a sample containing 1,754 publicly listed companies from the Spain, Netherlands, Italy, France, Germany, and UK during the time period from 2002 to 2009 was selected to conduct this research. Although, in the sample firms, no major impact of CEO ownership over policy of dividend payout was illustrated through the findings (Cesari and Ozkan, 2013). In short, these researches imagine that a negative relationship is present between the dividend payout policy and the CEO ownership.

Control Variables

2.6 Firm Size and Dividend Policy
It is commonly acknowledged that if a firm is large in size it will have greater means of entry to the capital markets because of their potential of increasing fund with less difficulties and with a smaller amount cost in comparison to firms that are small in size (Al-Malkawi, 2008). Al-Malkawi (2008) took the sample involving Jordanian public listed firms for 15 years (e.g. 1989-2003) unbalanced data in company with 1137 observations and discovered that a positive correlation is present between dividend payout and the company size. In further explanation according to Al-Malkawi (2008), it demonstrates that large firms are more dependent upon internal funds in order to pay dividends. Hence, a lot of the earlier studies (Barclay & Smith, 1995; Fama & French, 2001) believe the size of the company as the foremost constituent of dividend policy and discovered positive association between dividend payout policy and company size.

2.7   Firm Growth and Dividend Policy

It is declared by Zhou and Wit (2009) that the growth of a company is a significant pointer of a successful economy. Growth is the outcome of an organization originated from the mixture of firm-specific resources, routines, and capabilities. The growth opportunities of a firm are associated with its existing organizational production demeanours.

Study of Musiega et al. (2013) found that there is negative relationship between company growth and dividend policy. They conducted their investigation from 2007 to 2011 on the data from Kenya. This is for the reason that the higher the growth of a company, the more the necessity for the funds in favour of the purpose of financing growth and the more probable it is for the firm to keep hold of earnings instead of disbursing them as dividends.

However, a positive association between dividend payout and company growth is reported by Ouma (2012) in 58 firms that are listed in the Nairobi Securities Exchange (NSE) in Kenya in the year 2012. They affirmed that managers ought to give sufficient time when devising a dividend policy that is going to enhance the growth of a firm and consequently the value of a shareholder.

A number of studies have been acknowledged on the subject of dividend policy. Numerous authors turned up with diverse results from their researches on the topic of dividend policy. On the whole, these researches consider that a negative connection is present between the policy of the dividend payout and the growth of a company.

2.8   Firm Profitability and Dividend Policy

In accordance with Amidu and Abor (2006) and DeAngelo et al. (2006), profitability is regarded as a vital component of dividend policy. They discovered that the profitability of a company have a positive connection to the dividend payout. Lebanese banks listed on Beirut Stock Exchange during the period from 2005 to 2011 were inspected by Maldajian and El Khoury (2014) and as a result a negtive relationship was noticed between company profitability and dividend payout policy.

Furthermore, Gupta and Banga (2010) incorporated 150 Indian firms listed on Bombay Stock Exchange for the time period of 7 years. The finding demonstrated that a considerable negative correlation is there between dividend payout and the firm performance, which is in agreement with few earlier researches as well (e.g. Kania & Bacon, 2005; Dilawer, 2012). This illustrates that the lucrative firms have a preference for disbursing lesser amount of dividends to their shareholders. Rozeff (1982) explicated that firms encompassing higher rate of profitability have a propensity for investing in potential projects in order to spread out the business when they observe more opportunities of growth. Thus, this research also looks forward to find a positive correlation between the profitability of a firm and its dividend payments since higher profitability means that the dividend payouts will be higher.

3. RESEARCH METHODOLOGY

Data has been collected from annual financial reports and Datastream. Research model which includes corporate governance variables and control variables is as follows:

$$DP_{it} = \alpha + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 CEOOWN_{it} + \beta_4 SIZE_{it} + \beta_5 GROW_{it}$$
$$+ \beta_6 PROF_{it} + \mu_i + \varepsilon_{it}$$

Where DP_{it} = dividend policy for firm i in year t,
BSIZE = board size
BIND = board independence
CEOOWN = CEO ownership
SIZE = firm size
GROW = firm growth
PROF = firm profitability

The error term is represented by ε_{it} and μ_i is an individual specific effect that is not observable and that is not changeable with lapse of time. To generate coefficient estimates, this study used STATA command "reg".

Table following on the next page

Table 1: Descriptive Statistics

Variable	Mean	Minimum	Maximum	Std. Dev.
DPO	3.5112	0.7550	6.7499	0.7728
BSIZE	0.1345	0	1	0.3415
BIND	42.8069	12.5	100	12.1747
CEOOWN	0.9709	-5.9115	4.2425	2.2935
SIZE	8.8226	6.5780	10.9957	0.8141
GROW	8.8931	-94.676	173.796	26.7661
PROF	6.7262	-21.5537	47.1184	7.1115

Table 2: Correlation Coefficient Matrix

Variables	DPO	BSIZE	BIND	CEOOWN	SIZE	GROW	PROF
DPO	1						
BSIZE	0.155**	1					
BIND	0.030	0.098*	1				
CEOOWN	-0.157**	0.196**	-0.076	1			
SIZE	-0.001	-0.015	0.007	-0.348**	1		
GROW	-0.170**	0.073	0.007	-0.020	0.003	1	
PROF	0.119*	-0.021	0.027	-0.070	-0.131**	0.110**	1

* The coefficient is significant at 1 per cent level.
** The coefficient is significant at 5 per cent level.

