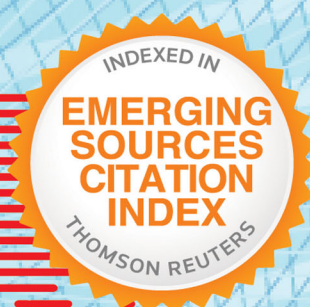


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### Notes from the Editor-in-Chief



Dear authors,

We are still going to work on International Review improvement, so we predicted many novelties for the year 2019. First of all, we shall be more selective when it comes to choosing topics and works. We shall give priority to more scientific and original papers, as well as to topics that refer to business economics, management and entrepreneurship. This means that we will have to narrow our focus in comparison to previous issues, which is again a request from those who evaluate our journal.

Finally, I would like to ask you to follow technical instructions for writing your papers and to not send papers that exceed 10 pages of text. Also, your paper should be in Times New Roman, font size 10, line spacing 1 and B5 page format.

In anticipation of a continuously great interest in the International Review journal (IR) and an even greater number of quality research papers, I can only wish you lots of professional success in this year.

Yours faithfully,  
Academician Mirjana Radovic-Markovic

Editor in Chief

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# AN APPROACH FOR HOTEL TYPE SELECTION BASED ON THE SINGLE-VALUED INTUITIONISTIC FUZZY NUMBERS

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## ABSTRACT

The main objective of this paper is to emphasize the importance of the involving the Multiple-Criteria Decision-Making (MCDM) methods in the process of the selection of the optimal type of hotel for investment. Besides, the application of the Single-Valued Intuitionistic Fuzzy Numbers (SVIFN) is proposed. The applicability of the proposed approach is demonstrated through real case study directed to the selection of the appropriate type of hotel for investment that should be constructed in the Golija Mountain. Three decision-makers estimated five alternative types of hotels relative to the five evaluation criteria. The obtained results are reliable and representative and confirm that introducing of the appropriate multiple-criteria models minimize the possibility of making wrong decisions.

**Keywords:** Multiple-Criteria Decision-Making, Single-Valued Intuitionistic Fuzzy Numbers, Hotel property development, Investment, Selection

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## INTRODUCTION

Investing in the development of a hotel is similar to investing in any kind of real estate and contains three main phases: development, operation and exit (Younes & Kett, 2006). The issue that further complicates decisions about investment in this kind of property is question if the investor should invest in a full service hotel, limited service hotel, and apartments or shared ownership. Development of the mentioned types of facilities is followed by different levels of risk and because of that all influential criteria should be appreciated during the decision-making and selection process. The authors proposed different sets of the criteria for the selection of optimal real estate i.e. hotel for investing in. Some of these authors are Zavadskas, Ustinovichius & Stasiulionis (2004), Migilinskas & Ustinovichius (2007), Ginevičius & Zubrecovas (2009). Because decision-making process is relied on the set of criteria that often are conflicting, the Multiple-Criteria Decision-Making (MCDM) methods are suitable for applying in the area of the selection of the suitable type of a hotel for investment.

The MCDM methods are widely used for the facilitation of the decision-making process in different business fields (Popovic *et al.*, 2019; Stojcic *et al.*, 2019; Chatterjee & Stevic, 2019; Nunic, 2018; Stanujkic & Karabasevic, 2018; Pamucar *et al.*, 2018; Milosavljevic, Bursaca & Trickovic, 2018; Veskovic *et al.*, 2018). The good overviews of these methods are given in the papers by Velasquez & Hester (2013), and Mardani *et al.* (2015a). During the time, appropriate extensions of the given methods are proposed by introducing the fuzzy sets and some authors performed the systematization of the extended methods (Mardani *et al.*, 2015b; Kahraman, Onar & Oztaysi, 2015).

In the area of the hotel operating, the MCDM methods are most often used for estimation of the building's energy efficiency (Xu & Chan, 2013), for the location selection (Krylovas, Zavadskas & Kosareva, 2016), and accomodation quality estimation (Park, Kim & Choo, 2014). The selection of the suitable type of hotel for construction is the topic that was not observed enough. The authors give the attention to the selection of the construction projects in general (Ebrahimnejad *et al.*, 2012; Taylan *et al.*, 2014; Gajzler & Zima, 2017). Popovic, Stanujkic & Karabasevic (2019) proposed the application of the hybrid model based on the SWARA and WS PLP methods in the case of selection of the appropriate hotel type for construction.

In this paper the evaluation and selection of the appropriate type of hotel for investing in is performed by using an approach based on Single-Valued Intuitionistic Fuzzy Numbers (SVIFN). Three decision-makers (hereinafter marked as *DMs*) assessed five types of hotels planned for the construction on the Golija mountain (Horwath HTL, 2007) in relation to the selected set of 5 criteria. We emphasize the fact that the main goal of the paper is to point out the advantages and applicability of the SVIFN in the process of estimation and selection of the optimal type of a hotel for investment. With that aim, the rest of the paper is organized as follows: Section 1 presents the Introduction; Section 2 presents the Preliminaries, Section 3 presents Numerical illustration and finally at the end of the manuscript Conclusions are given.

## PRELIMINARIES

This section considers some basic concepts of Intuitionistic Fuzzy Set (IFS), Intuitionistic Fuzzy Numbers (IFNs) and linguistic variables.

### *Basic concepts of Intuitionistic Fuzzy Sets*

IFS theory was introduced by **Error! Hyperlink reference not valid.** (1986). In addition to belonging to a set, proposed in Fuzzy Set (FS) theory, in IFS theory **Error! Hyperlink reference not valid.** also introduced not belonging to a set. Therefore, an IFS  $\tilde{A}$  in  $X$  can be defined as follows

$$\tilde{A} = \left\{ \langle x, \mu_A(x), \nu_A(x) \rangle \mid x \in X \right\}, \quad (1)$$

where:  $\mu_A(x)$  and  $\nu_A(x)$  denote the degree of membership and the degree of non-membership of the element  $x$  to the set  $A$ , respectively;  $\mu_A : X \rightarrow [0, 1]$  and  $\nu_A : X \rightarrow [0, 1]$ ;  $0 \leq \mu_A(x) + \nu_A(x) \leq 1$ .

In addition, a very useful parameter, called the degree of indeterminacy  $\pi_A(x)$  of  $x$  to  $A$ , is defined in the IFSs theory, as follows

$$\pi_A(x) = 1 - \mu_A(x) - \nu_A(x), \quad (2)$$

under the following condition

$$\pi_A(x) \in [0, 1]. \quad (3)$$

### *Single-Valued Intuitionistic Fuzzy Numbers*

As with the FS theory, the IFS theory also proposes several shapes of IFNs. The significant shapes are the triangular and trapezoidal ones when the linear membership functions are used, while with the bell-shaped ones the non-linear membership functions are preferred.

In addition to the above-mentioned shapes, the singleton shape can be pointed out as a characteristic one. A singleton IFN  $\tilde{A}$ , or Single-Valued Intuitionistic Fuzzy Number (IVIFN),  $\tilde{A} = \langle a, a' \rangle$ , is defined with the membership  $\mu_A(x)$  and non-membership  $\nu_A(x)$  function, respectively, as follows:

$$\mu(x) = \begin{cases} 1 & x = a, \\ 0 & \text{otherwise,} \end{cases} \quad (4)$$

$$\nu(x) = \begin{cases} 1 & x = a' \\ 0 & \text{otherwise,} \end{cases} \quad (5)$$

where: parameter  $a$  indicates the most promising value that describes belonging to a set, parameter  $a'$  indicates the most promising value that describes not-belonging to a set.

**Basic operations on SVIFNs.** The operations of addition and multiplication on IFSs were defined by Atanassov (1994). Let  $\tilde{A} = \langle a, a' \rangle$  and  $\tilde{B} = \langle b, b' \rangle$  be two SVIFNs. Then, the operations of addition and multiplication on SVIFNs are as follows:

$$\tilde{A} + \tilde{B} = \langle a + b - ab, a'b' \rangle, \quad (6)$$

$$\tilde{A} \cdot \tilde{B} = \langle ab, a' + b' - a'b' \rangle. \quad (7)$$

**Score function of SVIFNs.** Chen and Tan (1994) introduced a Score function to provide a method for comparing IFSs. Let  $\tilde{A} = \langle a, a' \rangle$  be a SVIFN. Then, the score  $S_{\tilde{A}}$  of  $\tilde{A}$  is as follows

$$S_{\tilde{A}} = a - a', \quad (8)$$

where  $S_{\tilde{A}} \in [-1, 1]$ .

As in the case of IFSs, the Score function can be used to rank the IFNs, as it is previously shown.

**Ranking of SVIFNs.** For two SVIFNs  $\tilde{A}$  and  $\tilde{B}$ , with scores  $S_A$  and  $S_B$ , the following condition applies:

$$\tilde{A} > \tilde{B} \quad \text{if} \quad S_A > S_B \quad (9)$$

**Intuitionistic Weighted Arithmetic Mean of SVIFNs.** Let  $\tilde{A}_j = \langle a_j, a'_j \rangle$  be a collection of singletons SVIFNs. Then, the IWAM of singleton IFNs is as follows

$$IWAM(\tilde{A}_1, \tilde{A}_2, \dots, \tilde{A}_n) = \left( 1 - \prod_{j=1}^n (1 - a_j)^{w_j}, \prod_{j=1}^n (a'_j)^{w_j} \right). \quad (10)$$

### Intuitionistic Fuzzy Linguistic Variables

The linguistic variables have been extensively used in order to simplify the use of fuzzy numbers. In this approach a linguistic scale adopted from Stanujkic, Zavadskas, & Tamošaitienė (2015) is used. The linguistic scale is shown in Table 1.

Table 1: Linguistic variables for expressing satisfaction and dissatisfaction levels

Linguistic variable	The corresponding numerical values
Completely (C)	0.995
Very high (VH)	0.875
High (H)	0.750
Moderate high (MH)	0.625
Moderate (M)	0.500
Moderate low (ML)	0.375
Low (L)	0.250
Very Low (VL)	0.125
Insignificantly Little (IL)	0.005

## NUMERICAL ILLUSTRATION

In this section, the usage of SVIFNs is demonstrated on a case of the most appropriate hotel type selection on the Golija mountain. A team of three experts (decision-makers) has been formed with the aim of carrying out an evaluation.

At the beginning of the evaluation, the team of experts have defined a set of evaluation criteria. In this case, the team of experts have selected the following criteria: Investment – IN ( $C_1$ ); Number of units - NU ( $C_2$ ); Total area – TA ( $C_3$ ); Price per night – PN ( $C_4$ ); and Events – EV ( $C_5$ ). Proposed set of the evaluation criteria will be used to evaluate five types of hotels planned for the construction on the Golija mountain (Horwath HTL, 2007): Destination hotel –  $A_1$ ; Condotel –  $A_2$ ; B+B Pensions –  $A_3$ ; City houses –  $A_4$ ; and Chalets –  $A_5$ .

After that, experts evaluated alternatives in relation to selected criteria. In doing so, experts express their level of satisfaction and level of dissatisfaction using the linguistic variables shown in Table 1, or the numbers from an interval  $[0,1]$ . The ratings obtained from three experts are shown in Tables 2, 3 and 4.

*Table 2: The ratings obtained from the first of the three experts*

Criteria	$C_1$		$C_2$		$C_3$		$C_4$		$C_5$	
Alternatives	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$
$A_1$	M	L	H	VL	H	VL	H	VL	M	IL
$A_2$	MH	ML	H	VL	VH	VL	H	L	MH	VL
$A_3$	M	VL	M	L	L	IL	M	VL	MH	L
$A_4$	M	VL	MH	ML	MH	IL	M	VL	M	IL
$A_5$	L	VL	H	L	L	H	H	L	M	VL

*Table 3: The ratings obtained from the second of the three experts*

Criteria	$C_1$		$C_2$		$C_3$		$C_4$		$C_5$	
Alternatives	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$
$A_1$	ML	L	M	VL	MH	IL	M	L	MH	IL
$A_2$	MH	IL	H	VL	H	L	H	IL	H	IL
$A_3$	ML	L	ML	VL	ML	L	ML	IL	ML	L
$A_4$	L	IL	MH	VL	H	IL	M	IL	L	IL
$A_5$	VL	IL	M	IL	MH	IL	MH	IL	L	IL

*Table 4: The ratings obtained from the third of the three experts*

Criteria	$C_1$		$C_2$		$C_3$		$C_4$		$C_5$	
Alternatives	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$	$\mu$	$\nu$
$A_1$	ML	VL	MH	IL	MH	L	MH	VL	MH	IL
$A_2$	M	L	VH	IL	VH	IL	M	VL	H	IL
$A_3$	M	IL	ML	VL	ML	IL	M	IL	M	IL
$A_4$	ML	IL	H	IL	H	IL	M	IL	ML	IL
$A_5$	L	IL	MH	L	MH	IL	MH	IL	ML	IL

In order to be evaluated further, the ratings from Tables 2, 3 and 4 are transformed into numerical values. After that, the group performance ratings are calculated using IWAM operator, i.e. using Eq. (10). During this calculation, it is assumed that all experts have the same significance, that is  $1/K$ , which is 0.333. The group performance ratings are shown in Table 5.



*Table 5: The group performance ratings*

Weights	0.25	0.21	0.18	0.20	0.15
Criteria Alternatives	C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>	C <sub>4</sub>	C <sub>5</sub>
A <sub>1</sub>	<0.54, 0.00>	<0.66, 0.12>	<0.66, 0.00>	<0.68, 0.00>	<0.6, 0.00>
A <sub>2</sub>	<0.47, 0.00>	<0.66, 0.00>	<0.73, 0.00>	<0.57, 0.00>	<0.47, 0.00>
A <sub>3</sub>	<0.34, 0.00>	<0.58, 0.19>	<0.58, 0.00>	<0.54, 0.00>	<0.43, 0.00>
A <sub>4</sub>	<0.24, 0.00>	<0.42, 0.00>	<0.47, 0.00>	<0.42, 0.00>	<0.27, 0.00>
A <sub>5</sub>	<0.09, 0.00>	<0.36, 0.00>	<0.09, 0.00>	<0.36, 0.00>	<0.20, 0.00>

The criteria weights, shown in Table 5, were determined using PIPRECIA method (Stanujkic *et al.*, 2017).

On the basis of the data from Table 5, the overall performance ratings are also determined using Eq. (10). Then, using Eq. (8), the value of the Score function for each of the considered alternatives was determined.

The overall performance ratings, values of Score function, and ranking order of consideration websites are shown in Table 6.

*Table 6: The ranking order of the analyzed websites obtained on the basis of Score function*

Alternatives	IWAM	S <sub>i</sub>	Rank
A <sub>1</sub>	<0.63, 0.00>	0.316	1
A <sub>2</sub>	<0.59, 0.00>	0.296	2
A <sub>3</sub>	<0.5, 0.00>	0.252	3
A <sub>4</sub>	<0.37, 0.00>	0.187	4
A <sub>5</sub>	<0.23, 0.00>	0.118	5

As it can be seen from Table 6, the alternative A<sub>1</sub> is the most appropriate one among the considered alternatives.

## CONCLUSIONS

Hotel industry represents an important industry that is often a subject to change. However, what cannot be changed easily, and to a great extent affects the business operations of the hotel, is precisely the type of hotel. Thus, when investing, special attention is given to the selection of the type of hotel for construction. The selection of the suitable type of hotel is usually the result of many analyzes, calculations and market research.

The selection of the suitable type of hotel for construction is the topic that was not observed enough. Therefore, in this paper is proposed one approach for the evaluation and selection of the appropriate type of the hotel for investing based on Single-Valued Intuitionistic Fuzzy Numbers. The applicability of the proposed approach is demonstrated through conducted real case study of the selection of appropriate type of hotel on Golija Mountain.

Conducted numerical example (case study) has shown that proposed approach is adequate when it comes to the selection of type of hotel. Alternative A<sub>1</sub> - destination hotel is the most appropriate one among the considered alternatives for construction on the Golija Mountain in the present conditions. If it is necessary approach could be easily adjusted with additional criteria of sub-criteria if needed. Also, proposed approach can be successfully applied for

solving problems in other areas as well. Obtained results confirm that application of the appropriate MCDM based models will minimize possibility of making wrong decisions, especially when it comes to investing.

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# SMART CITY: THE CASE STUDY OF SAINT-PETERBURG 2019.

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## ABSTRACT

This paper investigates the problems of implementing the concept of a “smart city” as a strategic direction in the development of modern cities. The authors explore the relevance of the concept of "smart city" in modern cities on case study of Saint-Petersburg. The methods applied in the research were analysis and synthesis of modern theory of smart cities, interviews of more than 107 people living in the different part of the city Saint-Petersburg, which was used in conduction with modern smart city theory. The findings of current research discovered the high level of people interest to greening of smart cities and more active using green technologies in the development of smart cities.

Keywords: smart city, green city, sustainability, urban infrastructure, urban planning, urban development, urban management.

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## INTRODUCTION

Over half of the planet now lives in cities, and more than two-thirds of the world's population will be urbanized by 2050. In Russia today, 73% of the population lives in cities, with 17% in million-plus cities. Due to growth of urban population and more active using of digital technologies in cities was based the new direction in science, "smart" city, and its priority firstly was oriented on the techno-sphere safety. The "smart city" was considered as a concept for the integration of several information and communication technologies (ICT) and the Internet of Things (IoT Solutions) for the effective management of urban infrastructure and more active involvement of the urban community in the issues of municipal management. The concept of "Smart City" is very flexible. Each city chooses priority directions of development. The "smart" cities include Seoul, Singapore, Barcelona, Moscow, Kazan, etc. In this study, we consider the development of smart city concept on the case study in St. Petersburg.

## LITERACY REVIEW

The concept of "smart city" emerged relatively recently. And there is no unambiguous and generally accepted interpretation of this term. The very concept of a smart city was born in the late 90s. It was then that the progressive part of humanity for the first time realized that the future was behind the development of the IT sector in the researches of Brilhante, O., & Klaas, J. [2], Lu, H. P., Chen, C. S., & Yu, H. [7].

It is curious that initially this idea developed exclusively in a social, ecological and environmental context.