Table 3: Regression Results

DP	Coef.	t—value
BSIZE	0.2331*	2.43
BIND	-0.0023	-0.90
CEOOWN	-0.0504**	-3.27
SIZE	-0.0391	-0.91
GROW	-0.0049**	-4.10
PROF	0.0133**	2.84
Cons	3.9841**	9.73
Adj.R^2	0.17	
R^2	0.18	
F—value	8.07**	

* The coefficient is significant at 1 per cent level.
** The coefficient is significant at 5 per cent level.

4. CONCLUSION

The main objective of this study is to investigate the impact of corporate governance factors and firm-level control factors on the dividend payment policy of 113 service sector firms of Malaysia from the year 2009 to 2013. Results show that board size, CEO ownership, growth and profitability remained significant whereas board independence and firm size remained insignificant. Positive relation between board size and dividend payout policy shows that both the variables are substitute to each other for controlling agency costs and larger board-sized companies pay higher dividends. There are less agency cost issues related to equity when CEO owns shares. Findings further show that lesser growing companies and profitable companies are paying more dividends to send positive signals to the market, which may ultimately assist companies to further grow. Furthermore, future research may go in detail about looking into reasons which lead investors take passive role in monitoring and management of dividend payout decisions.

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Entrepreneurship Caught Between Creativity and Bureaucracy

FINANCING PREFERENCES OF CROATIAN SMALL AND MEDIUM-SIZED COMPANIES

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ABSTRACT
Capital structure theories which tried to explain composition of capital structure are not universal and not applicable on all companies. Since optimal capital structure does not exist, we have tried to determine how number of competition in industry and USP (unique selling proposition) of their products or services affect capital structure of small and medium-sized companies (SMEs). In order to find correlation between those determinants, a survey has been conducted on 103 Croatian SMEs (older than 12 months). Their financial data have been derived from their annual reports. The results of this research indicate that there is no relationship between leverage of SMEs and number of competitors in their industry, but USP of their products or services affects their leverage. The results of this research are in the line with pecking order theory. Research results are important for accountants but also for entrepreneurs and those that actively participate in the process of politics and laws creation that are focused on development of small and medium sized companies. Further research focused on influence of financial market (especially underdeveloped financial market) on financial preferences can clarify decision making process on capital structure and sources of financial growth and development of SMEs.
Keywords: *financial preferences, financial crisis, pecking order theory, small and medium-sized companies, underdeveloped financial market*

1. INTRODUCTION

Capital structure, especially the optimum one, is still one of the research questions that has to be answered. Researchers tried to approach the problem from different angles and developed different theories about capital structure. Fama and Miller (1972) as leaders of the agency theory identified two types of conflicts in the company: between owner and manager and shareholder and debtholder. These conflicts in capital structure decision making can limit the amount of debt and all the benefits of the financial leverage. Other researchers indicated that in capital structure of the company important role have asymmetric information. Ross (1977) and Leland and Pyle (1977) proved that signalling the decision of the project financing to the external investor significantly influence capital structure of the company, while Myers and Majluf (1984) showed that the capital structure of the company is the result of different financial options that minimize asymmetric information.

More recent theories, identified by Brander and Lewis (1986) and Harris and Raviv (1988) are trying to interpret capital structure with the interactions between product and inputs on the market and company control. Capital structure model of interactions between product and inputs is focused on availability of the product, quality of the product and negotiation processes between managers and suppliers. Based on this model, Harris and Raviv (1988) conclude that competition of the product can influence capital structure of the company.[1]

These major theories can only partially explain capital structure decision making process and are focused on pursuit for optimum capital structure. Capital structure theories cannot be viewed

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[1] Harris and Raviv (1988) based their conclusion on the reserach of Titman (1984)

and analysed individually and with the idea that there is optimum capital structure. Capital structure has been changed during the time and it has been connected with development of financial markets and availability of debt, market conditions, and characteristics of the industry and level of the control in the company. Myers (1984) explained several limitations of the capital structure theories and among them is the idea that capital structure decision making in small and medium sized companies (SMEs) is different than in companies that were previously analysed.[2] Based on these conclusions, Ang (1992) stressed out in his article that the change of research focus is needed in order to understand the capital structure puzzle. He suggested researches having in mind SMEs.