It is possible to give the following definition: it is the integration of all communication and information technologies for the effective management of the urban system. According to the concept of "smart city", all these technologies are used to solve a number of important tasks such as:

- Rational use of all objects of urban infrastructure also in cyber security by Vitunskaitė, M., He, Y., Brandstetter, T., Janicke, H. [8] and catalyzing urban energy sustainability Haarstad, H., Wathne, M. W. [9];
- Comprehensive landscaping also resource management based on fog computing in smart city systems by Wang, T., Liang, Y., Jia, W., Arif, M., Liu, A., & Xie, M. [10];
- Operational collection and transmission of data to city officials also in the era of big data Bibri, S. E. [4], information systems by Ismagilova, E., Hughes, L., Dwivedi, Y. K., & Raman, K. R. [6];
- Establishing close ties between the city management and local residents and developing an integrative framework as it is presenting in the articles of Chourabi, H., Nam, T., Walker, S., Gil-Garcia, J. R., Mellouli, S., Nahon, K., Scholl, H. J. [1], Desdemoustier, J., Crutzen, N., Cools, M., & Teller, J. [5].

So the main goal of the "smart city" program is to increase the efficiency of all municipal services. Today there are seven main signs of a smart city such as:

- Attraction of ordinary urban residents to management issues;
- Availability of intelligent traffic management systems;
- Reasonable approach to street lighting;
- The introduction of a citywide and affordable Wi-Fi network;
- Active use of solar panels;



- The presence of a warning system for citizens about emergencies through sms-messages.
- Minimum use of cash to pay for goods and services.

The main technologies of the smart city today include wireless sensor networks, various online platforms, sensors (for example, to monitor traffic, air pollution levels, etc.), electronic maps and applications.

The device of a smart city According to the concept we are considering, a smart city consists of seven structural components (parts) - three main and four auxiliary. These are:

1. Smart economy (development of information and communication technologies, a favorable environment for innovation, the availability of an online booking system).
2. Smart financial system (non-cash payments, availability of ATMs and terminals, transparency in the distribution of tenders).
3. Smart city management (openness of the municipal administration, close ties between local authorities and ordinary people).
4. Smart public transportation.
5. Smart infrastructure.
6. Smart lighting.
7. Smart residents.

The concept of smart city start from technological context, after it evacuated to social sphere (Fig 1.) and now we can see strong tendency of its development to ecological sphere (Fig.2.). So the concept of “green city” and the concept of “smart city” start to integrate to each other and we can see it today on the case study of many global cities.

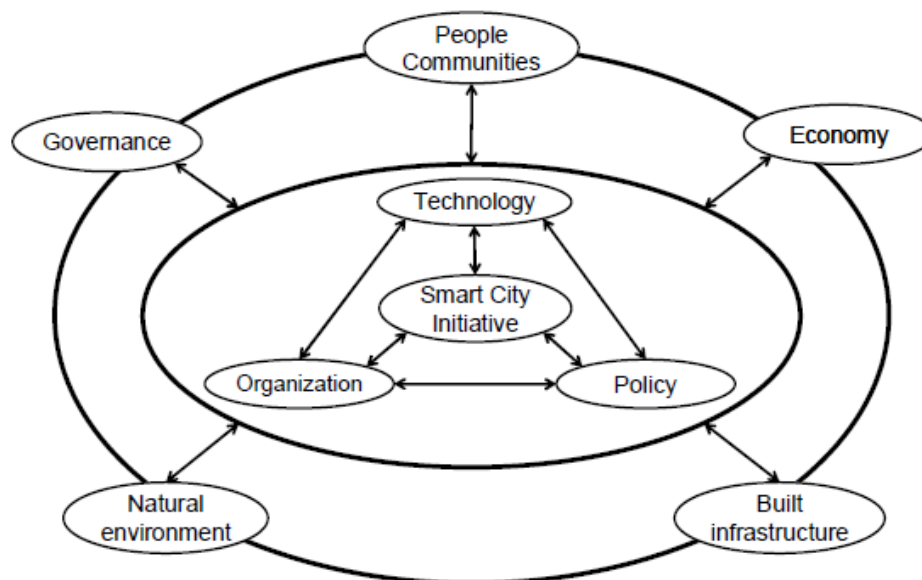


Figure 1. Framework for smart city initiatives

Source: Chourabi, H., Nam, T., Walker, S., Gil-Garcia, J. R., Mellouli, S., Nahon, K., ... & Scholl, H. J. (2012, January) [1]

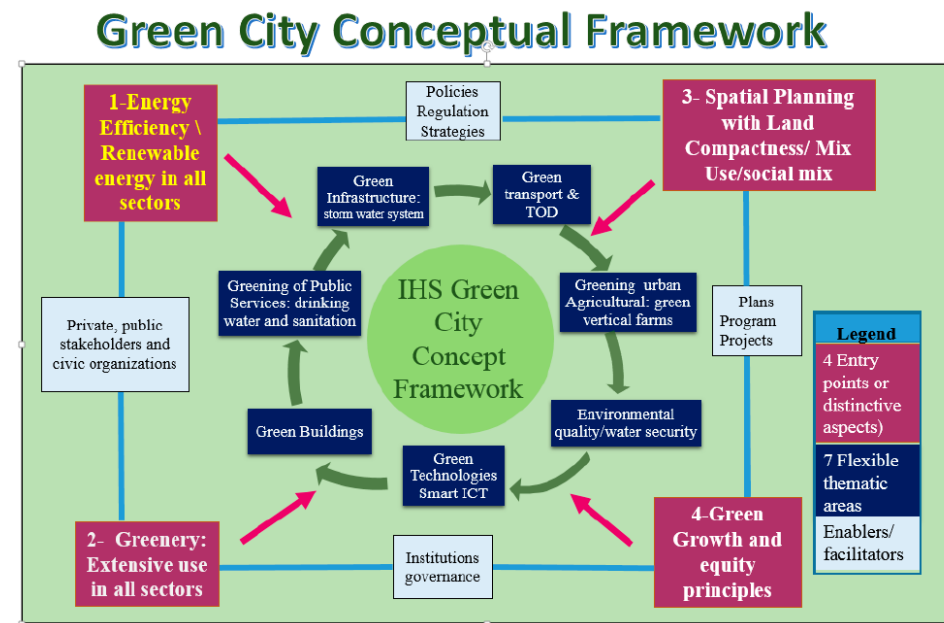


Figure 2. The conceptual basis of the green city

Source: Brilhante, O., & Klaas, J. (2018) [2]

These are the basis theory but as we said before the concept of "Smart City" is very flexible and each city chooses priority directions of development.

## METHODOLOGY

### Methods

The study is based on the method "Interview" which was done with residents of Saint-Petersburg. Due to the lack of information on the subject of 'smart city', the limitations of time for research and the difficulties surrounding communication between the researcher and the visitors with speech, language and communication difficulties, two methods were thought to be the most appropriate: "Interview".

#### 2.2. Data collection and analysis

The total number of interviewed residents is 107 people from 20 till 40 years old, who lived currently in Saint-Petersburg. The statistical distribution of interview results presented below.

### Data Analysis

In our research we investigate the point of view of Saint-Petersburg residents about the case study of smart city saint-Petersburg. Our interview shows that 35,5% of people are sure that smart city should be comfortable for living and its correlated with theoretical concept of smart city also they say about importance of eco-friendly urban environment and techno-sphere safety.

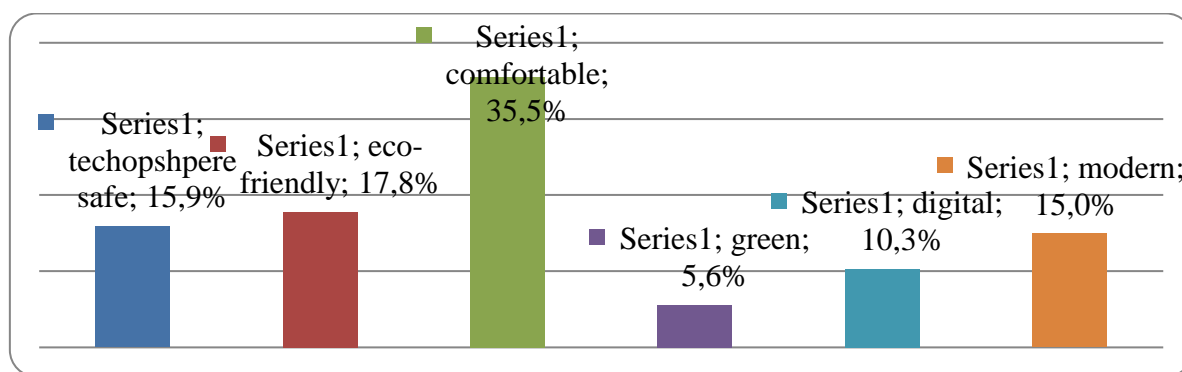


Figure 3. What is for you smart city?

Source. Authors

Among priorities of the development of smart city in saint-Petersburg residents present opinion about importance of the development modern urban infrastructure and modern technologies. Also 28% of interviewed residents said about importance of green zones in the city.

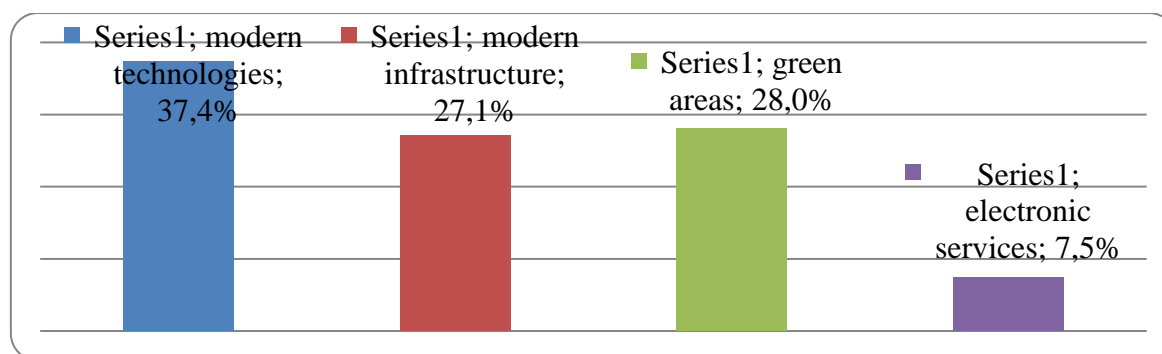


Figure 4. What do you think is most relevant today for the development of modern "smart" St. Petersburg?

Source: Authors

## RESULTS AND DISCUSSION

Theory of smart cities demonstrate the influence of greening city economy and we can notice that the concept of smart cities intergate with the concept of green cities [1,2]. It exist not only in science but also in practice, because if we will compare the ranking of smart cities and the ranking of green cities we will find the same cities: London and New York are in Top 50 smart city governments [3] and in the top 10 of green cities [11]. So by our research we can see that technological innovation in urban development are important for residents and in the same time people prefer to live in green and eco urban zone.

## CONCLUSION

By the case study of Saint-Petersburg, the city located in Europe from 1703 year with population 5, 3 mln. people we can see the evaluation of the concept of smart city from technological point to greening technologies and integration of the concept of green and smart cities into one with sustainable basis.

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# **A HYBRID MODEL OF COMPETITIVE ADVANTAGE BASED ON BOURDIEU CAPITAL THEORY AND COMPETITIVE INTELLIGENCE USING FUZZY DELPHI AND ISM-GRAY DEMATEL (STUDY OF IRANIAN FOOD INDUSTRY)**

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## **ABSTRACT**

Competitive advantage is an important issue emphasized in management and strategic planning over the past few years. This study was aimed to comprehensively evaluate competitive advantage and design and explain a hybrid model of competitive advantage based on Bourdieu capital theory and competitive intelligence using fuzzy Delphi and ISM-Gray DEMATEL in Iran Food Industry.

This article applies a method to managers, with the findings indicating that the firms will not be able to achieve competitive advantage in the market unless they are formed by a high start-up capital and a high competitive intelligence and awareness on the part of the managers as to the business conditions. Such factors enable organizations to make better use of their own cultural and social capitals. Also, the optimal use of social and cultural capitals ameliorates the competitive advantages of the organizations. The authenticity and the economic values added of organizations are further enhanced by obtaining competitive advantage. Promoting organizations' credit and brand improves their economic and market value added, which, in turn augment their capitals and economic assets.

**Keywords:** competitive advantage, economic capital, social capital, symbolic capital, cultural capital, competitive intelligence

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**UDC: 005.332.4:338.439(55)**

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## INTRODUCTION

As far as food industry is concerned, there exists a major need for planning in many countries due to the following reasons (Antelo, Magdalena, & Reboredo, 2017; Chavas, 2017; Perez, Ribera, & Palma, 2017; Nestle, 2013; Vasconcellos, 2003; Kress-Rogers & Brimelow, 2001; Traill & Pitts, 1998; Menrad, 2004):

- Major parts of its value reside in the native country, hence providing a suitable employment condition.
- It provides more profits and values added in every stage of supply chain
- Regarding the locality of the chain of raw material to consumption (value chain), food industry and agriculture are less sensitive to and can survive in the face of external risks.
- High effect of new technologies in increasing the speed and quality as well as reducing the production costs.
- Food industry notably impacts the lifestyle and culture of various social classes.

The increased net value of agricultural products improves indigenous investment in this sector. Moreover, as a result of the availability of food and conversion industries, the brokerage of agricultural products diminishes, thereby leading to a more healthy economy. Supplying food and providing food security are of great importance, a direction in which conversion industry plays a critical role. Owing to the high competition in this field, many manufacturing companies try to achieve competitive advantage, hence higher market share, profitability, authenticity and so forth (Harris & Ogbonna, 2001; Klimek & Hansen, 2017; Massa & Testa, 2009; Topliceanu, Bibire, & Nistor, 2015).

In so far as Iran economy is concerned, food and agriculture occupy prominent positions. The agriculture sector plays a major part in economy because of the availability of potential facilities, arable areas, climate variation, high population and employment in rural parts, presence of economic superiority such as relative superiority of investment in this field and the value of manufacturing assets and capital. Currently, Iran economy is in dire need for the development of products that promote domestic economy and improve non-petroleum exports because. In this regard, conversion industries have a high importance because they play critical roles in domestic economy and, simultaneously, affect non-petroleum export (Valentine; John & Rice, 2013; Tehran Times, 2012). According to Porter's competitive advantage model, the higher the attraction of an industry the more the investment and the competition within that industry becomes. In such contest, the firm with the higher competitive advantage can prevail (Davicik & Sharma, 2016; Hsu, 2013; Perren, 2013; Rui, Zhang, & Shipman, 2017; Wongprawmas & Canavari, 2017).

Broadly speaking, environmental and organizational factors affect competitive advantage. The former refers to achieving competencies through external opportunities, whereas the latter considers the competitive advantage in the context of resource-based view (RNV), competence-based competition (CBC) and dynamic capabilities view (DCV). The main focus of the present study is DCV which refers to the renovation of structures according to environmental conditions. DCV deals with relational and network capabilities, trust, cooperation and inter-organizational alliance (Borseková, Vaňová, & Vitálišová, 2016; Jensen, Cobbs, & Turner, 2016; Peters, Wieder, Sutton, & Wakefield, 2016; Teixeira & Werther, 2013).

Competitive intelligence in DCV includes identifying the nature of change, predicting future market trends, competition, technology, innovation, and customers' preferences and behavioral patterns. The main areas covered by DCV are competitor-related intelligence,

technology intelligence, strategic intelligence and social intelligence. Market intelligence monitors the current and future demands of customers and their tendency to new markets, segmentation opportunities, major changes in market and competitors distribution. Competitor intelligence evaluates the evolution of competitors' competitive strategies via systematic monitoring of competitors' structure, new alternative products and the newcomers of industry. Technology intelligence refers to the profits of current and new technologies and predicts the technologies which will be outcompeted and those that will prevail. Strategic intelligence includes financial and tax rules, political, and human resource and social issues. These four types of intelligence, all interrelated, consider and analyze the socio-behavioral trends ((Ali Köseoglu, Ross, & Okumus, 2016; Mariadoss, Milewicz, Lee, & Sahaym, 2014; Sewdass & Toit, 2014; Shih, Liu, & Hsu, 2010).

Competitive advantage may bring economic value added (EVA) and market value added (MVA). EVA, also called economic profit, is an indicator for the evaluation of financial performance according to surplus wealth calculated by the deduction of capital cost from the operational profit (after deduction of tax), (Borseková et al., 2016; Davcik & Sharma, 2016; Peters et al., 2016 Lieberman, Garcia-Castro & Balasubramanian, 2017).

Bourdieu (1984), a sociologist, developed a comprehensive theory about the social and organizational capital and advantage creation which can be considered as the essence of many theories and visions of advantage. According to Bourdieu, humans do not live in a vacuum but in a number of fields that are composed of elements including economic, cultural, social and symbolic capitals. He who accords with such elements is able to achieve advantage.

- 1- Economic capital: The word capital first came to mean “physical” until 1960s. Physical capital usually refers to building and machinery (Shi, Connelly & Hoskisson, 2017)
- 2- Social capital, Bourdieu argues, represents a collection of relationships, contacts, familiarities, friendships and debts (symbolic debts) that form networks.
- 3- Symbolic capital is a set of related customs to honor or gratitude rules, belonging to a person or a group. Such capital stems from one's charisma, experience, religion, race, prestige, dignity, respect and individual capabilities. Symbolic capital is a part of cultural capital that means legitimating, defining and evaluating. According to Bourdieu, symbolic capital can be considered as a separate capital and as the upper bound of other capital types.
- 4- Cultural capital, Bourdieu holds, refers to information on cultural beliefs and customs and is a behavioral criteria, promoting success and achievement. Cultural capital refers to the ability to perceive and apply cultural goods that appease sustainable tendencies accumulated through socialization. Bourdieu maintained that the theory, on top of macro-level impacts, can lead to variation and competitive advantage in micro communities such various industries and organizations ((Barthélemy, 2017 ; Baxter & Chua, 2008; Cooper & Coulson, 2014; Ihlen, 2005, 2007; Kitchin & David Howe, 2013; Sieweke, 2014).

Reviewing various studies, especially those conducted in the field of food industry, it was revealed that, despite the importance of this sector, there have been few studies proposing a compendious and practical model for achieving competitive advantage. The main objective of the present, therefore, was to find out how the indices proposed by Bourdieu can create competitive advantage in food industry, how competitive intelligence can bring about competitive advantage in food industry and other factors affecting competitive advantage.

## METHODOLOGY

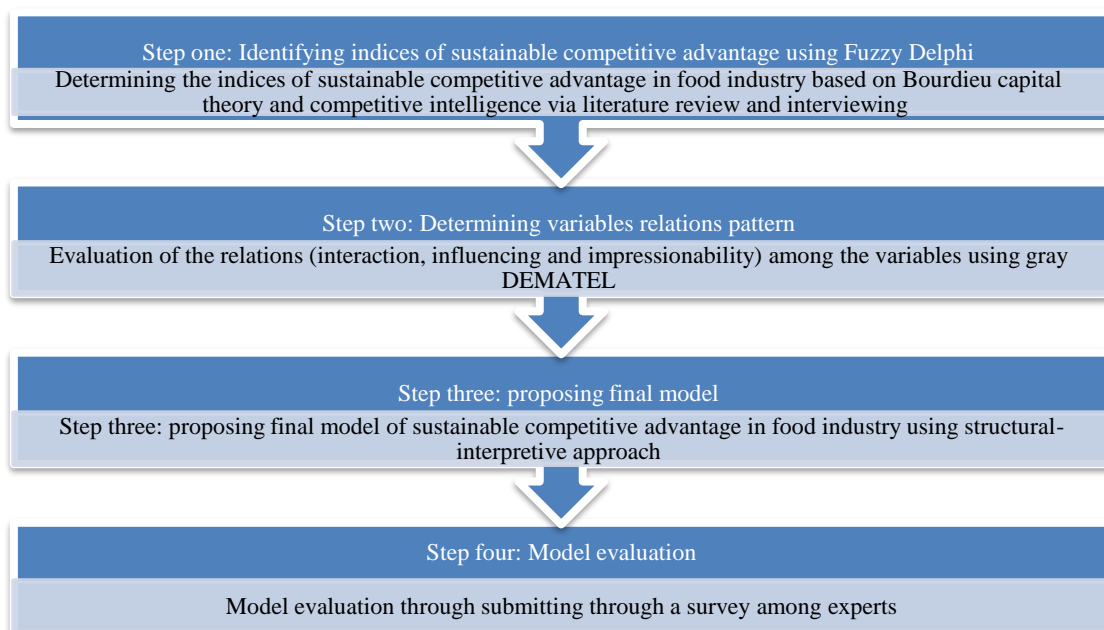
This is an applied study conducted as a descriptive survey in which a combination of library and field methods were implemented. Library method was used to identify research variables, indices and dimensions of economic, cultural, social and intellectual capitals and competitive intelligence. A survey was carried out to collect the required data. Statistical population includes all corporations working within Iran food industry. Sampling was performed by non-randomized judgment method where eight firms were proposed by national standard organization, health and medical ministry and food and drug organization. The first three firms, chosen based on market share over the past five years (playing major roles in the export of non-petroleum products), were interviewed to identify the native and food-specific indices. The size of the sample did not matter in this study, rather the importance was allocated to experts in group decision making.

The experts had to meet the following criteria:

- Education in the fields related to strategic management
- MA degree
- A minimum of ten-year experience in marketing or strategic planning and management
- Work experience as manager or assistant for at least for 5 years

Interviews were continued until a theoretical saturation was reached (46 experts were interviewed). For Delphi procedure, ten experts with better status were selected.

The questionnaires were based on a pairwise comparison of all elements, hence its validity. Moreover, they were submitted to nine experts (chosen out of the interviewees) for content validity evaluation and modified according to their comments. Furthermore, all model factors and criteria were compared pairwise and the highest possible number of questions were asked, thereby eliminating any need for reliability check. Research procedure algorithm was designed based on a scientific methodology as depicted in figure 1.



*Figure1. Research execution algorithm*

## DATA ANALYSIS

### *Descriptive statistics*

Descriptive statistics was used to describe the collected data. Demographic properties of the respondents are presented in table 1. According to the table, most respondents (89%) were married; 41% were 50-60 years old; 57% had MA degree and 54% had a work experience of 10 to 15 years.

*Table 1. Demographic properties of the respondents*

Marriage status	Married	89
	Single	11
Age	30-40 years	19
	40-50	28
	50-60	41
	>60	8
Education	Bachelor and lower	39
	MA	57
	PhD	4
Work experience	5-10	30
	10-15	54
	>15	34

### *Inferential statistics*

#### *Identifying the key factors affecting competitive advantage in food industry using fuzzy Delphi*

Identifying factors affecting competitive advantage is difficult and the background of competitive advantage is scarce in food industry; problem solving, accordingly, requires the cooperation of experts. In this regard, fuzzy Delphi was used to determine the key factors affecting competitive advantage and representing the core of this research. Fuzzy Delphi was performed as follows: At first, via literature review, 59 factors affecting competitive advantage were selected out of which, 36 factors were finally chosen based on the comments of nine experts in the context of Bourdieu capital theory and competitive intelligence together with two additional variables. Fuzzification was performed using Likert's five-point scale with identical distances. Fuzzy counterparts of the linguistic variables are presented in Table 2.

*Table 2. Fuzzy numbers of linguistic variables (Bujadzief, 2002)*

Linguistic variables	Triangular fuzzy numbers
Very high	(0.75, 1, 1)
High	(0.5, 0.75, 1)
Average	(0.25, 0.5, 0.75)
Low	(0, 0.25, 0.5)
Very low	(0, 0, 0.25)

A questionnaire was then prepared and submitted to the experts based on the proposed items and linguistic variables represented in Table 3. In the second part of the survey, another questionnaire was prepared where the proposed items together with the previous comments of each expert and their differences (defuzzified means) were submitted to the expert panel. If the difference between experts' comments in two consecutive steps is lower than the very low threshold (0.1), the survey is stopped (Cheng and Lin, 2002). Finally, a consensus was achieved among the experts as to the components including EVA, national and international award, application of multiple brands, co-branding with famous firms, creating distinctive images, sustainable market share index, observed competitive advantage index, permanent use of global knowledge and organizational learning culture, keeping up with high standards, embedded credits and scientific quality, ethical issues, manufacturing machinery and excellent software and hardware, raw materials in supply chain, high startup capital, professional employees, international vision of managers, suitable pricing approach, appropriate strategies and policies, an accurate understanding of domestic and global technology, R&D unit and permanent monitoring of market and customers' demands, entrepreneurial vision of top management, effective interaction with customers, cooperation with social and public organizations, timely alliance with competitors for market control, using network and WOM in advertising instead of media, internal trust and consistency between managers and staff, and creating trust among the customers with the differences lower than the very low threshold (0.1) between the first and second steps; thus the survey was stopped with the significant difference being about 9 components.

In the third step of the survey, model criteria and components were modified and a third questionnaire was prepared and submitted to the experts. However, in this step, 27 out of 36 components were stopped and the survey was conducted on the remaining nine components. The disagreement among the experts as regards the nine items was lower than 0.1, hence the survey was stopped. Compared with the previous steps, there existed, a suitable consensus among the expert in this step. Out of the various components, top managers' brand in food industry (with a score of -0.12) and cooperation with customers through branding process (0.11) were removed from the model due to disagreement among experts. Therefore, after three steps, two criteria were removed and a model with 34 items was developed. Factors affecting competitive advantage were identified according to fuzzy Delphi method.

### ***Developing final model using ISM-Gray DEMATEL***

Gray multiple-criteria decision making models were used to determine the associations among the variables. For this purpose, gray DEMATEL technique was used where following the determination of the causal relations among the variables, interpretive-structural technique was applied to develop the final model.

### ***Calculating interrelations using GDEMATEL***

The main objective of this study was to elucidate competitive advantage based on Bourdieu capital theory and competitive intelligence using ISM-Gray DEMATEL. The main criteria included competitive intelligence, social capital, economic capital, symbolic capital, EVA, cultural capital, competitive advantage and MAV. The criteria were indexed with  $C_i$  to facilitate their tracking through the research.

Table 3. Criteria of achieving competitive advantage in food industry and its symbols

	C8	C7	C6	C5	C4	C3	C2	C1
	Market value added	Competitive advantage	Cultural capital	Economic value added	Symbolic capital	Social capital	Economic capital	Competitive intelligence

Primarily, interrelations among the indices were identified, forming a matrix for the relationships among the main criteria. The interrelations of the main criteria were achieved by DEMATEL method, so the experts were enabled to express their ideas as to the severity and direction of the effects. It should be mentioned that DEMATEL matrix (interrelations matrix) is cause-effect, influencing the impressionability of the variables.

### Direct relation matrix

In group DEMATEL technique, based on the ideas of certain experts, simple arithmetic mean was used and a direct relation matrix was formed. First, experts' ideas were individually grayed. The primary matrix of each expert was formed as follows:

$$Z^k = \begin{matrix} C_1 \\ C_2 \\ \vdots \\ C_n \end{matrix} \begin{bmatrix} [0,0] & \otimes z_{12}^k & \cdots & \otimes z_{1n}^k \\ \otimes z_{21}^k & [0,0] & \cdots & \otimes z_{2n}^k \\ \vdots & \vdots & \ddots & \vdots \\ \otimes z_{n1}^k & \otimes z_{n2}^k & \cdots & [0,0] \end{bmatrix} \quad (1)$$

In this matrix,  $Z_{ij}^k$  stands for the effect of the element  $i$  on element  $j$  based on  $k$ th expert vision. In order to form final direct relation matrix, the mean of experts' comments was calculated for each element:

$$X = \frac{1}{n} \sum_{k=1}^n Z^k \quad (2)$$

And a direct relation matrix ( $X$ ) was calculated by estimating the gray mean of experts' comments.

Table 4. Gray direct relation matrix

X	C1	C2	C3	C4	C5	C6	C7	C8
C1	[0, 0.3]	[0.32, .62]	[0.4, 0.66]	[0.55, 0.4]	[0.67, .16]	[0.42,0.78]	[0.47, .72]	[0.44, 0.3]
C2	[0.45, 0.6]	[0, 0.3]	[0.55, 0.4]	[0.51, 0.36]	[0.41, 0.56]	[0.34, 0.62]	[0.43, 0.68]	[0.53, .48]
C3	[0.38, 0.66]	[0.31, 0.48]	[0, 0.3]	[0.47, 0.32]	[0.41, 0.72]	[0.36, 0.66]	[0.31, 0.6]	[0.46,0.62]
C4	[0.23, 0.48]	[0.2, 0.5]	[0.45, 0.68]	[0, 0.3]	[0.43, 0.28]	[0.48, 0.62]	[0.43, 0.64]	[0.38, .66]
C5	[0.22, 0.42]	[0.19, 0.4]	[0.35, 0.64]	[0.34, 0.5]	[0, 0.3]	[0.41, 0.76]	[0.27, 0.52]	[0.44, 0.66]
C6	[0.32, 0.62]	[0.39, 0.56]	[0.55, 0.64]	[0.44, 0.66]	[0.44, 0.58]	[0, 0.3]	[0.6, 0.38]	[0.38, 0.7]
C7	[0.3, 0.42]	[0.31, 0.44]	[0.31, 0.48]	[0.31, 0.56]	[0.35, 0.64]	[0.36, 0.54]	[0, 0.3]	[0.2, 0.5]
C8	[0.22, 0.42]	[0.19, 0.4]	[0.34, 0.62]	[0.29, 0.44]	[0.25, 0.48]	[0.4, 0.62]	[0.21, 0.48]	[0, 0.3]

Calculating the normal direct relation matrix

Direct relation matrix was normalized using the following formula:

$$\otimes s = [\underline{s}, \overline{s}] = \frac{1}{\max \sum_j^n \otimes} \quad (3)$$

$$N = \otimes S \times X \quad (4)$$

$$N_{ij} = [\underline{S} \times \underline{X}_{ij}, \bar{S} \times \bar{X}] \quad (5)$$

The sum of the upper and lower bounds of each row was individually calculated. The elements of the lower bound were divided by the largest sum of the lower bounds. Elements of the upper bound were divided by the largest sum of the upper bounds.

Therefore,

$$\otimes S = \left[ \frac{1}{4.4}, \frac{1}{3.3} \right] \quad (6)$$

Normalized matrix (N) of the main criteria was formed as follows:

*Table 5. Normalized matrix of the main criteria (N)*

N	C1	C2	C3	C4	C5	C6	C7	C8
C1	[0, 0.092]	[0.072, 0.19]	[0.09, 0.202]	[0.124, 0.122]	[0.151, 0.049]	[0.095, 0.239]	[0.106, 0.22]	[0.099, 0.092]
C2	[0.101, 0.183]	[0, 0.092]	[0.124, 0.122]	[0.115, 0.11]	[0.092, 0.171]	[0.077, 0.19]	[0.097, 0.208]	[0.119, 0.147]
C3	[0.086, 0.202]	[0.07, 0.147]	[0, 0.092]	[0.106, 0.098]	[0.092, 0.22]	[0.081, 0.202]	[0.07, 0.183]	[0.104, 0.19]
C4	[0.052, 0.147]	[0.045, 0.153]	[0.101, 0.208]	[0, 0.092]	[0.097, 0.086]	[0.108, 0.19]	[0.097, 0.196]	[0.086, 0.202]
C5	[0.05, 0.128]	[0.043, 0.122]	[0.079, 0.196]	[0.077, 0.153]	[0, 0.092]	[0.092, 0.232]	[0.061, 0.159]	[0.099, 0.202]
C6	[0.072, 0.19]	[0.088, 0.171]	[0.124, 0.196]	[0.099, 0.202]	[0.099, 0.177]	[0, 0.092]	[0.135, 0.116]	[0.086, 0.214]
C7	[0.068, 0.128]	[0.07, 0.135]	[0.07, 0.147]	[0.07, 0.171]	[0.079, 0.196]	[0.081, 0.165]	[0, 0.092]	[0.045, 0.153]
C8	[0.05, 0.128]	[0.043, 0.122]	[0.077, 0.19]	[0.065, 0.135]	[0.056, 0.147]	[0.09, 0.19]	[0.047, 0.147]	[0, 0.092]

Calculating the full relation matrix

For this purpose, the identity matrix (I) was formed and then deducted from the normalized matrix; the resulting matrix was inversed and, ultimately, the normalized matrix was multiplied by the inversed identity matrix:

$$T = N \times (I - N)^{-1} \quad (7)$$

*Table 6. Total relation matrix (T) of the main criteria using gray values*

T	C1	C2	C3	C4	C5	C6	C7	C8
C1	[0.108, 0.621]	[0.166, 0.492]	[0.232, 0.612]	[0.257, 0.257]	[0.283, 0.629]	[0.23, 0.559]	[0.234, 0.562]	[0.234, 0.676]
C2	[0.201, 0.549]	[0.099, 0.59]	[0.259, 0.682]	[0.25, 0.25]	[0.233, 0.532]	[0.214, 0.545]	[0.225, 0.579]	[0.251, 0.633]
C3	[0.17, 0.595]	[0.149, 0.597]	[0.126, 0.78]	[0.22, 0.22]	[0.211, 0.548]	[0.196, 0.614]	[0.182, 0.668]	[0.216, 0.66]
C4	[0.138, 0.605]	[0.125, 0.559]	[0.213, 0.638]	[0.118, 0.118]	[0.208, 0.63]	[0.214, 0.594]	[0.201, 0.619]	[0.194, 0.612]
C5	[0.123, 0.634]	[0.111, 0.598]	[0.178, 0.659]	[0.173, 0.173]	[0.103, 0.64]	[0.185, 0.544]	[0.154, 0.669]	[0.191, 0.619]
C6	[0.173, 0.617]	[0.178, 0.588]	[0.255, 0.699]	[0.231, 0.231]	[0.233, 0.604]	[0.137, 0.539]	[0.254, 0.737]	[0.216, 0.652]
C7	[0.139, 0.581]	[0.135, 0.535]	[0.169, 0.639]	[0.167, 0.167]	[0.177, 0.494]	[0.174, 0.477]	[0.097, 0.668]	[0.144, 0.603]
C8	[0.115, 0.559]	[0.104, 0.527]	[0.164, 0.583]	[0.152, 0.152]	[0.145, 0.516]	[0.171, 0.494]	[0.132, 0.597]	[0.089, 0.642]

Plotting the network relation map

Estimating the threshold value specifies the network relation map (NRM). This method enables us to ignore negligible relations and plot the significant ones. NRM shows the relations whose values are higher than threshold value in matrix T. For this purpose, gray values were converted to white values. Full relation matrix is presented in the following table:

*Table 7. Total relation matrix (T) of the main criteria using crisp values*

Tw	C8	C7	C6	C5	C4	C3	C2	C1
C1	0.455	0.398	0.395	0.456	0.257	0.422	0.329	0.364
C2	0.442	0.402	0.379	0.382	0.424	0.471	0.344	0.375
C3	0.438	0.425	0.405	0.379	0.362	0.453	0.373	0.383
C4	0.403	0.410	0.404	0.419	0.386	0.426	0.342	0.372
C5	0.405	0.411	0.364	0.371	0.388	0.418	0.355	0.379
C6	0.434	0.495	0.338	0.419	0.421	0.477	0.383	0.395
C7	0.373	0.382	0.325	0.336	0.352	0.404	0.335	0.360
C8	0.365	0.364	0.332	0.331	0.346	0.373	0.315	0.337

The mean of matrix T is calculated to estimate the threshold values of the relations. Once threshold values are determined, all values of matrix T lower than threshold are regarded as zero, meaning that the causal relation is ignored. In this study, threshold value was estimated 0.387. Since this matrix is used as the input matrix in ISM, significant relations are assigned 1 and those with values lower than threshold are assigned zero. The pattern of significant relations is presented in the below table.

*Table 8. Pattern of significant relations of the main criteria*

Tm	C8	C7	C6	C5	C4	C3	C2	C1
C1	1	1	1	1	0	1	0	0
C2	1	1	0	0	1	1	0	0
C3	1	1	1	0	0	1	0	0
C4	1	1	1	1	0	1	0	0
C5	1	1	0	0	1	1	0	0
C6	1	1	0	1	1	1	0	1
C7	0	0	0	0	0	1	0	0
C8	0	0	0	0	0	0	0	0

### Interpretive structural modeling

Interpretive structural modeling was first proposed by Sidge in 1977. In this study, after identifying the criteria and indices, the relation between the indicators and dimensions resulted in analysis using the conceptual relation. Next, the interrelations of the main criteria were determined to obtain the super matrix of causal relations pattern using experts' comments, enabling experts to express their ideas about the severity and direction of the effects. The resulting matrix (interrelations matrix) shows the cause-effect, influence and impressionability of the variables.