2. CAPITAL STRUCTURE IN SMEs

Capital structure in SMEs started to occupy the researchers as the number of SMEs became dominant in every economy. Walker and Petty (1978) tried to find major differences between large companies, listed on the stock market and small companies that could not follow the existing capital structure models. They have find out that some financial praxis are completely unnecessary in SMEs, and managers in small companies have very limited number of financial sources. Based on these conclusions, researchers agreed that the process of making decisions on capital structure in SMEs follow completely different pattern, worth to be further researched. Hamilton and Fox (1998), on the sample of 555 SMEs in New Zealand confirmed that the owners/managers in SMEs as first financial source use internally generated sources and after that will search for external sources, primarily long term bank loans. Among reasons for such decisions are mostly very high collaterals and low level of financial literacy among owner/managers in SMEs. These results are in line with the Myer's pecking order theory. Owners/managers in SMEs other sources of finance consider as sort of exit from the company (especially venture funds and IPO) and as major deficiency they have adduced fear of losing control and the ownership of the company.

Hamilton and Fox (1998) also tried to find out if other capital structure models are applicable for the SMEs. They have not find any evidence for supporting applicability of these models in SMEs and even highlighted that "asymmetric information are very rare phenomenon in small companies". They have suggested, together with Norton (1991) to research managerial beliefs and desires which play a large role in determining capital structure of the company.

Owners/managers in SMEs are relaying on different sources of finance, negotiation about credit conditions are extremely important and decisive factor in capital structure decisions since owners/managers in SMEs are in inferior position with local investors, legal form is crucial for owners/manager risk propensity and phases in lifecycle of SMEs mean also that different sources of finance are available. These findings even more deepened the gap between large and small and medium sized companies.

Small and medium sized companies are more influenced by the business eco-system. Beck and Demirguc-Kunt (2006) proved that SMEs will be twice as much affected by the deficiencies and irregularities that characterise all the underdeveloped financial markets, primarily by access to sources of financing, legal protection and corruption.

Figure following on the next page

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[2] All capital structure theories are results of the researches that were conducted on big companies, listed on the stock markets
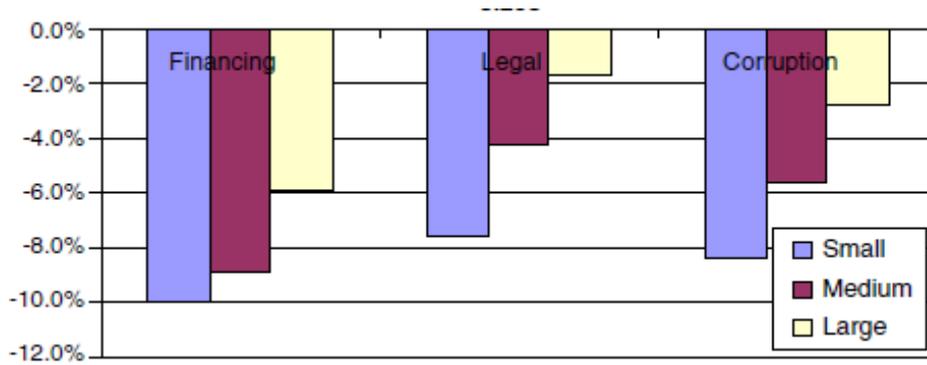
Figure 1: Impact of obstacles from entrepreneurial environment on enterprises, according to size (Beck and Demirguc-Kunt, 2006, p.2937)

Greenwood and Smith (1997), Rajan and Zingales (2001) and Beck (2007) have concluded that in countries with underdeveloped financial and legal systems SMEs will longer stay small and collateral becomes essential for obtaining external financing. Cook (2001) made the most detailed list of differences in SMEs capital structure determinants between developed and underdeveloped countries. He concluded that level of country's development will be evident in a capital structure of SME – higher level of long term assets, higher share of family and friend's money, difficult access to finance and lower net working capital and liquidity ratios.

Small Firms in UK	**Small firms in underdeveloped financial markets**
small firms have a high reliance on short term financing through the banking sector	small firms rely on formal and informal sectors for short term finance
a low proportion of their assets are financed by shareholders so debt to equity ratios are relatively high compared to larger firms	family and friend contribute a high proportion towards financing small firms' assets
fixed assets are relatively unimportant in the balance sheets of smaller firms	fixed assets are important as only collateral that banks will accept
in recent years, leasing and hire purchase and venture capital have become more important	less important
small firms have higher transaction costs than larger firms	confirmed
smaller firms have greater information imperfections than larger firms	more significant in developing countries particularly with respect to financial accounting and management
smaller firms have poor business planning, lack of interfirm cooperation between small firms, weakens relations with financial institutions	networks shown to be very important

Table 1. Determinants of capital structure in SMEs on developed (UK) and underdeveloped financial markets (adopted from Cook, 2001, p.30.)

Recent researches are more focused on determinants of capital structure model in SMEs than differences in arranging capital structure in big and small companies. Among most important determinants of capital structure in SMEs are, according to Matthews et al (1994), managerial characteristics, relation and attitude toward debt and external factors (legal form, financial

conditions and market). Owner/manager of the small company became central point in researches about capital structure decision making in SMEs.