#### Formation of structural self-interaction matrix

Structural self-interaction matrix is formed by criteria and indices and their comparison through four statuses of the conceptual relations. The resulting information was summarized based on ISM and the final structural self-interaction matrix was formed (Azar and Bayat, 2008). Reachability matrix is formed by converting the self-interaction matrix to a 0 and 1 two-value matrix. In this matrix, elements of the main diameter are assigned 1. Secondary relations have to be controlled, meaning that if A results in B and B results in C, then A must result in C, otherwise the table12 is to be adjusted such that it shows the secondary relations. The reachability matrix of ISM technique is presented in the last table.



### Determining the relations and levels of criteria and indices

So as to determine the relations and levels of criteria and indices, we extracted the sum of inputs and outputs for each criterion. The total outputs set includes the criterion and those influenced by the criterion, while the total inputs set includes the criterion and those affecting it. A two-tailed relations pattern of the criteria was then determined.

*Table 9. Sum of inputs and outputs for the determination of the level*

	Input, impressionability	Output, influence
Competitive intelligence	C1,C6	C1,C3,C5,C6,C7,C8
Economic capital	C2,C4	C2,C3,C4,C6,C7,C8
Social capital	C1,C2,C3,C7,C8	C3,C7,C8
Symbolic capital	C2,C4,C5,C6,C7	C2,C4,C5,C8
EVA	C1,C4,C5,C6,C7	C4,C5
Cultural capital	C1,C2,C6	C1,C4,C5,C6,C7,C8
Competitive advantage	C1,C2,C3,C6,C7	C3,C4,C5,C7,C8
MVA	C1,C2,C3,C4,C6,C7,C8	C3,C8

The first row which is the intersection of the two sets is equal to achievable (inputs) set, indicating the first level of priority. If intersection of the inputs set and outputs set is equal, the corresponding variable is placed in the highest position of ISM hierarchy. After determining the level, the criterion whose level is determined is removed from the set and a new set of inputs and outputs is formed where the level of the next variable is obtained.

*Table10. Determining the first level in ISM hierarchy*

	Output, influence	Input, impressionability	Shared	level
Competitive intelligence	C1,C3,C5,C6,C7,C8	C1,C6	C1,C6	1
Economic capital	C2,C3,C4,C6,C7,C8	C2,C4	C2,C4	1
Social capital	C3,C7,C8	C1,C2,C3,C7,C8	C3,C7,C8	
Symbolic capital	C2,C4,C5,C8	C2,C4,C5,C6,C7	C2,C4 ,C5	
EVA	C4,C5	C1,C4,C5,C6,C7	C4,C5	
Cultural capital	C1,C4,C5,C6,C7,C8	C1,C2,C6	C1,C6	
Competitive advantage	C3,C4,C5,C7,C8	C1,C2,C3,C6,C7	C3,C7	
MVA	C3,C8	C1,C2,C3,C4,C6 ,C7,C8	C3,C8	

Therefore, competitive intelligence and economic capital are the variables of the first level which were then removed and a new set of inputs and outputs was formed without considering the variables of the first level. Once the Intersection set is determined, variables whose intersection is equal to inputs set are considered as the variable of the second level. Table 15 presents the calculation process of determining the second level in Ism hierarchy.

*Table11. Determining the second level in ISM hierarchy*

	Output, influence	Input, impressionability	Shared	level
Social capital	C3,C7,C8	C3,C7,C8	C3,C7,C8	2
Symbolic capital	C4,C5,C8	C4,C5,C6,C7	C4,C5	
EVA	C4,C5	C4,C5,C6,C7	C4,C5	
Cultural capital	C4,C5,C6,C7,C8	C6	C6	2
Competitive advantage	C3,C4,C5,C7,C8	C3,C6,C7	C3,C7	
MVA	C3,C8	C3,C4,C6,C7,C8	C3,C8	

According to the results, social capital and cultural capital are the variables of the second level. To determine the elements of the third level, those placed in the second level are removed and a new set of inputs and outputs is formed without considering the variables of the second level. The intersection set is determined and the variables whose intersection is equal to inputs set are considered as the variables of the third level.

*Table12. Determining the elements of the third level*

	Output, influence	Input, impressionability	Shared	level
Symbolic capital	C4,C5,C8	C4,C5,C7	C4,C5	
EVA	C4,C5	C4,C5,C7	C4,C5	
Competitive advantage	C4,C5,C7,C8	C7	C7	3
MVA	C8	C4,C7,C8	C8	

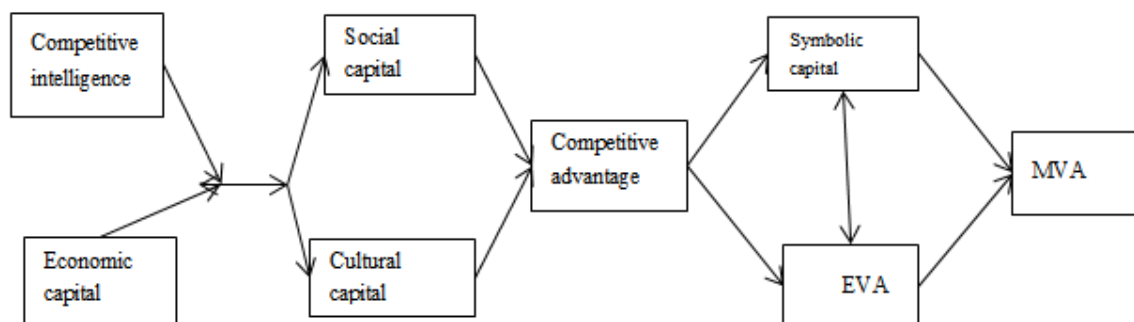
According to the calculations, competitive advantage is determined as the variable of the third level.

*Table13. Determining the elements of the fourth level*

	Output, influence	Input, impressionability	Shared	level
Symbolic capital	C4,C5,C8	C4,C5	C4,C5	4
EVA	C4,C5	C4,C5	C4,C5	4
MVA	C8	C4,C8	C8	

Symbolic capital and EVA were selected as the variables placed at the fourth level. Finally, MVA was determined as the variable of the last level. The final pattern of the variables' levels is presented in Figure 4 which illustrates the significant relation of the variables of each level with those positioned in the lower level along with the significant interdependencies of each row's elements.

Adding the variables' names, we reach:



*Figure 2. Basic model developed by adding variables' names*

## CONCLUSION

The main objective of this study was to explain and develop a hybrid model of competitive advantage based on Bourdieu capital theory and competitive intelligence using fuzzy Delphi and ISM-Gray DEMATEL in Iran food industry. Based on the results, certain recommendations are proposed to managers and decision makers of the food industry.

Based on Delphi results, managers and decision makers of food industry should pay a great deal of attention to EVA, national and international award, application of multiple brands, co-branding with famous firms, creating distinctive image, sustainable market share index, observed competitive advantage index, permanent use of global knowledge and organizational learning culture, keeping up with high standards, embedded credits and scientific quality, ethical issues, manufacturing machinery and excellent software and hardware, raw materials in the supply chain, high startup capital, professional employees, international visions, suitable pricing approach, appropriate strategies and policies, a thorough understanding of domestic and global technology, R&D unit and permanent monitoring of market and customers' demands, entrepreneurial vision of top management, effective interaction with customers, cooperation with social and public organizations, timely alliance with competitors for market control, using network and WOM for advertising instead of media, internal trust and consistency between managers and staff, and establishing trust among the customers for planning.

Based on the results of modeling tests and evaluation via ISM-DEMATEL, it is recommended that administrators promote competitive intelligence, and truly understand business and startup capital to achieve competitive advantage. In doing so, an organization can make better use of social and cultural capital. Optimal use of social and cultural capital improves the competitive advantage of these organizations in the market, enhancing their credit, EVA and MVA

Based on experts' emphasis on certain indices, it can be concluded that the following can positively affect profitability via increasing customers' satisfaction and promoting sale: Increasing investment in advertising rate and R&D system, reducing price and strengthening the customer relation management and customer experience management, and paying a lot of heed to such communication tools as personal interaction and relationships with foreign distributors. Increasing customer satisfaction influences their loyalty to the brand and its power and reputation (symbolic capital), thereby promoting market share (competitive advantage). Possessing a market-oriented export approach is an indispensable part of superior export performance. Accordingly, it is indispensable to increase export marketing skills in firms seeking regular export, through allocating sufficient resources to export marketing R&D. Notwithstanding the rather high cost of R&D, such practices reduce the uncertainty of export marketing decisions.

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## **Part II.**

### **Investments , IT and organization models**





# INVESTMENTS OF THE EBRD IN THE INFRASTRUCTURE SECTOR OF SERBIA

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## ABSTRACT

In the world of infrastructure investments, international financing represents a key determinant and the basis for a larger and more successful development of small economies in Europe and the world. There is a very important role played by international financial institutions that provide financial investment and incentives without which the progress of small and stunted economies, potentially prosperous, would not be possible. Consequently, we will try to further explore the characteristics, significance and structure of EBRD's investment in the infrastructure sector of the Republic of Serbia, thus making a review of this sector of the Republic of Serbia.

Keywords: EBRD, investments, infrastructure sector, economy, bank

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## INTRODUCTION

The subject of the research is investment in the infrastructure by the European Bank for Reconstruction and Development (EBRD) during the global economic crisis. The European Bank for Reconstruction and Development invests in the projects in EU countries and partner countries. The sector of particular interest for investments is the infrastructure sector. In the countries of the European Union, governments adopt regulations that are focused on the development of the infrastructure sector. Infrastructure sectors must be seen as the main drivers of innovation, employment, and also social and local integration in Europe. It is therefore considered that it is very important to create the best possible environment for the needs of growth and development of this sector in the function of faster sustainable growth and the development of national economies.

The scientific goal of the research is the scientific description of the stimulation of the infrastructure sector by the European Bank for Reconstruction and Development in the conditions of the global economic crisis. The results of the research should point to the role that the European Bank has in the development of our country, with particular reference to the infrastructure sector.

The social goal is to meet the practical needs, ie. that the basic research findings will be in the function of improving the cooperation of our country with the EBRD and improving the performance of its investments, in order to accelerate growth and development of the Serbian economy.

General hypothesis:

- The European Bank for Reconstruction and Development approves those investment projects in the infrastructure sector that contribute to improving the infrastructure conditions in the Republic of Serbia.

Special hypotheses:

- European Bank for Reconstruction and Development applies a situational approach to the governance; the approval of investment projects depends on a particular situation, political, economic and infrastructural factors and aspects.
- European Bank for Reconstruction and Development has assumed an important role in lending to the economy, especially in the sphere of the infrastructure sector.

Individual hypothesis:

- European Bank for Reconstruction and Development was one of the leading investors in the infrastructure sector in Serbia during the transition period.
- There is still a great need for the financing of infrastructure projects in Serbia,

Theoretical and methodological approach to research is dialectical. The basic methods applied were analytical methods, basic synthetic methods, and general scientific methods. From the analytical basic methods, we applied the method of analysis, method of abstraction, method of specialization and deduction method. The synthetic basic methods we have used in the research are: synthesis, concretization, generalization and induction. We applied the method of data collection and content analysis and factor analysis.

Starting from the set hypotheses and goals of the research, the corresponding structure of work also emerged.

The first part deals with the EBRD's investment in the infrastructure sector, the other part relates to specific projects of the infrastructure sector, followed by a conclusion and a literature review in the end.

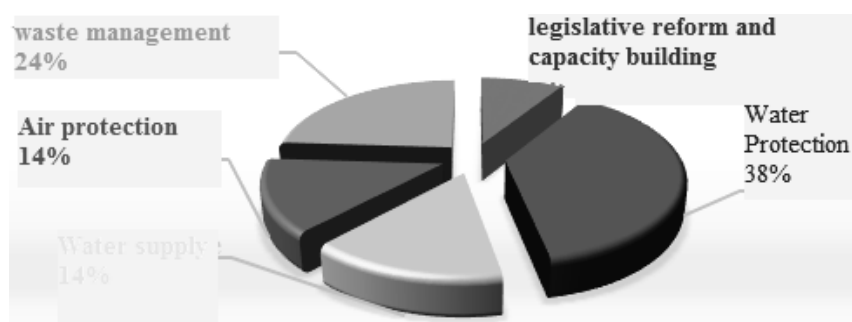
## **THE IMPORTANCE OF THE EBRD'S INVESTMENT IN THE INFRASTRUCTURE PROJECTS**

The EBRD has tied a lot of its investments in the Republic of Serbia to the improvement of the infrastructure modernization throughout the whole territory of Serbia. So far, 29 large projects have been implemented, 27 of which are of public importance with 1,291 million Euros invested. These projects are funded in line with the main European goals set by the European Commission, the Council of Europe and other EU supervisory authorities in the field of infrastructure. It should be emphasized that, in line with the European guidelines for economic prosperity for the region of the Western Balkans, the main task is to ensure a stable economy and development. One of the basic preconditions for such development is the realization of infrastructure projects. The activity of the EBRD in the territory of the present Republic of Serbia has been going on for nearly 20 years. The Action plan for the infrastructure projects was created for the first time in 2003, but for the past 10 years there was a noticeable momentum in infrastructure investments. Namely, the investment in infrastructure was one of the priorities for the EBRD's operations in the Republic of Serbia. Of course, as in other countries of the region and beyond, there are still many problems regarding to the bureaucratic obstacles, procedures, lack of adequate documentation and the lack of more serious additional sources for co-financiers in the projects. What is often a problem in the business practice is not having an idea and activities for business investment in projects and non-withdrawal of funds. Very often in the business environment, the problem of non-withdrawal of funds by the EBRD is considered a not-so-wise decision, as it is usually assumed that the co-perpetrator of the project doesn't have all the fulfilled technical and legal conditions for the good execution of the project, which are solely his responsibility. These cases are not frequent but they still exist, especially in the area of energetic efficiency. In the structure of the EBRD's total investments, investments in the infrastructure projects have a share of 37.7%. By investing in the improvement of infrastructure, the EBRD is improving the economic climate, providing better general business conditions, which creates a basis for improving the living standards of citizens, and thus contributes to the faster and more quality development of our country.

At the gathering of countries of the Western Balkans in Sofia, held on May 17, 2018, attended by EBRD President Suma Chacabarti, was emphasized the importance of engaging of the EBRD in the area of infrastructure, and it was noted that one of the priorities of the EBRD will be the development of an infrastructure that stimulates economic growth in the region, and link countries closer to each other and with Europe.

Without the EBRD's support in the modernization of the infrastructure sector, the Serbian economy would not have all the necessary infrastructural conditions at a satisfactory level, and without this kind of assistance, its economy would have a slower development than the one potentially possible. The investment effect of the EBRD is primarily seen in better traffic connections, which are linked to numerous and extensive investments in the road network, in the rehabilitation of roads such as: Corridor X, the bridge over Ada Ciganlija, reconstruction of

the Belgrade-GSP bus fleet, then the reconstruction project of the Gazela bridge, rehabilitation of the Corridor X railroad, reconstruction of the Belgrade-Noví Sad highway, reconstruction of the infrastructure of the city of Kragujevac, reconstruction of the infrastructure of the city of Subotica, etc. EBRD investments were also focused on environment preservation projects such as: the project for remediation of Belgrade Solid Waste PPP, the water supply and sewage repair project, JKP Belgrade water system - Makiš, Duboko - solid waste remediation project, Užice and Čačak, Dolovo Veteropark project, Kovačica - wind farm, one of the leading goals of the EUROPEAN UNION, as well as its EBRD instrument, is the preservation of the environment. We must note that European Union has committed itself to the environment protection consent, signed in the Kyoto city of Japan, to exclusively base its investments on projects that are not harmful to the environment and preserving all natural resources. Therefore, in the last 10 years, emphasis is placed on projects that are in the domain of construction and processing of all types of waste, the creation of a plan for the recovery of waste of all major environmental pollutants, and their disposal. In particular, we emphasize that this is not only one of the goals, but also a condition for the countries of pre-accession membership to fulfill, in order to be able to enter the final phase of the final accession to the European Union. Not a single infrastructure project, in which the EBRD took part, will endanger the environmental aspects of the project. We will now look at a chart in which you can see the areas of the environment in which the European Union invested in the previous period in our country.



**Figure 1.** EU's aid to the environment sector

Total aid to the environment protection from 2000 to 2013 is about 700 million euros. The aid that is in progress amounts to over 113 million euros, while planned future aid should amount to 73 million euros.

A number of projects have been implemented through the "EU PROGRESS-European Partnership with Municipalities Program", the so-called European program of partnership with local communities, as well as other programs that the European Union has. The aim of this program is to greatly contribute to the improvement and increase of the degree of stability, and socio-ecological development as the primary factor in the south and southwestern Serbia. These include projects in infrastructure, and investment in the environment. Many partners of this program are the Delegation of the European Union in Serbia, the Government of the Swiss State, and the Swiss Office for Development and Cooperation in the Republic of Serbia, the Ministry of the Republic of Serbia, and the United Nations Office in the Republic of Serbia. Of course, this type of program is very important, and donations, loans, investments in the infrastructure, as well as in all other branches, are very important decisions, but it should be emphasized that 80% of these investments are going through the EBRD - the European Bank for Reconstruction and Development, EIB - European Investment Bank, EIF - European Investment Fund. Mostly they are co-financed projects with other project funders.

## EXAMPLES OF PROJECTS IN THE INFRASTRUCTURE, FINANCED BY EBRD

### *Duboko Solid Waste project, Duboko waste remediation (Regional sanitary Landfill)*

The project, initiated in 2006, aims to build a regional landfill site that will serve for nine municipalities: Čačak, Užice, Bajina Bašta, Požega, Arilje, Čajetina, Kosjerić, Lučani and Ivanjica. In addition, the project involves the construction of two lines that would be used for the separation of recyclable materials, as well as the administration and laboratory building, a facility for washing and disinfecting vehicles, a substation, communication areas and infrastructure (internal roads) and zone protection around the site.

The project further includes 3 mobile stations, the transport and closure of existing landfills. It is expected that the closure of existing landfills and the purification and rehabilitation of this area will be financed through the EAR funds and the Eco Fund of the Government of Serbia.