3. DETERMINANTS OF CAPITAL STRUCTURE IN SMEs

Accepting the results of the researches that proved owner/manager's characteristics of the SME as a most important determinant in the decision making process of capital structure, researchers started to use research results from other sciences (mostly phycology and sociology) in order to resolve capital structure puzzle. First articles that were focused on the capital structure decision making process anchored their researches in the theory of rational decision making theory and strategic decision making. Hisrich (1990) was among first researchers who pointed out the need for joining different theories and their views, since every fifth SME will go bankrupt due to financial or emotional risks. First model that incorporated the research results of other sciences was developed by Matthews et al (1994). In the centre of that capital structure decision making in SMEs are managerial characteristics but also some external factors (market conditions, access to finance and legal form of the company).

Michaelas, Chittenden and Poutziouris (1998) presented the model of capital structure decision making in which they took into account the results of prior research, but using Matthews et al (1994) model as a core model and focal point for new, more completed model. In the centre of this model, as the most important determinant in the capital structure decision making process are characteristics of the owners/managers – their need for control, knowledge, experience, goals and risk propensity. Their attitude toward debt, internal factors of the company and external factors (business eco-system) lead to decision about capital structure.

Other researchers, more financially oriented, Patel et al (1991) and Johnsen and McMahon (2005) proved that industry is important determinant while Michaelas et al (1998) and Lopez-Garcia and Aybar- Arias (2000) tried to prove that access to finance is crucial in that process. In that gap, between financially oriented models and those focused on managerial characteristics, there is another direction of researches that tried to prove influence of culture and cultural differences in capital structure of SMEs. Neither one of proposed models can explain completely process of capital structure decision making in SMEs, but helps in better understanding of that process and the idea that there is no universal formula for optimum capital structure. In order to check how Croatian SMEs make decisions about capital structure, 103 SMEs are asked about their attitudes, preferences and habits. The goal of this research was to check whether their leverage and USP of their product or service can be among determinants of capital structure.

4. RESEARCH DESIGN

For the purpose of this research the survey was conducted on the sample of 103 SMEs from the Croatia. From the data of Financial Agency (FINA), SMEs that were older than 1 year and had obligation to deliver their annual reports, were selected. Financial Agency was also the source of their annual reports. The survey consisted of 39 close questions and only 2 open questions. Since the survey was conducted online, all the SMEs that did not have email were excluded. The response rate was 28, 35 %.

Since regional differences can be seen also in capital structure, SMEs in the sample have been chosen according to the number of SMEs in each of three NUTS regions in Croatia. This NUTS (Nomenclature of Territorial Units for Statistics) methodology is also used in the Regional competitiveness index (RIK) research, which was secondary data source. RIK has been used to compare level of development of the regions and the biggest obstacles in the business eco-system.

Age and industry are, according to the prior researches, important determinants in the process of capital structure decision making. The SMEs in the sample are not start-up companies and

are from different industries. Companies in the sample were export but also import oriented ones. Since partnership could be the way of financing company's growth, there was 21,3 % SMEs in the sample that were founded by 2 or more partners. In the sample, there were 58,3 % of the companies that had less than 10 employees. Employees were mostly motivated (70,4 % of the companies) and only 22,2 % of the companies had extremely motivated employees. But, despite that only 2 % of the companies mentioned problem of fluctuation of employees, and 38 % of them is using help from the family members. Although the members of the family are actively involved in the companies, only 42, 6 % of them are payed for their contribution. Owners of the SMEs in the sample find that competition in their industry is high (50 % of them) and extremely high (20 %). Despite this high level of competition, 65 % of the companies find their product or service better and 19 % far better than competition can offer.
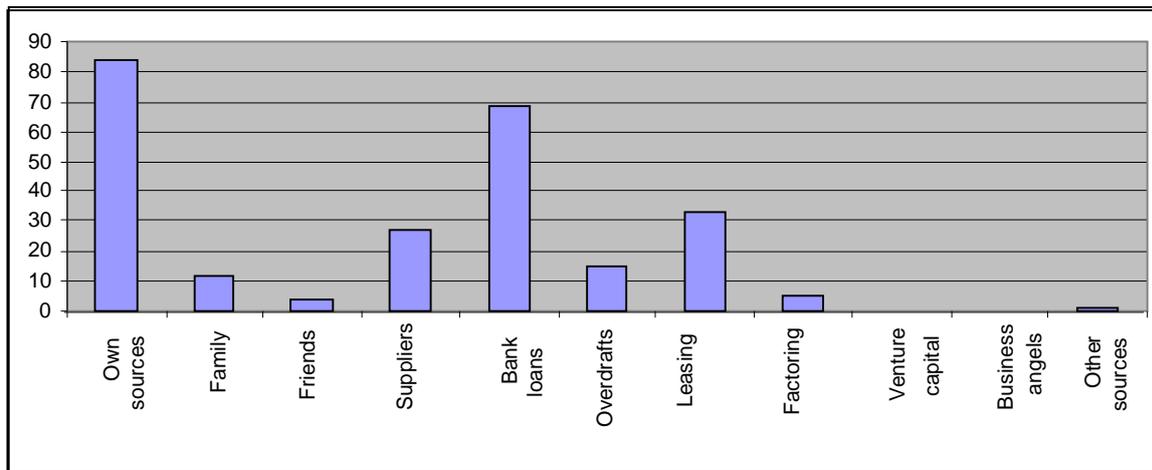

Figure 2: Used sources of finance in the growth phase (author)

In this article, the goal was to check whether number of competitors in industry will affect the leverage of SMEs and is there correlation between USP (unique selling proposition) of the product and service and the leverage of SMEs. For testing proposed hypothesis the Kruskal Wallis nonparametric method was used. The data was collected for the period of three years.

5. RESULTS AND DISCUSSION
Number of competitors in industry and entry barriers in industry will significantly influence the capital structure of the company (Hamilton and Fox, 2001). If the number of competitors is very high, companies will be forced to use leverage more in order to keep their competitive position. There was not enough evidence for the hypothesis that there is a correlation between leverage of the Croatian SMEs and the number of competitors in industry. Explanation for this result could be find on the Croatian market and the attitudes of the companies in the sample. Only 1/5 of SMEs in the sample find that the competition on the market is extremely competitive. On the other side, the results of the survey were collected during the period of financial crisis in Croatia in which companies should change their way of working and approaching the customer. All major investments were stopped, significant number of companies declared bankruptcy and companies were forced to reduce all their costs, including leverage which did not worked for them anymore. Although the Croatia is among countries with underdeveloped financial markets, owners/managers in the sample did not find unfair competition as a barrier (only 42,5 % of the owners/managers found this as a big barrier). The majority of the companies in the sample used own sources and bank loans as a most important sources of finance, while venture capital and business angels were not used at all. Croatian

financial market is underdeveloped and characterized with bank loans as a leading source of finance and very high insolvency. Those characteristics are seen in the sources of finance of the companies in the sample and suppliers are among major sources of finance which only deepens problem of insolvency. This could be also among explanations for not finding correlation between leverage of SMEs and number of competitors in industry. The second hypothesis was focused on correlation between USP of the product and leverage of the company. Unique selling proposition (USP) of the product or service puts product/service in the better position that those produced by competitors. This allows to company to put a higher, even premium price of the product/service. The more retained profit company has, the less external sources will be used. This is in line with Myer's pecking order theory, but tested on large public companies. Since SMEs, also in the observed sample of Croatian SMEs, prefer internal (own) sources of finance, this theory could be applicable on small and medium sized companies, also. Statistical results for the first two years were not significant. The explanation could be find in the financial crisis which lowers demand for premium products and services. The last observed year showed some positive macroeconomic indicators which was sign of recovery and the null hypothesis for the last year was rejected.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of pokazatelj zaduzenosti 2010 is the same across categories of nas proizvod je u odnosu na konkurenciju.	Independent-Samples Kruskal-Wallis Test	,012	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is ,05.

Figure 3. Statistical result for the third year (author)

Despite the great number of capital structure theories, there is neither one that could fully explain different choices of capital structure in the company. There are many determinants that influence owners or managers decisions, especially when owner and manager are not the same person. Small and medium companies have different patterns of capital structure and most of developed theories cannot be applied. Also, the time of financial crisis showed that companies had to adopt their way of working to lower demand for their products and services. On the capital structure of SMEs the market imperfections will affect twice as much. Croatian financial market has characteristics of undeveloped market and SMEs are oriented toward bank loans and internal (own) sources of finance. When those sources are not available, SMEs are forced to rely on their supplier that even more deepens the spiral of insolvency. The habit of not paying obligations on time could explain growth without using external sources of finance, but this will affect competitiveness of Croatian SMEs outside of the national market. Pecking order theory is among rare theories that could be applicable also on SMEs. When SMEs have retained profits, they will not seek for external sources of finance for purpose of growing. Croatian SMEs will follow this pattern if their product or service has USP, but only if economy is growing. In the time of financial crisis, companies were oriented toward survival and external financing was used only to fill the cash-gaps.

461

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THE PROFITABILITY OF SME'S WITHIN RETAIL SECTOR OF ADVANCED EU ECONOMIES

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ABSTRACT
From year 2009 global competitive pressures have increased dramatically and influenced the performance SME's within EU and global retail sector. Nowadays, global retail sector has continued to recover reasonably well, expanding retail sales and profitability. R&D and innovations are beginning to pay off. International markets of advanced economies are showing increasing signs of promise. This paper examines the profitability of retail SME's in advanced EU economies. Keeping above said in mind the main objective of this paper is to explore the profitability of retail SME's of two advanced EU member states: Italy and France over 2006 – 2012 period. The analysis aims to answer whether features of firm environment such as agglomeration externalities and concentration as well as their characteristics such as ownership influence the performance of SMEs. A dynamic panel econometric technique is applied in order to assess the existence of short and long run effects. The obtained findings will be used to formulate recommendations for business policy makers in the field of EU SME's in retail sector.
Keywords: Advanced EU economies, Profitability, Retail Sector, Dynamic panel model