The project was signed in 2008 when the Duboko company bank provided a loan of 5 million euros for the construction of a landfill site in the region. The financing of the bank was complemented by EU funding, a grant provided by the Government of Serbia and a contribution of nine municipalities, a total of 12.1 million euros. Due to unexpected landslides that occurred during the construction phase, the initial financing plan increased, so the total estimated project cost was 19.1 million euros. This financial increase was partly covered with 2.4 million euros as support from the Swedish agency for international development cooperation ("Sida").

In order to further stabilize and expand the capacity of the landfill, Sida has funded further technical assistance for the preparation of detailed technical studies and designs for stabilization and extended landfill capacity. According to the project, additional investments for the stabilization and expansion of landfill capacities are estimated at 4.5 million euros. Sida has made another support that will be channeled through the EBRD under the EBRD SWME Fund in an approximate amount of 2.5 million euros for capital and technical assistance. The Serbian government has indicated that it is ready to provide an amount of 2 million euros to finance the remaining amount required for completion of landfill works. These works include stabilization work and landfill design changes to ensure lasting stability with increased landfill capacity. Potential environmental and social impacts associated with changes in design and increased capacity is assessed through the Environmental and Social Impact Assessment (ESIA) and appropriate mitigation measures.

The project will be financed by:	The financial plan for building the "Duboko" project is:
1. Fund for the protection of environment of the Republic of Serbia	Eco Fund 1.527.060 €
2. Nine (9) participating municipalities	All nine municipalities 2.533.111 €
3. European Agency for Reconstruction (EAR) via donation	EAR 2.969.822 €
4. European Bank for Reconstruction and Development (EBRD) via loan	EBRD 5.179.161 €
<b>TOTAL (€)</b>	<b>12.209.155</b>

Figure 2: Project „ Duboko,,

Client of the EBRD - Duboko Company

The waste Management Company Duboko is a company founded for the construction and management of a regional solid waste landfill for nine municipalities. The company is majority owned and controlled by the municipalities of Čačak and Užice.

Municipalities of Užice, Bajina Bašta, Požega, Arilje, Čajetina, Kosjerić, Lučani and Ivanjica in 2005 have concluded the Agreement on the establishment, construction and use of the regional sanitary landfill “Duboko”, where they, as founders, regulated mutual rights and obligations related to the establishment, construction, financing and exploitation of the Regional sanitary landfill Duboko.

*Table 1. Ownership structure of the “Duboko” company*

Number	Founder cities and municipalities	Percentage of participation in financing
1	<i>City of Užice</i>	<b>23.91%</b>
2	<i>City of Čačak</i>	<b>26.88%</b>
3	<i>Ivanjica Municipality</i>	<b>10.20%</b>
4	<i>Požega Municipality</i>	<b>9.30%</b>
5	<i>Bajina Bašta Municipality</i>	<b>8.39%</b>
6	<i>Lučani Municipality</i>	<b>7.09%</b>
7	<i>Arilje Municipality</i>	<b>5.70%</b>
8	<i>Čajetina Municipality</i>	<b>4.50%</b>
9	<i>Kosjerić Municipality</i>	<b>4.03%</b>
<b>Total</b>		<b>100%</b>

*Source: www.duboko.rs*

#### *EBRD Project Financing.*

A loan of up to 5 million euros for Duboko is secured by an agreement on municipal support by the cities of Čačak and Užice, as well as other municipalities. During 2013, it became apparent that the stabilization at the existing site of the Duboko landfill will not be sufficient to protect the long term “shelf life” of the landfill. In accordance with the priorities of the Ministry of Agriculture and Environmental Protection, Sida has provided great support for the provision of permanent landfill stability and its expansion for the second allocation of landfills in the amount of 1.5 to 2 million euros. In connection with this, Sida hired a technical adviser in the summer of 2014 to consider the various options for preserving the operation of the Duboko landfill in the long-term perspective.

The financial plan of this project consisted of the following:<sup>1</sup>

In the first phase, there is a basis for implementing this first initial phase of the project. The regional sanitary landfill Duboko is now one of the largest, if not the most modern infrastructure projects for the waste treatment and environmental protection that has been successfully implemented, and which greatly reflects all the necessity for further investments and investments of this type, the project that connected the 9 municipalities enabled the processing of the total non-

<sup>1</sup> A draft of EIA 2007 – Volume I 163-1/07/Duboko, and non-technical\* summary, May 24<sup>th</sup> 2007. MOL, Belgrade–11

hazardous waste from these 9 municipalities. This project progresses from year to year and JKP DUBOKO is one of the best investments in this part of the Western Balkans Region.

In order to support this thesis, we will explore the possible cost-effectiveness of the project itself, namely, the return on the capital of the project itself:

### JKP Duboko Užice

Calculation: (AOP 1064: S. NET GAIN or AOP 1065: T. NET LOSS) / AOP 0401: CAPITAL

*Table 2. Return on equity rate (ROE)*

	Net gain	Net loss	Capital	ROE
<b>2014</b>	82417000		760744000	10.83%
<b>2015</b>	94207000		726667000	12.96%
<b>2016</b>	105513000		865136000	12.19%
<b>2017</b>		18637000	789006000	-2.36%

*Source : Knežević et al. (2017)*

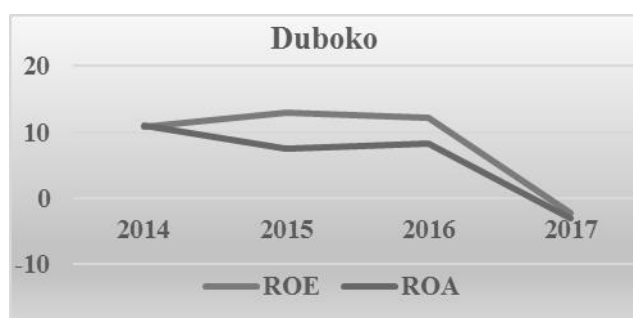
Calculation: (AOP 1030: V. BUSINESS PROFIT or AOP 1031: G. BUSINESS LOSS) / AOP 0071: D. TOTAL ASSETS

*Table 3. Return on assets rate (ROA)*

	Business profit	Business loss	Total assets	ROA
<b>2014</b>	168258000		1519177000	11.07%
<b>2015</b>	110779000		1474718000	7.51%
<b>2016</b>	118283000		1443346000	8.19%
<b>2017</b>		45260000	1489358000	-3.03%

*Source : Knežević et al. (2017)*

In the future, according to the projection, the company will generate an average of 0.19% of return on capital, which would allocate her alongside similar companies in Central and Eastern Europe, so we can conclude that the investments of all participants in this project, including the EBRD, are profitable.



*Figure 3. Return on assets rate*



### ***Belgrade Public Transport and Traffic Infrastructure project***

The project belongs to one of the larger EBRD's investments, and is very important from the aspect of improving the quality of life and work of the citizens of Belgrade. The total loan amount is 57 million euros. The purpose of the loan is the following:

- Adaptation and modernization of tram roads and electrical network of the center of Belgrade, in order to include new trams;
- Adaptation, modernization, extension of the most important traffic roads, in order to enable the most circulating traffic possible;
- Purchase of the 30 new and modernized tram vehicles.

As a phase of continuation and finalization of the project, an additional 15 million euros will be provided for the continuation of investments in the area of expanding Belgrade's traffic infrastructure. Regarding the city transport in Belgrade, the City Administration of Belgrade and the City Transportation Company "Belgrade" (hereinafter "GSP") will review their regulatory relations and bring them in harmony with the best commercial practices in the world.

### ***Financing the project***

EBRD participates in the financing of the project with a total of 166, 452 million euros, of which:

- "Original loan" in the amount of 57 million euros (November 2011);
- First loan increase in the amount of 30 million euros (July 2013);
- Second loan increase in the amount of 15 million euros (in July 2017).

Estimated project costs amount to 227,032 million euros. In addition to the EBRD financing, the City of Belgrade will co-finance the implementation of the public transport strategy and the construction of transport infrastructure from its own funds.

According to the GSP business program for 2017 and 2018, the table shows the credit indebtedness table ([www.gsp.rs](http://www.gsp.rs)):

*Table 4. Credit Indebtedness of GSP (Business Program for 2018)*

Creditor	Credit/Project name	Currency	Contracted loan amount - EUR	State guarantee – yes/no	Credit indebtedness on 31.12.2018, in original currency	Credit indebtedness on 31.12.2018, in dinars	Year of the withdrawal of	Repayment period without a waiting period	Waiting period (Grace period)	Date of first repayment	Interest rate	Number of repayments in a year
<b>Domestic creditor</b>												
AIK bank	Overdraft	din	400.000.000,00	No	400.000.000,00	400.000.000,00	2017	12 months	-	-	3.8% + belibor	After the expiration of the loan
AIK bank	Overdraft	din	400.000.000,00	No	400.000.000,00	400.000.000,00	2017	12 months	-	-	3.8% + belibor	After the expiration of the loan
Unicredit bank	Overdraft	din	600.000.000,00	No	600.000.000,00	600.000.000,00	2017	12 months	-	-	3.8% + belibor	After the expiration of the loan

Vojvodanska bank	Overdraft	din	400.000.000,00	No	400.000.000,00	400.000.000,00	2017	12 months	-	-	3.8% + belibor	After the expiration of the loan
Vojvodanska bank	Overdraft	din	200.000.000,00	No	200.000.000,00	200.000.000,00	2017	12 months	-	-	3.8% + belibor	After the expiration of the loan
Belgrade power plants	Loan agreement	Din	400.000.000,00	No	400.000.000,00	400.000.000,00	2016	12months	-	-	3%	After the deadline expiration
City markets	Loan agreement	Din	280.000.000,00	No	280.000.000,00	280.000.000,00	2016	12months	-	-	3%	After the deadline expiration
Belgrade Water system	Loan agreement	Din	300.000.000,00	No	300.000.000,00	300.000.000,00	2016	12months	-	-	3%	After the deadline expiration
Leasing- Unicredit leasing – bus 31	Leasing	Eur	6.912.000,00	No	0.00	0.00	2013	5years		08.04.2013.	8.41	12
Leasing- Unicredit leasing – van 10	Leasing	Eur	424.560,00	No	18.910,00	2.458.300,00	2014	5 years		01.04.2014.	9,6023	12
Leasing- Unicredit leasing – bus 30	Leasing	Eur	5.400.000,00	No	2.007.363,60	260.957.268,00	2015	5 years		08.10.2015.	10,83	12
Leasing – 20 buses	Leasing	Eur	3.820.800,00	No	1.827.518,00	237.577.444,00	2016	5 years		03.10.2016.	7.75	12
Leasing- Unicredit leasing – bus 10	Leasing	Eur	1.918.800,00	No	1.103.424,80	143.445.224,00	2017	5 years		08.05.2017.	9.31	12
Leasing – 30 articulated buses	Leasing	Eur	8.636.400,00	No	5.370.220,80	698.128.704,00	2017	5 years		20.07.2017.	9	12
<b>Foreign creditor</b>												
EBRD	Buying 200 buses + 12 minibuses	Eur	49.981.906,00		27.770.259,70	3.776.755.319,20	2013	9	2	30.03.2015.	4.5 + 6ME	2
EBRD		Din	1.803.265.500,00		1.746.550.356,03	1.746.550.356,03	2017	6	8 months	30.09.2017.	2,8+ 3m belibor	4
<b>Total credit indebtedness</b>								<b>9.845.872.615,00</b>				
<b>Of which for liquidity</b>								<b>2.000.000.000,00</b>				
<b>Of which for capital projects</b>								<b>1.342.566.940,00</b>				

*Table 5. Loan Payment Plan to the EBRD - GSP (Business Program for 2018)*

Principal amount first quarter	Principal amount second quarter	Principal amount third quarter	Principal amount fourth quarter	Interest first quarter	Interest second quarter	Interest third quarter	Interest fourth quarter
289.767.96 4,12		289.767.96 4,12		78.777.14 1,84		71.686.92 9,92	
78.402.847 ,83	78.402.84 7,83	78.402.847 ,83	78.402.84 7,83	39.097.15 2,17	39.097.15 2,17	39.097.15 2,17	39.097.15 2,17

With this, according to the Income Statement, the results for the period 2014 - 2017 are as follows:

**GSP** (Source APR)

Calculation:

(AOP 1064: S. NET PROFIT OR AOP 1065: T. NET LOSS) / AOP 1001: A. OPERATING INCOME

*Table 6. Profit margin*

	Net profit	Net loss	Business Income	Profit margin
<b>2014</b>		620306000	13762161000	-40.2%
<b>2015</b>		1340493000	13484630000	-4%
<b>2016</b>		551583000	13751206000	-99.4%
<b>2017</b>		4574888000	11370795000	-4.5%

*Source : Knežević et al. (2017)*

*Table 7. Return on equity rate (ROE)*

	Net profit	Net loss	Capital	ROE
<b>2014</b>		620306000	11095454000	-41.23%
<b>2015</b>		1340493000	15525893000	-3.55%
<b>2016</b>		551583000	14632704000	-9.16%
<b>2017</b>		4574888000	13987532000	-4.43%

Table 8. Return on assets rate (ROA)

	Business profit	Business loss	Total assets	ROA
2014		775527000	28527280000	-11.59%
2015		930751000	29494694000	-2.24%
2016		679716000	30325282000	-3.15%
2017		3002974000	25907767000	-27.18%

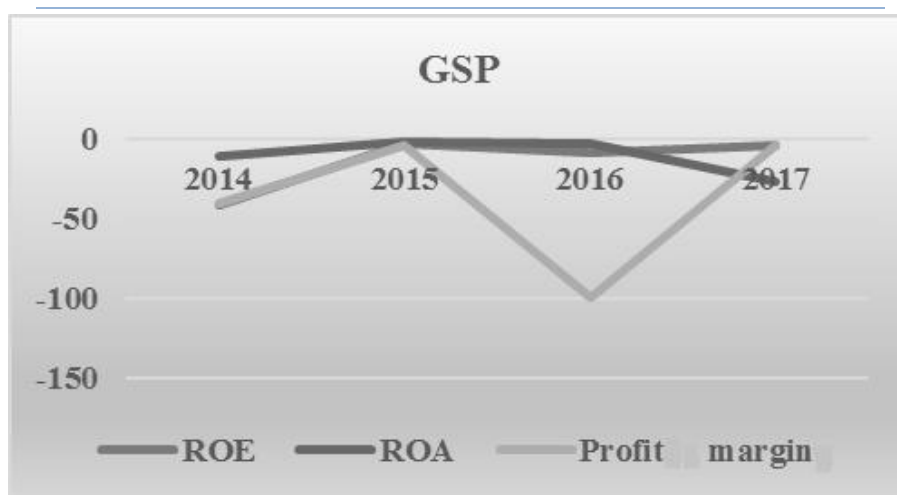


Figure 4. GSP's rate of return

Total credit indebtedness is high. It must be taken into account that the profit margin in 2014 and 2016 was large in percentage, in the negative aspect, respectively, in 2014 to -40.2% and in 2016 to -99.4%.

We have to keep in mind that this kind of investment in the GSP can help the company enter the restructuring process in the coming years. According to the revenues for 2017, which amounted to about 5.4 billion dinars from the core business, it is concluded that, according to the operating parameters shown, a longer interval of return of the existing debts is required.

## COOPERATION WITH EBRD

EBRD loans are based on interest rates that are at a relatively lower level than the current market prices of capital. It should be emphasized that the EBRD does not finance projects in its entirety, but only partially, offering fixed and variable interest rates:

- A fixed interest rate associated with a variable rate such as LIBOR.
- A floating rate with a cap or collar.

Since the interest rate affects profitability, the financial structure of the project should include loans with variable and fixed interest rates. Their combination is assessed with regard to the sensitivity of the client and the project to the movement of interest rates, ie. to the estimated interest risk of the project.

### ***Fees and expenses***

An additional margin is envisioned at the base interest rate, which is a combination of national risk and project-specific risk.

With the margin, the EBRD may charge some of the following fees and commissions:

- Front-end commission, paid in advance.
- Fee for payment of obligations, which is paid for the pre-loan, but also the unpaid loan amount.
- Loan conversion fees, payable at the time of the interest rate or before the currency arrangement on the amount to be converted.
- Fees for advance payment, cancellation and late payment are charged as needed.

In accordance with commercial practice, sponsors are obliged to compensate the bank for exit costs, such as fees for technical advisors, lawyers and travel expenses.

### ***Other terms of lending***

Full credit terms are negotiated directly with the client for each project.

#### ***Recourse***

It is not required to obtain a sponsor. However, the EBRD may require special enforcement guarantees, as well as other forms of sponsorship of the type that are commonly used in limited access financing practices.

#### ***Insurance***

The bank requires project companies to obtain insurance against normal insurance risks. Examples include property theft, fire outbreaks, and specific construction risks. The EBRD does not require insurance against political risk or non-convertibility of the domestic currency.

#### ***Security***

The EBRD usually requires companies that it approves a loan to, to provide a mortgage for loan securing, taking into account, on average, large amounts of approved loans and their relatively long repayment periods.

Security may also include:

1. Mortgage on immovable property, such as land, facilities and other buildings.
2. Lien of movable property, such as equipment, other business assets.
3. Lien of deposit in hard currency and earnings in the local currency of the company.
4. Promise the sponsor's shares in the company.
5. Provision of insurance policies for the company and other contractual benefits.

#### ***Syndication***

As part of the loan package, typical contracts on project financing are provided. It is also possible to syndicate the loan, ie. ensuring participation of more participants in order to limit indebtedness and determine other financial measures and various other issues.

### *Loan repayment*

Repayment of loans provided by the EBRD takes place usually in equal, semi-annual installments. Further deadlines can be considered exceptionally, for example, up to 15 years for large infrastructure operations-projects.

### *Possibilities of risk protection*

The Bank can assist in managing the financial risks associated with assets and in the obligations of the project. This includes currency risk, interest rate risk and commodity price risk. Risk protection instruments include currency swaps, interest swaps, caps, collars and options and commodity swaps.

### *Loans for smaller projects*

Projects that are too small to be funded directly by the EBRD can still benefit from the EBRD investment.

The EBRD supports local commercial banks, which in turn provide loans to small and medium-sized enterprises and municipalities. Tools that may be available include credit lines, bank loans, credit facilities, and investments in local banks.

Small and medium-sized enterprises should contact local banks directly to access financing and check local requirements and investment restrictions. Loans to micro, small and medium-sized enterprises are available from these banks throughout the EBRD region.