1. INTRODUCTION

According to European Comission (2016), Small and medium-sized enterprises (SMEs) represent 99% of all businesses in the EU. SMEs could be classified as medium sized, small, and micro companies. The category of SMEs is determined by the staff headcount number of either turnover or balance sheet total. When considering the main characteristics, it should be added that large size almost inevitably goes together with less personality and less independence. When considering small scale businesses, one should distinguish between the scale of the production unit or establishment, and the scale of the enterprise (which can consist of one or many different or similar establishments). The scale of the establishment or production unit is of vital importance for a consideration of the structure of the labor force and the process of production: division of labor, labor relations, productivity, labor conditions, content of labor. The scale of the enterprise is of primary importance for a consideration of entrepreneurship (Nooteboom B.,1988). The difference between companies could be found in the independence of a small enterprise which refers to self sufficiency in decision making and limited accountability. This independence is on some kind of way complete, however, due to legal restrictions and restraints from suppliers of capital. As size increases, so does the dependence

level. The key point about small business, however, is that the entrepreneur himself determines the aim of the business and generally also the choice of product, production process, market and location.

Considering the period from 2000, there have been a number of changes in international business. These radical changes included the liberalization of trade, growth of regional economic integrations and advances in information communications. While these changes have taken place, the relevance of small businesses still remains an integral component of the overall economic activity (Leonidou 2004: 279-302). Small businesses continue to be vital contributors to economic growth and development. They stimulate job creation and the provision of low cost goods and services.

When we analyse the key features of global retail sector, it should be added that global retail market is characterized by group of positive and negative financial factors. Group of positive forces incorporate (Preda and Negricea, 2007):

- Relatively low interest rates,
- Easy availability of consumer credit,
- A very strong job market coupled with low unemployment rates,
- Moderate inflation,
- A relatively low personal savings rate (indicating a willingness to spend rather than save) and
- Higher stock market and personal investment values.

On the other side, the negative forces of global retail sector include:
- Higher stock market and personal investment values,
- High consumer debt levels,
- Higher health care costs for consumers,
- Global terrorism, tension and uncertainty and
- Consumers burdened with much higher energy costs including gasoline, home heating fuel, natural gas rates and electricity rates.

These factors have a strong impact on the profitability of SME's within retail sector of advanced EU economies as well. According to Preda and Negricea (2007), the profitability and cash positions of enterprises indicate upward trend. Investments in technology are beginning to pay off, but the competition remains intense in the industry. Therefore, enterprises of retail sectors have developed focused strategies that are allowing them to flourish.

Keeping in mind previously mentioned circumstances and given factors, the profitability of retail SME's in advanced EU economies will be main subject of this research. Current research is oriented towards two advanced member states Italy and France over the period from 2006 to 2012. The analysis will provide main conclusions that are derived from econometrical results. The scope is to investigate the impact of factors like firm environment, agglomeration externalities, institutional framework along with characteristics such as ownership influence on the performance of SMEs.

The research consists of 5 parts. The introduction is followed with the second part of the research introduces recent studies. The third part outlines the methodological frameworks of the research. The fourth part of the research outlines the econometric frameworks and the results of Italian and French SME's performance. The research finishes by outlining proposals and recommendations, as well as final reflections.

2. PREVIOUS RESEARCH

This part of research investigates theoretical background of SMEs and retail sector. A large number of studies confirmed that most of the new jobs belong to the small business industry. (Stanworth and Curran, 1976:95-110; Burns and Dewhurst, 1996:225; Glancey, 1998:18-27). Although the small business sector represents a significant proportion of the global economy (Morrison and Ali 2003:417-425), the role of small business is most vital in small developing countries where technology, capital, size, and other resource constraints limit the establishment of large enterprises. In such economies, the small business sector has the significant role in providing goods and services for the nation (Reddy, 2007).

Literature has confirmed various impacts on the profitability in the retail industry. Findings from Gosman et al. (2004) showed that major customers in the retail industry have been able to garner significant increases in profitability, both in magnitude and persistence. Authors have used the major customer setting for their analysis. The higher major customer profitability could be seen by the market to be sustainable and not offset by increased risk, as evidenced by higher market-to-book multiples for a given level of profitability. They have stressed out the determinants of these benefits (lower selling expenses and higher levels of payables) is consistent with the purported benefits of supply chain management. Their results showed that major customer firms appear to use supply chain power to lower selling costs while carrying lower levels of net working capital.

Other authors are focused more on strategic role of returns policies in terms of increasing sales and profitability. For a example, Pellegrini (1986) indicated that, by implementing a returns policy, a manufacturer can encourage retailers to carry larger stocks and thereby improve sales of its brand relative to competing products. Pasternack (1985) examines how a manufacturer can use return policies to induce multiple retailers to carry the optimal level of stocks. Kandel (1996) emphasizes asymmetric information and the incentives for service and product quality. Padmanabhan and Png (1997) in their research showed that manufacturers should accept returns if production costs are sufficiently low and demand uncertainty is not too great.