Companies wishing to obtain loans through local banks should ensure:

1. Healthy business plans for establishing or expanding the company's business.
2. Strong management of the company with proven results.
3. Products that are competitive on the market.
4. Information about owners/partners.
5. Financial and credit history
6. Security in the form of mortgages, liens, etc.

Projects in Serbia and the world are based on the EBRD's investment in every potential possible and in significant transitional progress, an increase in living standards, and conditions for building a healthy business environment. Thanks to the capabilities of the European Bank for Reconstruction and Development, and that they can always co-finance projects with other project financiers and enable the recipient company and the beneficiary of the loan to have the potential to access cash funds, thus fulfilling the achievement of all business goals. It should be emphasized that with business entities that have signed a financing agreement with the EBRD, which in the past years performed the evaluation of almost all these economic entities, the funds received from the loan tranche immediately were invested in further improving of the existing service and product, and very few of these funds go to repay, for example, the already existing debts of those companies, which they have with potential suppliers and other partners. This part does not apply to the EBRD, or to other financier participants in the project, but a large part is related to the decisions of the borrower's management. In the large scale, they are the enterprises themselves.

Therefore, see a table that is an example of the basis and purpose of cooperation:

Table 9. An example of the basis and purpose of cooperation with the EBRD in Serbia<sup>2</sup>

Clients	Amount Eur	Description	Year
<b>SRBIJA VOZ</b>	22.000.000,00	Infrastructure reconstruction	2017
<b>ŽTP SRBIJA</b>	57.000.000,00	Infrastructure reconstruction	2011
<b>AGRI EUROPE</b>	120.000.000,00	Buying facilities and production infrastructure renewal	2016
<b>BAKERY POINT</b>	15.000.000,00	Cancelled	2009
<b>SOKO ŠTARK</b>	10.000.000,00	Modernization	2006
<b>SOMBOLED</b>	10.000.000,00	Equipment and reconstruction	2006
<b>FRIKOM</b>	12.500.000,00	Modernization	2003
<b>SBB MREZE</b>	17.000.000,00	Modernization	2004
<b>ETV</b>	24.000.000,00	Modernization	2014
<b>SRBIJA GAS</b>	150.000.000,00	Organizational and financial reconstruction	2009
<b>TRANS NAFTA</b>	5.700.000,00	Cancelled	2012
<b>KREF</b>	2.000.000,00	Capital	2001
<b>TOTAL</b>	445.000.000,00	Based on expansion, renewal and modernization	Until 2018

We are basing the research that there are participants in the infrastructure sector of the Republic of Serbia (private and public), who can improve their business through loans from the EBRD that would repay their debts to existing creditors. We think that the public opinion and the mentioned business participants are not informed to the extent that they can create such a business environment, which would enable the relaxation of their business obligations over a longer period of time and the possibility of realizing their business plans and models. Our business stakeholders, the business and the public opinion, must recognize the potential of the EBRD to a greater extent.

In order to define the final list of relevant indicators, which will be included in the assessment of the level of knowledge of the area of EBRD investment in the infrastructure sector of Serbia, it is necessary to implement the so-called expert judgment in the next step. The number of experts who participated in this research was 7. It was also accepted that the weight coefficients of the experts are equal and equal to 1. The experts were given a questionnaire in the form of a table, which was to be filled in according to the attached instruction from the questionnaire. An expert evaluation would involve evaluating indicators that are in a narrow list of possible relevant indicators.

It is necessary, based on the experts' opinion, to determine the indicators that have the greatest impact on the calculation of the level of knowledge of the area of EBRD's investment in the infrastructure sector of Serbia.

The assigned degrees of knowledge (rank of knowledge) are arranged in the following way:

1	2	3	4	5
no	somewhat	medium	quite	yes

<sup>2</sup> Own sources of the author, data taken from EBRD's site

The calculation of the "rank of knowledge" was carried out as follows.

The calculation of the expert judgment for each of the risk behaviors was done as follows:

*Table 10. Calculation procedure for the final expert evaluation*

Knowledge rank 1		
Expert 1	Expert 2	Expert n
Rating 1	Rating 2	Rating n
Total rating		

By calculating the overall rate (degree of knowledge) of the EBRD's investment area in the Serbian infrastructure sector, the next step is where each category of knowledge is multiplied with an appropriate level of knowledge, and the weighting factors (WF) are observed for the whole country. Then, the addition of weighting factors for each area was carried out, and a "rank of knowledge" was obtained for each site observed.

$$\text{WF Belgrade} = A * 1 + B * 3 + V * 1 + G * 5 + \dots + NJ * 1$$

$$\text{"Knowledge Rank"} = \text{WF Beograd} + \text{WF Novi Sad} + \dots + \text{WF Subotica}$$

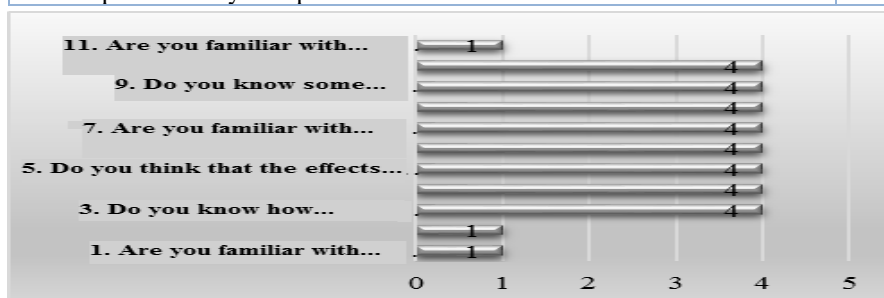
After executing the weighting, the data obtained indicate which of the mentioned areas has the highest degree of recognition of the importance of EBRD's investments in our country and submit a proposal for an idea solution in order to improve the understanding of the importance of cooperation with the EBRD and the proposal for future cooperation. The database was tailored for research needs in Microsoft Office Excel 2013, in which tables were created and generated the required charts.

*Table 11. Table showing investments in the territory of the Republic of Serbia and assigned degrees of knowledge and importance*

Investments on the territory of the Republic of Serbia	
1. Are you familiar with the degree of development of the infrastructure sector in Serbia and how important is it, in your opinion?	1
2. Do you understand the role of the EBRD in the development of Serbia's infrastructure sector and how important is it in your opinion?	1
3. Do you know how the EBRD invests in the economy and infrastructure of the Republic of Serbia and how important is it in your opinion?	4
4. Do you know some major investors (international financial institutions) in the infrastructure sector in Serbia and how important are investments in your opinion?	4
5. Do you think that the effects of investments in Serbia's economy (especially in the infrastructure sector) are satisfying?	4
6. Do you know the amount of the EBRD's up-to-date investment in the infrastructure sector and how important is it in your opinion?	4
7. Are you familiar with the cooperation between EBRD and local institutions on projects: corridor X, bridge on Ada, renovation of railway infrastructure?	4



8. Are you familiar with the amount of EBRD's investment in the infrastructure sector of Serbia and how important is it in your opinion?	4
9. Do you know some of the largest infrastructure projects in the country and what is their significance in your opinion?	4
10. Do you know since when the EBRD is investing in the infrastructure sector in Serbia and mark the importance of investing in your opinion?	4
11. Are you familiar with the role of the EBRD as a lender for ongoing infrastructure projects in the region and what is its importance in your opinion?	1

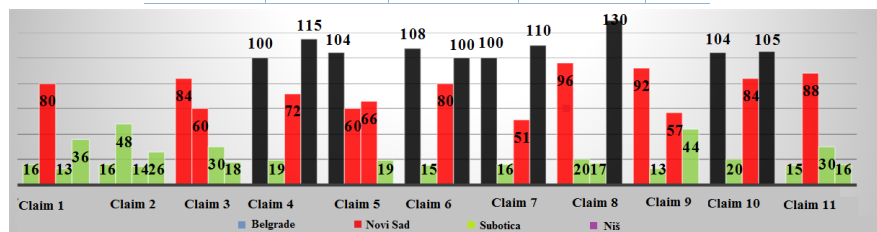


Graph 1. Graphic presentation of the overall rate of investment experts on the territory of the Republic of Serbia, based on the degree of knowledge and importance

It can be concluded from the graph that the following investments are the most important according to the experts: claims 2, 3, 4, 5, 6, 7, 8, 9, and 10.

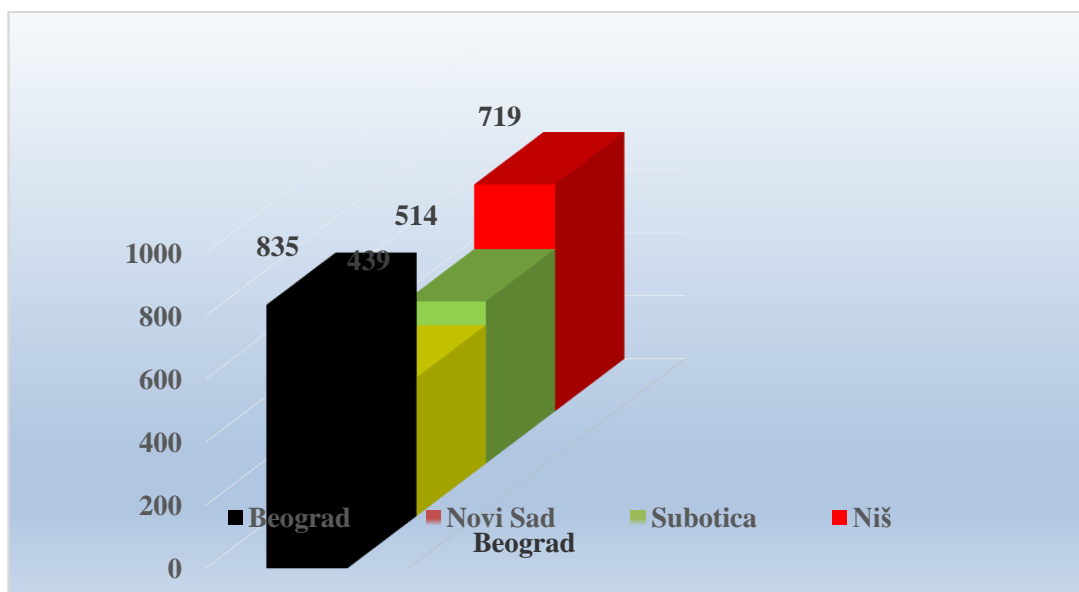
Table 12. The value of weighted estimates of the importance of investment in the cities of the research

	Beograd	Novi Sad	Subotica	Niš
Claim 1	16	80	13	36
Claim 2	16	48	14	26
Claim 3	84	60	30	18
Claim 4	100	19	72	115
Claim 5	104	60	66	19
Claim 6	108	15	80	100
Claim 7	100	16	51	110
Claim 8	96	20	17	130
Claim 9	92	13	57	44
Claim 10	104	20	84	105
Claim 11	15	88	30	16



Graph 2. The distribution of the weighted values of the investment grade value of the research cities, observed for the four cities

From the Table 12, it can be concluded that the claims 2, 3, 4, 5, 6, 7, 8, 9 and 10 are primary in Belgrade, while for Novi Sad are the claims 1 and 11. For Subotica those are 6 and 10, and for Niš 4, 6, 7, 8. Aforementioned claims are presented on a graph below.



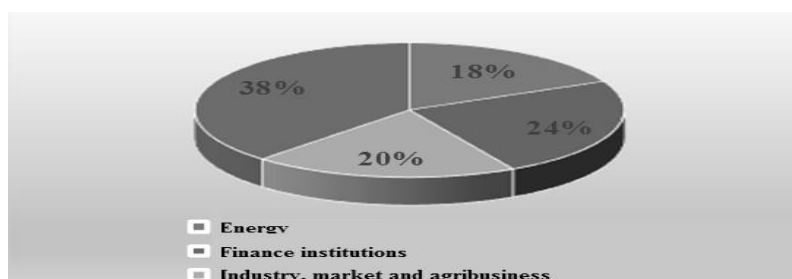
Graph 3. The distribution of the total weighted values of the investment grade value of the research cities, observed for the four cities

From this chart it can be clearly seen that the city of Belgrade has the highest level of knowledge of the importance of the EBRD investing in our country, and that it is followed by Novi Sad with a significantly lower degree.

Each class of weighting factors is assigned a color: black ( $100 \geq TF$ ) - very high value, red ( $50 \geq TF < 99$ ) - high value, green ( $1 \geq TF < 49$ ) - low value. From the chart it can be noted that 4, 6, 7, 10 are the claims that are distinguished with the highest degree of knowledge in the observed cities.

EBRD has invested around 806 million euros in Serbian infrastructure, for a period of about 7 years.

Total investments that have been realized for the last 7 years and which have been signed and in the process of implementation, for which the funds have already been taken over in the domain of the infrastructure sector and the funds planned, amount to over 1,093 million euros. This amount is changeable because new projects and applications change in a short time interval. In accordance with this, we see the following:



Graph 4. Percentage of EBRD's investment in infrastructure

Source: <https://www.ebrd.com/where-we-are/serbia/data.html>

*Table 13. Investment of the Republic of Serbia in the traffic infrastructure*

2012.	2013.	2014.	2015.	2016.	2017.
<b>76496528</b>	66551053	76411613	106585662	109485395	110768346
Average yearly exchange rate of euro					
<b>113,12</b>	113,13	117,30	120,73	123,11	121,33
<b>676.242.291</b>	588.270.600	651.420.400	882.743.220	889.329.827	912.951.000

*Source: Statistics yearbook 2016, 2017, 2018.*

EBRD's investment of 813.000.000 euros in the infrastructure. For the past 6 years, the Republic of Serbia's investment amounted to 4,600,957,338 euros. The percentage share was approximately 17, 6%.

The participation of the European Bank for Reconstruction and Development is not a surprise because almost all larger and numerous projects of the greatest public infrastructure importance go and are implemented through the EBRD. The effects of these investments are reflected in the improved road network, highways, rail network, construction of highways, road stations, power plants, and other infrastructure facilities.

From the point of view of EBRD loans for infrastructure projects, and the participation of the Republic of Serbia, it can be estimated that the projects were profitable. In addition to profitability, the EBRD also takes into account the achievement of other goals such as: engaging the domestic economy, creating new work places in mentioned projects, focusing on the purchase of domestic raw materials, goods, and materials used in the project, the use of domestic logistic houses and services, legal and other agencies. The previous cooperation with the EBRD shows the significance of the mentioned additional goals.

On average, the EBRD does not have a high margin, which in other words points to favorable borrowing terms. We emphasize that we have taken all of the total business in the infrastructure sector and business with Serbia, and this is a favorable moment for us to borrow at not so high interest rates. Especially in the domain of the infrastructure sector, Serbia needs significant investments, and the plan of the Republic of Serbia is that the infrastructure sector is modernized and existing capacities expanded, taking into account the volume of resources that we can obtain and under what conditions. We will present a table overview of the projects that started and initiated the cooperation and on which cooperation was completed, in order to gain insight into these possibilities and comprehensiveness of cooperation in recent years between the EBRD and our business players in the infrastructure sector.

*Table 14. Potential of the investments in the public and private sector*

Date	Project number	Project name	Type of project	Project status
20.03.2018.	46758	Belgrade solid waste ppp	Private sector	Project concept accepted - under consideration
24.08.2015.	47690	Kragujevac city infrastructure	Public sector	Realized
25.09.2014.	46465	Belgrade water	Public sector	Realized
03.09.2014.	45458	Šabac district heating upgrade	Public sector	Cancelled
16.07.2012.	44014	Belgrade bus renewal programme	Public sector	Realized
21.02.2012.	43472	Subotica water upgrade programme	Public sector	Signed- realization in progress
30.06.2011.	42809	Belgrade public transport	Public sector	Signed- realization in progress
10.01.2011.	41874	Novi sad district heating project	Public sector	Cancelled
15.11.2006.	37033	Duboko solid waste	Public sector	Realized
22.09.2005.	34913	Sava river crossing	Public sector	Realized
13.07.2001.	17300	Belgrade municipal infrastructure	Public sector	Realized

Table 21 shows the potential of these investments; we see that there is primarily a focus on the public sector. However, it seems that the importance of the European Bank for Reconstruction and Development is still not sufficiently recognized, especially in the private sector. Our businessmen, private manufacturing companies, business public opinion have to see how the modern financing system works and a larger industrial step should be launched.

In summary, the advantages of cooperation with the European Bank for Reconstruction and Development from the above mentioned projects are the following:

- A feasible approach to a greater mass of funds and greater mobility of funds to modernize infrastructure capacity and build new ones.
- Establishing respect and knowledge of legislation and clear business procedures as a prerequisite for respecting all legal aspects that contribute to a better project focus.
- Establishment of a professional, quality, certified management of the subject and object of the parent project,
- Provides better connection of all participants in the business, and timely informs everyone, monitoring all stages in the project cycle, rapid processing of requests.
- Finding other co-financiers in the project in case of higher needs,
- Ensuring the project with strong guarantees leads to a significant level of the safety of the project,
- Establishing new models and ways of cooperation, a unique way of communication that was not known to a large number of our business entities, and determination in their application. Giving opportunities for new platforms (SEE PLATFORMS),
- Creating a better investment climate, and the possibility of greater economic integration of business actors at the regional level,
- The potential for granting funds for several business factors, and the incentive for their networking.

- Insisting on the development of certain sectors of the economy, in our case, the infrastructure sector (roads, bridges, network roads).
- Lower interest rates compared to other sources of financing.
- Economic integration of all member states, both pre-accession and candidate countries.
- The presence and distribution of investments in all spheres of the infrastructure sector,
- Realizing all important economic goals in line with EU goals,
- A large number of business activities are coordinated in order to achieve goals on finalization in negotiating chapters.
- Their presence itself allows for the presence of a large number of foreign investors, and provides, as a rule, better rating of the country.