Market forces can have strong impact on the profitability of enterprises as well. Literature showed siginificant positive relationship between entry barriers and long-run average profit rates (Mann, 1966, Bain, 1972). Besides entry barriers, Scherer (1980) measured the impact concetration on the profitability of firms. He concluded that concentration may be conducive to collusion, high profits and high prices, but unless there are appreciable barriers to entry, the profits will attract new entrants and the collusion will be undermined eventually. Other factors like limit pricing, predatory pricing, uncertainty, entry lags, etc. make this relationship obscure (Van Herck 1984, De Bondt, 1976; Lippman, 1980). Alternatively, Van Herck (1984) stressed out various papers that have found that entry barriers exert a significant influence on profitability independent of concentration.

Besides microeconomic factors, there are macroeconomic factors that influenced on financial performance of retail sector. According to Preda and Negricea (2007), US retail sales and profitability were significantly affected by low rate of inflation, sales of gasoline (extremely high prices of gasoline) and interest rates on consumer loans and mortgages.

3. METHODOLOGY

The aim of our investigation is to explore the impact of industrial characteristics and ownership on the performance of SMEs in retail sector of two advanced EU member states Italy and France over 2006-2012 period. Such analysis can only be undertaken on the sample coming from

longitudinal dataset. One should also bear in mind that current firm performance depends among other things on its past realizations. Along same lines, there are theoretical reasons to expect the existence of correlation between firm profitability, some of its determinants and time-invariant unobservables such as quality of institutional framework or the quality of management. To take into account all aforementioned issues a dynamic panel estimation technique is chosen. The advantage of this methodology is its ability to control for potential endogeneity of lagged dependent and other independent variables as well as to distinguish between short and long run effects.

The analysis is undertaken using two-step system dynamic panel estimator (Arellano and Bond, 1991.; Greene, 2002). This estimator builds database with double amount of observations and runs estimation of two equations in difference and levels form. The final outcome of this process is however treated as single equation (Roodman, 2009). This way the amount of available information is maximised and more efficient estimation is achieved. The estimation is undertaken in two-step procedure in order to construct matrix of instruments robust to heteroscedasticity patterns. In order to eliminate potential downward bias of standard errors Windmeier (2005) corrections are applied. Finally, a delta method (Papke and Wooldridge, 2005) is used to calculate long run coefficients and their corresponding standard errors and t-statistics. Building on these grounds a model is developed of following form:

$$\text{Profitability}_{it} = \text{Profitability}_{it-1} + \text{Ownership}_{it} + \text{Urbanisation economies}_{it} + \text{Localisation economies}_{it} + \text{Concentration}_{it} + u_i + v_{it} \qquad (1)$$

In equation (1) the dependent variable, profitability is defined as the return on assets (ROA) of firm i in year t. The right hand side of equation includes lagged value of dependent variable which controls for the impact on profitability of its past realizations. On the one hand, previous positive performance provides firms with resources required for competition with current rivals. However, previous superior performance may trigger inflow of other firms in the industry and thus exert negative effect in current period. Along parallel lines successful firms may pursue strategy of survival on the basis of past results which is known as quiet-life behaviour. The result of such behavioural pattern in present period could be reduced profitability. For all these reasons there is no a priori expectation on the sign of this variable.

The explanatory variables include also firm ownership. Here, a firm is considered foreign owned if more than 25% of its ownership is in hands of foreign individuals or institutions. The control for ownership is constructed as categorical variable that takes value of one if firm is classified as foreign owned. There are several channels through which foreign ownership can facilitate better performance results. Transfer of knowledge, access to owner's distribution and supply linkages, easier access to finance are only some of arguments in favour of foreign ownership. Such spillover effects are particularly relevant for SMEs as the size of these enterprises often acts as barrier to engagement in business endeavours. For the above mentioned reasons a positive sign is expected on this variable.

Two variables are included to control for agglomeration externalities. In building of their competitiveness SMEs often rely on cooperation with various agents from their environment. In this process important role belongs to the location. There are several channels through which location of firm can influence its performance. Businesses in densely populated urban areas have better access to demand, greater pool of labour and better infrastructure. In addition to these between industry externalities the concentration of firms from same industry on particular location leads to within industry effects such as knowledge and technology transfer as well as greater ability to share resources and jointly enter market. To control for between industry effects a variable defined as urbanisation economies, the ratio between number of firms in a region and all firms in country is included. Within industry economies are controlled for with

the variable localisation economies constructed as the ratio between all retail firms in particular region and total number of firms in the same region. The positive sign can be expected on these variables as well. The last explanatory variable of the model is industrial concentration measured with Herfindahl Hirschmann index. Industrial concentration is commonly associated with factors such as economies of scale or barriers to entry that enable larger firms to prevent market entry and achieve better business results. However, in context of SMEs, larger concentration can force exit from the market and to this end exert negative effect on their profitability. Yet, the effect of concentration shall depend on the behavioural pattern of large firms. According to dominant enterprise model in concentrated industries large firms may determine their optimal capacity and leave other small firms to serve remainder of the market. For these reasons no expectation can be made regarding the sign of this variable.