At the same time, there are certain shortcomings and problems in the cooperation, that also exist on the side of domestic institutions, public private partnerships, and other business factors:

- Initiating certain aspects of cooperation that are contrary to the strategic plan of the framework EU directive, but with need to clarify that it is not the EBRD's domain to implement these directives and goals, but domestic institutions to the sector to which the mentioned aspect of cooperation relates.
- Unintentional spending of funds by the borrower, obviously requiring greater control and additional checks by the European Bank for Reconstruction and Development and controls of other business factors, there must be very good control of funds and cash flows in order to avoid the risk of unintentional spending of funds
- Lack of competitiveness of Serbian enterprises, lack of plans for opening large industrial projects by economic actors from the domestic economy of the Republic of Serbia, but orientation exclusively to foreign investors.
- Political uncertainty in the region contributes to the fact that regional integration projects cannot be carried out at a faster time interval.
- Bank procedures and correlations of cooperation often conflict with domestic bureaucracy, which is quite expected because all countries in transition had these difficulties. They are there to fix the situation and to avoid all the risks in business.
- Availability of project data. Namely, this is only one from a number of problems especially for scientific researches, the bank has its own policy of informing and communicating information according to the procedures and statutes of the bank, and information can't be obtained every time, which is right from the point of view of the bank's operations. But from the point of view of other factors, it's a problem in the sphere of non-correspondence.
- The realization of certain projects in the sectors of infrastructure, energy and natural resources took place slower than expected. Reasons for this include insufficient planning, problems with land expropriation, long tendering procedures and unusually low contracted bids, frequent work breaks and limited capacity for project implementation (EBRD).
- Lack of a clear business strategy with the EBRD by companies at the level of all participants in the business, lack of real business plans, knowledge of the subject matter of the loan plan, insufficient expertise and unreliable business practices.
- Not knowing the concept and scope of the EBRD's business by companies in the infrastructure sector.
- Failure to comply with the project by the borrower most often causes a delay in the project.

There are opinions that the process of cooperation between the EBRD and domestic economic actors is largely accompanied by challenges, and about that - the challenges of cooperation lie in the following: insufficient protection of property rights, inadequate transparency in the process of granting subsidies, a large number of non-transparent inspections, and parafiscal costs, gap between necessary and existing skills, wastewater management subsector remains the most underdeveloped subsector of water supply infrastructure, delay of the adoption of by-laws, the perception that some investors benefit from operating on unequal grounds.<sup>3</sup>

Naturally, as in other development banks in the world, there are always some projects that are not well implemented to the end, which is expected by every norm of operations, taking into account that the bank has direct and indirect business activities with a large number of business actors. What we can emphasize is that it is a practice that can't be avoided in most cases. Of course, there are always exceptions.

It is not uncommon for project participants, in case they don't have an adequate assessment of the cooperation with the EBRD, to go to other foreign lenders and look for other borrowing terms. Usually these are then more expensive loans for infrastructure projects, because an unfavorable project reference is obtained, and other financial institutions or organizations are very cautiously looking at a new loan and a possible type of cooperation. What we have to repeat and conclude, is that for each type of project there are specific loan repayment principles and interest rates and in most cases they are secret and confidential data. However, in the opinion of various state institutions from the Ministry of Finance, the Ministry of Economy, there is no better evaluation of cooperation from cooperation with the European Bank for Reconstruction and Development. We think that no international institution has (in the last 20 years) provided support in the development of the infrastructure sector and program, as it is the case with the aforementioned development bank of Europe. Presently, its potential under the "Europe 2020" strategy is such that the emphasis on the strategy's completion is precisely on the infrastructure sector.

For the purpose of the orientation, we will look at the next set of average interest rates of other financial institutions in the infrastructure sector:

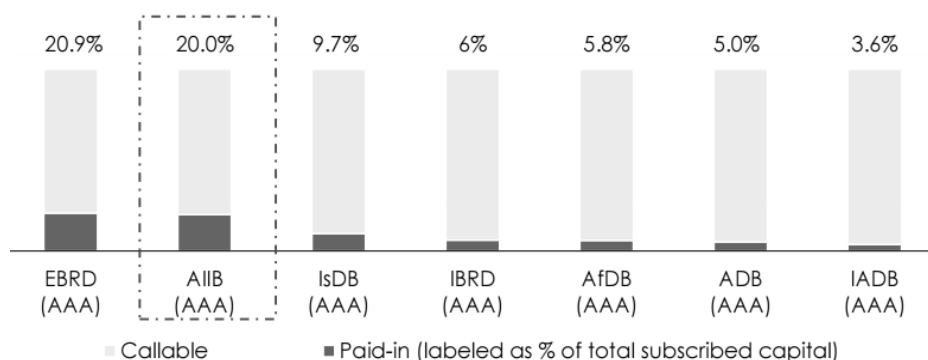
Table 15. Review of interest rates on infrastructure projects of other financial institutions<sup>4</sup>

Institution name	Interest rate	Interest rate increase during the repayment-max
<b>IBRD- International Bank for Reconstruction and Development</b>	1,02%	1,05%
<b>ADB- Asian Development Bank</b>	1,00%	1,5%
<b>IADB- Inter-American Development Bank</b>	1,05 %	1,08%
<b>AFDB- African Development Bank</b>	5,86%	5,87%
<b>AIIB- Asian Infrastructure Investment Bank</b>	1,96%	2,04%

According to credit potential, the closest to the EBRD are IBRD, AIIB and IADB. It can be noted that the credit potential is very high.

<sup>3</sup> EBRD document, draft of the strategy for Serbia, 2018-2024, Belgrade, Serbia, page 10

<sup>4</sup> Financial reports IBRD, IADB, AFDB, AIIB



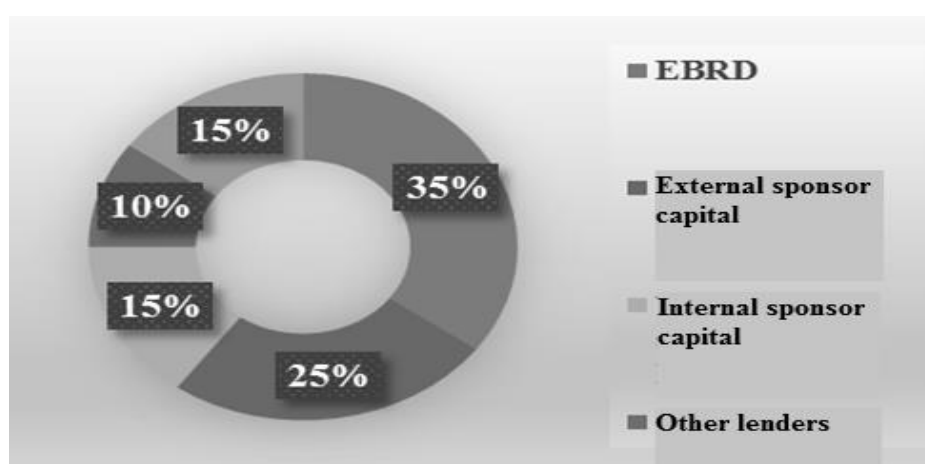
*Graph 5. Conservative capital structure*

*Source Asian Infrastructure Investment Bank*

Until now, investment in the primary and tertiary sector as a function of the European Bank for Reconstruction and Development has been to improve better living conditions and, consequently, certain economic parameters.

Here we are returning to the initial thesis and demonstrate that the EBRD's investments enable the improvement of the conditions of the real and tertiary sector, better conditions for the development of energy efficiency, better infrastructure performance, the development of all favorable aspects of the economy, and, of course, the preservation of the environment.

In all projects shown, as well as on many other projects, we can see exactly this cooperation of the European Bank for Reconstruction and Development with other financial institutions, and as such, deemed very important, because the EBRD thus achieves much greater financial capacity of the projects and increases the security of investments. It attracts other large co-financiers, and this holds great significance. It is important to emphasize that the usual structure of capitalization, as stated in the European Bank for Reconstruction and Development, is the following: EBRD 35%, the capital of another big sponsor-financier 25%, the capital of the local sponsor 15%, and other loans 10%.



*Graph 6. Usual capital structure*

*Source: Guide to finance EBRD*

According to the financial guidebook “Guide to EBRD financing”, the said European bank believes that EBRD loans have a competitive price, based on current market rates, such as EURIBOR and LIBOR. The EBRD also offers fixed and variable interest rates. The EBRD does not subsidize projects, does not offer soft loans and the bank does not compete with private banks' loans<sup>5</sup>.

However, we can't completely agree with this view, because in the current situation in the world and European market of banks, the lower interest rate is the very product of the bank which, as a generic focus, proved to be less attractive and less appealing to potential clients-investors. We are not saying that these funds are not competitive by the EBRD, and we are not saying that they are not needed, they are at a very large extent: we just think that interest rates can be even lower. Especially if we take the last EBRD 2013-2017 strategy, in which, according to various analyzes, the financial market and the banking sector have progressed and, consequently, the conditions of the business in the real sector have improved. Overall, the credit rating of the companies in the Republic of Serbia is at a higher level than in the past decade, and therefore the terms should be aligned with it.

However, the demand for debt financing funds by the EBRD (whether it is the European currency or in the dinar currency) has been reduced for several reasons:<sup>6</sup>

- High liquidity of the banking sector and the environment of low interest rates, which made the EBRD's funds less attractive to the ultimate borrowers
- Low demand for long-term finance in dinars

Consequently, there is a decrease in interest for projects of less financial capacity. Therefore, potential debtors consider whether and how much they could finance all loan conditions. But the question remains, who could possibly finance and have as much investment power as EBRD has; our opinion is that the EBRD has exceptional financial and investment power, and at the same time, very large opportunities in the KNOW HOW project segment.

## CONCLUSION

Starting from the hypothetical framework of research, the following can be concluded:

- The European Bank for Reconstruction and Development has recognized its role in providing funds for the infrastructure sector of Serbia. So far, it has been invested in 29 large projects, of which 27 are of public importance, in which 1,291 million euros was invested. This has been largely followed up in line with the main European objectives set by the European Commission, the Council of Europe and other relevant EU bodies. It should be emphasized that, in line with the European economic prosperity lens for the Western Balkans, the main task is to secure a stable economy and development.
- EBRD helps in the infrastructure sector to candidate countries and potential candidates for joining the European Union. It is primarily an important aspect of investing in this sector, as it contributes to improving the infrastructure conditions for easier mobilization, people, equipment and capital.

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<sup>5</sup> Finance Guidebook: Debt terms, International Finance Institutions and Bilateral loans, page 23, Government of the Republic of Serbia, Office for European Integrations, Belgrade, 2013

<sup>6</sup>EBRD document, draft of the strategy for Serbia, 2018-2024, Belgrade, Serbia, page 7



It is necessary for commercial banks that service credits for the infrastructure sector to take on a more active role in informing entrepreneurs, or potential investors about the funds available to them, and which are part of the credit lines mentioned by the European Bank. In the infrastructure sector there are very strict borrowing conditions, and their position is further aggravated by the global economic crisis. That is why the role of the EBRD in the securing of the funds is of utmost importance for our country.

The infrastructure sector needs extensive investments to address existing shortcomings and overcome the problem of non-maintenance and development breaks. Since the infrastructure sector is one of the important aspects and factors of the development of one society, special attention, importance and all alternative ways of financing, must be given to this domain and therefore must be included in order to ensure uninterrupted and high developmental economic cycles.

We can conclude that the EBRD is the leading financier in the sphere of the infrastructure sector in the Republic of Serbia, reflected in the number of 29 major projects, which are of a very large economic (economy, traffic, infrastructure) significance. Her role was particularly significant in the strategy implementation period of the 2007-2011, 2012-2017, which was an exceptional momentum for the boom of her business in Serbia. In Serbia, there is a very high need for the financing of the infrastructure projects, requiring a range of dedicated and structural investments, which implies the involvement of large international financial institutions. Absolute need exists, and the segment of cooperation with international financial institutions, in terms of infrastructure development, is very important and must be constant in order to accommodate all the conditions for the development of a modern society as a whole.

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# SELECTION OF ORGANIZATION MODELS AND CREATION OF COMPETENCES OF THE EMPLOYED PEOPLE FOR THE SAKE OF COMPETITIVENESS GROWTH IN GLOBAL BUSINESS ENVIRONMENT

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## ABSTRACT

This paper is a result of its author's work, whose goal was to examine the role of globalization in the change of organization models and intensification of its competitiveness, following trade liberalization. In addition, the goal was to define competitive advantages, which the companies have to develop in order to survive in a highly competitive global market. The study has shown that market expansion does not mean that only big business subjects will be able to make a profit. Also, the analysis has shown that there is no correlation between a big market and success of big businesses. In other words, globalization rewards the companies which are innovative and competitive, regardless of the company's size and country of origin.

Keywords: competitiveness, globalization, company, decentralization, trade, investments, new organization models

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## INTRODUCTION

In the last two decades, the globalization has occupied a special attention of scientists, having in mind its great impact on the development of global finances and financial markets, knowledge extension with the help of the improved communication terms, expansion of multinational companies and decentralization of economic activities within and among the companies, development of global oligopolies and reduction of barriers in trade and investments. Namely, the internationalization of all types of economic activities is growing. In situations where the organizations mutually integrate, they cross local borders and simultaneously contribute to simultaneous economies of several countries. Based on the opinion of many scientists, globalization has interrupted a previously strong local and regional economic identity of countries, (Radovic-Markovic,2019). To support this attitude, globalization was described as a vast and powerful multinational company where the impact of regional governments and administrations is significantly reduced. This has got simultaneous positive and negative dimensions from the aspect of national countries. This was particularly stressed by the Nobel Prize winner for economy, Stiglitz (2002). An increased connecting, according to his opinion, has led to the increased need for a new type of social, political and legal regime, which will increase the difference between the rich and the poor. He has put the basic stress to the fact that there isn't anything unjust in the aspect of economy when it comes to globalization, but these processes will provide new possibilities for an unscrupulous group of people and interest groups. Imposing new economic and business patterns will create an entirely new set of consequences and decisions. These decisions will be focused on an optimal use of resources and will provide the greatest advantages to the most developed countries of the world. Such attitudes have led to great debates, which have tried to confirm or deny who will profit the most-developed or undeveloped countries in terms of new economic movements under the impact of globalization. However, the thing that cannot be the subject of any dispute and that most economic experts agree about is the fact that it is difficult to separate mutually connected economic, political, cultural and institutional dimensions of globalization. In addition, there is a general compliance about the most important aspects of globalization:

- Globalization has led to the increased number of new jobs and thus the increased employment. The economists agree that in the USA there was more than 50% of jobs created in the last decade, which is directly connected to the global economy.
- New technologies have become a crucial business factor and a significant competitive advantage of the companies in modern terms of business. Usage of technological advantages, particularly in the domain of information and communication technologies, have an impact on a closer connection of economies in time and space, enabling the businesses to be performed in a new way and through a closer mutual interaction. There are also introduced new communication and coordination systems, as a link between different organizational cultures.
- There was created a new organizational culture of the companies, under the impact of global economic movements.
- Globalization provides a possibility of a greater cooperation between suppliers, manufacturers and buyers and enables a much more fluid marketing environment where an organization can extend its markets and thus increase its profit.
- It has come to the integration of financial markets. Namely, globalization affects the financial sector to a higher extent in relation to all other sectors since the money transfer

is performed through computer operations. Having this in mind, it is not surprising that this sector was the first one to experience the effect of globalization.

- Globalization has also largely affected the change in trade structure and increase of foreign direct investments and the competitive advantages of some countries.
- Globalization sets new challenges in life cycles of products and services ; users are increasingly demanding (Krstić, et.al.2018).

Having in mind a very wide range of globalization's effects on global economy, the aim of this paper is to focus the study on one segment only and examine the manner in which the globalization reflected itself on the creation of a new model of organization structure and the increase of international competitiveness of the company. In addition, the aim is to determine which competitive preconditions should the companies develop in terms of new economy.

### ***Defining of competition and determining basic forms of competitive advantages of the companies***

OECD defines the competition as “the level of advantages that one country can achieve in conditions of free and specific marketing conditions, producing products and services that can pass the test of international markets, while real profits of people are maintained during a longer period of time”

Competitive advantage can be defined as a unique position that a company develops in comparison to its competition. Many scientists consider that competitive advantage is achieved by acquiring a superior position in the market. This superiority depends on the consumers and therefore it can be observed and analyzed from their perspective. For example, the company can produce those products and services that are superior by their performances in relation to other products and services, but as long as the consumers accept them as superior, the company will not achieve competitive advantage. In other words, the company can offer superior products to consumers similar to those that are offered by the competition, but at somewhat lower prices or offer the products and services that aren't part of the offer of their competition. In that manner, the company achieves its competitive advantage in the market, i.e. main forms of competitive advantage are lower prices and diversity of products and services.

Let's assume that an economy consists of L workers and n number of companies. Each company has got its own market where the consumers express their different requirements. Requirements or preferences of consumers in relation to market offer of companies can be expressed in the following manner:

$$U = \left[ \int_0^1 y(i) di \right]^{\frac{1}{\gamma}}$$

$$0 \leq \gamma \leq 1$$

In this form, we express the consumption of the product i with y(i). Parameter  $\gamma$

determines the level of product diversity. As the parameter  $\gamma$  is higher, the products are more similar and the companies have less market power and they are less competitive and vice versa.

Namely, competitive advantages of a company are a result of an appropriate combination of prices and different positioning in the market.

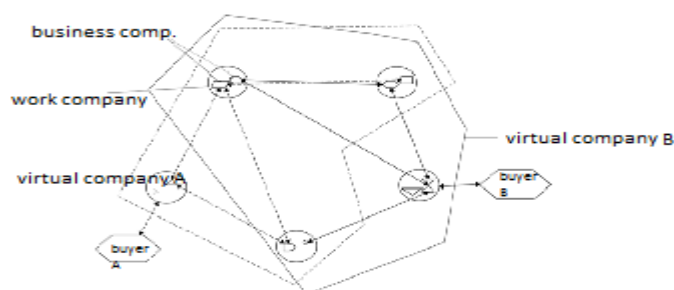
The role of small and medium companies has significantly changed after the 1980's. the processes of adaptation, as well as reaction to the oil shock and revolution in information and communication technologies, have caused the changes in perception of small and big companies, as well as the character of their interaction in the market (Radović-Marković and Tomas 2019).

### *Selection of organization model*

“Companies are focused on redesigning the organization itself, with nearly half actively studying and developing new models” (Bersin et.al. 2017, p.1). Having in mind that all the waves of globalization in modern history were in one or another way encouraged by technical and technological innovations, that was reflected on the change of doing business in a fundamental manner. Namely, the growth of information and communication technologies is of an exceptional significance, because they exert pressure on small companies to look for new, flexible and efficient forms of organization. Namely, in accordance to all these changes, the companies look for new models of organizational relations which are more suitable to the existing business environment, putting the development accent on two complementary directions:

1. modification of organizational structure which will enable rapid adaptation to the altered business conditions, both on the market and within the borders of the very company, with minimum costs and with as higher quality of products as possible (Pollalis & Dimitriou, 2008); and
2. intensive usage of information-communication tools for knowledge and information management.