In addition to previously described variables of interest model also includes annual dummy variables. The purpose of these variables is control for cross-sectional shocks, universal occurences that affect all firms in a given year such as economic turmoil or natural disasters. The analysis is undertaken on the sample of small and medium sized enterprises taken from database Amadeus, a largest pan-European firm level database. For the purpose of this research data was taken on about 10 000 French and over 12000 Italian SMEs from the retail sector observed over 2006 – 2012 period. The number of firms varies over years which means that we are dealing with unbalanced panel.

4. RESULTS

The results of estimation are presented in Table 1. A starting point of analysis is reflection on model diagnostics as these determine the validity of our model. In both specifications m1/m2 diagnostics suggest absence of first order and existence of second order autocorrelation. Hansen test in both specifications reveals that there is insufficient evidence to reject null hypothesis of validity of instruments. Diagnostics of Wald test indicate that all our variables as a group have explanatory power. Finally, important diagnostic in dynamic panel analysis is the number of instruments used in estimation. Reported values in Table 1 reveal that the number of instruments is several times smaller than the number of groups of cross-sectional units (firms). Together, all these diagnostics provide support to our estimation and enable us to proceed with the interpretation of results.

Table 1: Results of estimation

Variable	France		Italy	
	Short run	Long run	Short run	Long run
Lagged dependent variable	0.53***	-	0.38***	-
Foreign ownership	-16.7**	-35.28**	-52.6***	-84.3***
Urbanisation economies	2.94*	6.20*	4.97*	7.97**
Localisation economies	1.89*	3.99*	2.01	3.21
Industrial concentration	13.36*	28.21*	1.42	2.27
Model diagnostics				
Number of observations	42089		66835	
Number of groups	13465		19306	
Arellano – Bond M1 test	-13.87***		-17.70***	
Arellano – Bond M2 test	1.55		0.23	
Hansen J statistic (p-value)	69.00 (0.15)		6.70 (0.24)	

Source: Own calculations
Note: ***,** and * denote statistical significance at 1%, 5% and 10% respectively
Annual time dummies included

First interesting finding is relative robustness of results over two countries. In both specifications the lagged dependent variable is positive and highly significant. This signals that past realizations of profitability contribute to firm performance in present period. In both specifications the effect of foreign ownership on firm profitability is negative. A likely explanation is that foreign owners place more importance on positioning on market through price competition which has negative effect on profitability. We also find evidence of the importance of agglomeration externalities. In both countries a positive and significant coefficient on urbanisation economies was found. This signals that better pool of labour, ease of access to demand and general infrastructure are relevant for performance of analysed SMEs. It is thus likely that in building of their market position SMEs in both countries rely on the between industry externalities.

In France evidence is also found of the importance of localisation economies. As noted previously these externalities refer to the sector-specific knowledge transfer and sharing of resources such as information, collaboration between firms in supply or distribution segment of business activity. The lack of such effects in Italian sample could be signal that Italian firms lack absorptive capacity required for realisation of localisation economies. Finally, in French sample there is positive effect of industrial concentration on SMEs. Such finding is consistent with theoretical model of dominant enterprise according to which large firms determine optimal capacity and leave remainder of the market to their smaller counterparts. All these previously mentioned effects hold in the long run as well. The magnitude of long run coefficients is larger than the short run ones which means that the full effect on profitability is realised only in the long run.

5. CONCLUSION

Profitability is often regarded as principal indicator of firm success. It is often said that only profitable firms can survive in the long run. The ability to do business and achieve profit is particularly challenging task for small and medium sized enterprises. In their business endeavours these firms often have to overcome numerous barriers whose source is in their size and limited ability to access resources. In such setting features of firm environment often present decisive element of competitive advantage. Knowledge shariing, ease of access to demand, new ways of input supply or goods distribution are only some of the ways how SMEs can overcome barriers to doing business and prosper.

Our findings from two advanced EU economies suggest that spillover mechanisms, agglomeration externalities and industry characteristics play important part in building of SMEs performance in retail sector. It seems that SMEs rely primarily on general agglomeration externalities such as sharing of basic infrastructure. Similarly ease of access to demand is another form of agglomeration externalities that facilitates profitability. Somewhat unexpectedly it seems that foreign owned firms are less profitable than domestic ones. Several explanations can be offered for such finding ranging from price competition pursued by foreign owners over the lack of absorptive capacity to benefit from knowledge sharing mechanisms to the inability of foreign firms to meet needs of local customers.

Together these findings suggest that external environment plays important role in building of firm performance for SMEs. To this end, policy makers should promote measures that facilitate cooperation between firms as well as the cooperation between firms and various supporting institutions. These measures should be aimed not only on supply of initiatives towards SMEs but also towards strengthening of their capacity to absorb elements from their environment and to benefit from them in building of competitiveness and better performance.

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