A special form of networking, suitable for MSP, are virtual organizations. A concept of a virtual company answers the two previously mentioned requirements (Iandoli, et al., 2014).



*Figure1 Concept of virtual companies*

*Source: Marković and Radović-Marković, 2013*

Virtual companies possess their characteristics in basic form and as such they can achieve different forms of cooperation and integration with other virtual companies. Depending on the integration level, different form of information is also transferred in order to achieve common excellence.

Global flows in global trade also had the impact on the increased trade in semi-finished products. Global company performs one phase of production on one location and imports semi-finished product as an input for the second phase of production on the other location. Thus obtained product is further exported on the third location where final phase of production will be ended and a new product obtained. Therefore, for the period of production process, all its phases are done on

another location. In this manner, international organization of production leads to the increased trade in semi-finished products and direct international investments. Simultaneously with these changes in global economy, corporation sector in developed countries of the world is significantly changed and it has experienced its reorganization. The companies have started to make decisions in a decentralized manner within an organization. It has affected the reduction of hierarchy within the company and losing the managerial medium layer. However, the most dramatic changes have occurred in the aspect of significance that human capital has obtained in relation to all other resources and thus it has become a backbone and main strength of a company. Since human factor is not owned by the company, management of modern companies is focused on finding a manner to retain talents and prevent them from leaving the company.

“As organizations become more digital, they face a growing imperative to redesign themselves to move faster, adapt more quickly, facilitate rapid learning, and embrace the dynamic career demands of their people”.(Bersin, p.2). in each company, owner or director employ the managers which should establish separate sectors and employ the workers who will be engaged in production process. Director and managers must be informed on profitability of a project, which should be realized by the company. In addition, it is required for them to jointly take part in determining organization form, which would suit the international competition to the highest extent. According to this, we ask the question which organization form should be chosen in order to respond to the changes in international competition to a higher extent?

Numerous experts try to determine main characteristics of successful companies in the future, giving different names to their concepts, such as: “flexible firm”, “company based on knowledge”, “company based on small-scale production”, “firm with high work performances” etc. in the essence of all those concepts there are different approaches and assumptions. In spite to this, all of them agree in the aspect of common characteristics of successful companies, which will be able to develop their competitive advantages. Namely, they set aside the following characteristics as the most important:

- Several different knowledges of employees, in order to be able to respond to different tasks and obligations (Radovic-Markovic et.al.2017).
- Rotation of employees from one to another position, in order to be able to permanently professionally improve themselves and progress
- Encouraging teamwork, cooperation and connection of employees to their business partners and clients
- Greater inclusion of employees in development activities of the company

It is required to observe an organization or company as a system that consists of mutually intertwined numerous functions and characteristics that determine the success of business of the given company. The companies, which did not manage to adapt themselves to new requirements, have found themselves in danger to lose their strategic advantages, so that they had to find their competitive advantages through lower costs of traditional production factors, such as work. However, those companies that have adapted themselves to the new organizational requirements have increased strategic maneuvering space and created additional competitive possibilities in the market. Namely, competitive advantage does not have to be increased by the reduction of costs, but also the quality of production, innovativeness, constant development of products and services, comprehensive concept of services or the ability to rapidly answer the requirements of buyers and business partners. This was reflected in a positive aspect only on the increase of competitive advantages, but also the terms of employment in the organization.

The example to use the possibilities of globalization for development of SME offers (especially in countries with small internal market), global start-up companies. Namely, speaking of the future of entrepreneurial sector, a great number of researchers in the world believe that global start-ups will change global business and business style (Lesáková, 2014; Devinney, et al. 2016). It is about an organization which has extended itself to more than 15 countries and it makes more than a billion of American dollars of annual income. Global start-up companies have a significant role in innovations development. They are formed to exploit the possibilities in international market in almost every sector. Although small and medium companies were traditionally considered endangered in internationalization due to the limited size and resources, they play an important role in this type of internationalization (Radović-Marković and Tomas, 2019). In addition, organizational model creation is highly dependent on different cultures by determining business strategy, leadership style, motivation etc. (Radović-Marković, 2018).

### ***Increase of competences of employed persons for the sake of growth of company's competitiveness***

There is a great compliance between researchers that e-skills are becoming more and more important for the improvement of competitiveness, productiveness and innovations, as well as employment of labour and its professionalization. In that aspect, there is a rather expressed need to ensure knowledge, skills and competences of managers and IT specialists in this field, as well as users, in order to be able to affect the meeting of the highest global standards, which are continuously improved through the process of effective lifelong learning. Namely, increasing competition and globalization have set the innovations to the fore of industrial development. The lack of capacities for successful risk management particularly jeopardizes small companies.

Model of IT competences of managers consists of two dimensions: knowledge and experience. The role of entrepreneurs in companies, especially small ones (from 0–49 employees), which are the most numerous, is described in literature as leadership, managerial and coordinational, as well as entrepreneurial, as the undertaking new combinations and responsibilities, risks and innovations, and all of that in order to realize strategic goals of the enterprise.

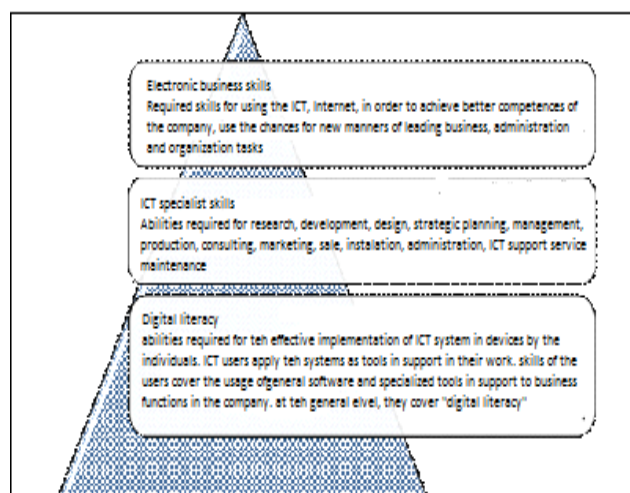


Figure 2. Pyramid of information competences

Source: Authors



Correlation between different types of changes in an organization points to the changes that have occurred by using electronic functions of the company. Regarding this, there are numerous examples in Europe showing competitive advantage in implementation of new technologies that the employment have with IT education, because they adapt them as new ideas more rapidly than the others. Rather high obstacles that exist for the entrance of SME to some new market are facilitated by higher usage of IC technologies because costs are reduced in that manner, productiveness and profitability are increased and workforce is additionally motivated to learn and increase competitiveness.

## CONCLUSION

Although limited resources make small companies sensible to changes in external environment, through their activities-action plans and business strategy in risky situations, they are able to perform a significant impact on own performances and survival (Radovic Markovic, et.al.2018). First of all, the changed economic and other terms of business require “extreme internal and external adaptation to changes”, which was shown in many developed countries such as Sweden and Denmark. This main characteristic of the enterprises in the countries mentioned, in comparison to the enterprises that have measured their success by their financial performances, has given much better results. Accordingly, less and less companies in today’s business environment base their functioning on old Taylor and Ford work models. As opposed to the old work models, there is gradually been formed global management with entirely different management in relation to the traditional management model. Global manager is expected to have a global vision of work, which will enable him to be above the existing geographic, competitive and other constraints. This global managerial vision is determined by a greater number of factors. One of the most important is the ability of the manager to observe global market as a whole. All the types of differences-ethical, national, religious, culturological and others should not be taken as a constraint, but the challenge and source of many new possibilities (Radović-Marković and Tomas 2019). Only in that manner and with the possession of more relevant knowledge than competition, we can raise the level of competitive advantages of some company in global terms of business.

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## **Part III.**

### **Finance, Banking and Insurance sector**



# THE INFLUENCE OF LIQUIDITY AND PROFITABILITY ON THE BANKING SECTOR PERFORMANCES – THE EXAMPLE OF SERBIA

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## ABSTRACT

As our country has been opening itself more to foreign capital, foreign banks have brought their paradigm of efficient business methods in the banking system of the Republic of Serbia. This paper shows the seven-year analysis of the time series based on the ratio indicators of liquidity and profitability of the 10 largest banks doing business in the Republic of Serbia for the period between 2010 and 2017. In this research we used data from quarterly reports issued by the National Bank of Serbia and the selection criteria for banks was the amount of total net assets. As the percentage of participating banks' share is 77.1% of the total net assets of all banks operating in the Republic of Serbia, the values obtained approximate the performance of the entire banking system to a very good extent. The objective of this paper is to interpret these indicators in the aim of supporting the decision-making process concerning the credit-based and other finance-based relationships with clients so as to demonstrate whether monitoring of monetary authorities needs to be raised to a higher level, assuming that in the observed period the banking system of the Republic of Serbia was stable.

Keywords: bank liquidity, bank profitability, banking system, Republic of Serbia, decision-making, assets, monetary policies

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## LITERATURE REVIEW

In order to better understand successfulness of one or any business, banking sector experts, mathematicians and economists have developed and created a number of indicators (Kenchington et al, 2019). As the nature of the operating methods of banks differs fundamentally from the business of companies in the nonfinancial sector, the financial statements differ as well, and their structure and content must reflect all the specifics of banking operations (Hadzic, 2009). The ratio indicators are calculated as a meaningful relationship between the positions in the financial statements and in order to analyse the performance of banks' operations they must be adjusted to the specificities of the financial statements of the banking sector. Ratio is the index by which one variable is measured in relation to the other variable and is usually calculated as a percentage or rate (Dimic et al, 2017). The nature of the banking operating methods consists in collecting cash from financially beneficial business entities and lending that money to deficient economic entities (Berger et al, 2017). All economic entities can be found on both the surplus and deficit side of the story - the population, companies and the state. As the deposit is paid by the bank, the bank pays the deposit interest rate and charges the active interest rate on the issued placements, the bank generates the largest part of the profit through the difference between the active and interest rate (Salem et al, 2012). The banking system constitutes a special part (a subsystem) of the overall economic system that enables the comprehensiveness of all social relations in which the financial mechanisms in production, distribution, exchange and consumption are developed and created (Andjelic et al, 2017). Banks have large amounts of money and their business is under constant and detailed monitoring by regulatory authorities (Mishkin, 2012). In this respect, they have a legal obligation to report on their daily work, and in order to retain the license, banks must provide the necessary level of capital adequacy and liquidity, as well as respond to all requests made by the National Bank of Serbia.

## RESEARCH PROBLEM, OBJECTIVE AND METHODOLOGY

Banks are obliged to issue financial statements for the sake of annual transparency and submit them to the National Bank of Serbia for review and verification (Cogoljevic, 2018). Such certified reports represent official indicators of the state of financial stability, i.e. the assets and sources of the company on the given day (balance sheet), as well as the cash inflow and outflow, i.e. expenditures, revenues and results (profit and loss statement). ***The subject of this research*** is a comparative analysis of the time series of publicly issued regular annual reports of 10 banks operating in the Republic of Serbia – ratios of liquidity and profitability indicators were used to make the best possible comparison of the results obtained. According to the Report for the 4th quarter of the National Bank of Serbia, the percentage of participating banks' share is 77.1% of the total net assets of all banks operating in the Republic of Serbia, hence the values obtained approximate the performance of the entire banking system to a very good extent. ***The objective*** of the research is to calculate and interpret the aforementioned indicators and planned balance sheet positions observed through the prism of commercial banks with the purpose of supporting the decision-making process in entering into credit agreements and other financial relations with clients. ***The general hypothesis*** is that the banking sector was stable in the period between 2010 and 2017, alongside with two sub-hypotheses.

- In the long run, assets have the growth with the highest share in total net assets.
- The monitoring of the creditworthiness of current and potential clients in banks in the Republic of Serbia needs to be raised to a higher level.

## EMPIRICAL ANALYSIS ON THE BASIS OF THE CURRENT STATE IN THE REPUBLIC OF SERBIA

In this part of the paper, a graphical image with comments on calculated ratios of indicators is given. A specific chart is related to a specific ratio indicator and it displays the value of a specific indicator in the participating banks using a time series analysis for the period 2010 - 2017. In addition to individual values of ratio indicators of the 10 largest banks as per the amount of assets, their average value is also shown in order to better understand the performance dynamics of these banks. According to the report for the 4<sup>th</sup> quarter of the National Bank of Serbia, the ten largest banks in the Republic of Serbia according to the above criterion are:

- Banca Intesa JSC - Belgrade
- Komercijalna banka JSC - Belgrade
- Unicredit Bank Srbija JSC – Belgrade
- Raiffeisen Banka JSC – Belgrade
- Societe Generale banka Srbija JSC – Belgrade
- Agroindustrijska komercijalna banka AIK banka JSC – Belgrade
- Eurobank JSC – Belgrade
- Erste Bank JSC – Novi Sad
- Banka Postanska stedionica JSC – Belgrade
- Vojvođanska banka JSC – Novi Sad

### DYNAMICS OF LIQUIDITY INDICATORS

We obtained the first bank liquidity indicator by putting cash, short-term effects and total assets in relation (Vesic et al, 2018). As we can see in Chart no. 1 – in the observed period, the share of cash and short-term effects in total assets is on average at 15% to 30%. Half of the banks we surveyed have these values above the average. The value of this indicator, which, from the aspect of liquidity, is at first glance a bad sign since the bank has smaller amounts of cash. The reason for this decline may be that banks have more funds invested based on which they earn more income, which is a preferred option for banks, but also because of the lower amount of cash due to the lack of collected deposits or their withdrawal.

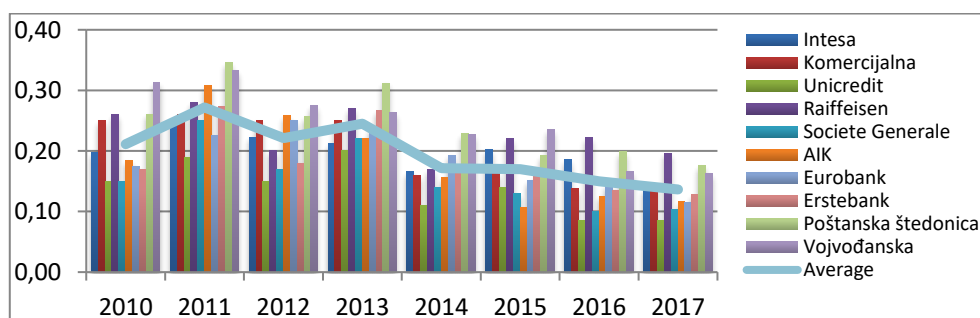


Chart 1. The share of cash and short-term effects in total assets

Source: Calculations by the authors based on the data obtained from the National Bank of Serbia



**The second liquidity indicator** is obtained by dividing cash and short-term effects by deposits (Vesic et al, 2017). The results are shown on the Chart no. 2. Its average value dynamics follows the average value dynamics of the first liquidity indicator. The average value of the share of cash and short-term effects in bank deposits in the observed period ranged from 20% to 40%. Based on the same dynamics of the first and second indicators, we see that there was no deposit decline, and that, consequently, the decrease in cash was not the result of a decrease in deposits or their withdrawal by depositors

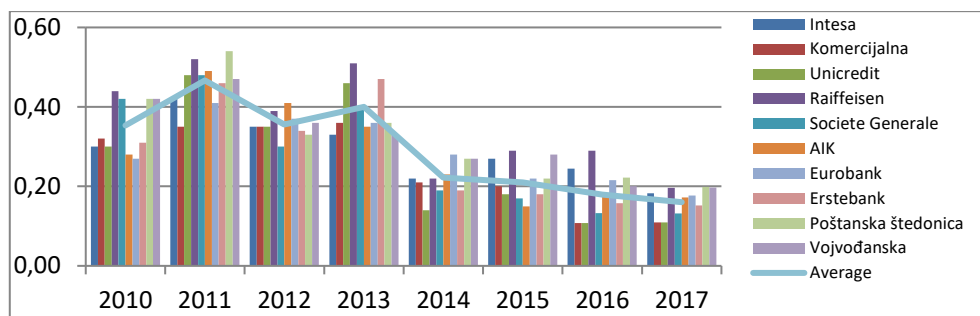


Chart 2. The share of cash and short-term effects in bank deposits

Source: Calculations by the authors based on the data obtained from the National Bank of Serbia

### Dynamics of the profitability indicator

**Return on Assets (ROA)** represents the ratio of net profit and average total assets (Vukosavljevic et al, 2016). The indicator is displayed in Chart no. 3. The return on assets in the observed period is on average up to 1%, but during the period it declined until 2015, when it started to increase again. This indicator shows that mostly foreign banks are above the average. When it comes to domestic banks, AIK Bank JSC Belgrade and Poštanska štedionica JSC Belgrade had values above average up until 2013.

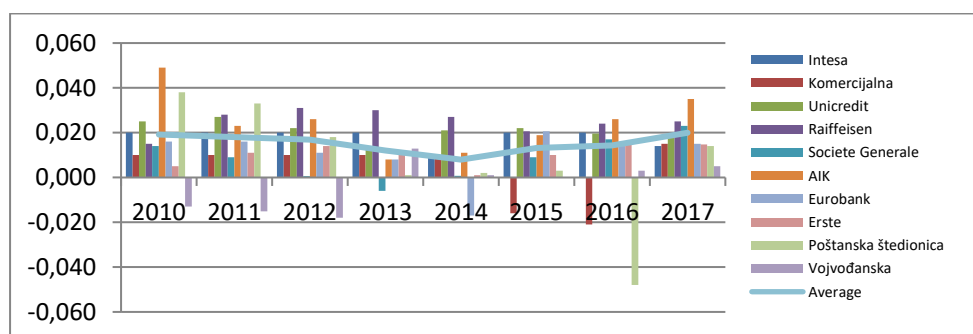


Chart 3. Return on assets

Source: Calculations by the authors based on the data obtained from the National Bank of Serbia

**Return on Equity (ROE)** represents the ratio of net profit and share capital and monitors the dynamics of return on assets (Žimonjić et al, 2018). The average value of the indicators from 8.6% in 2010, decreased until 2014 when it reached a minimum value of 3.7% and in 2015

improved to 4.8%. Approximately 60% of the participating banks had an above average ROE, with more foreign banks having results above average. In the group of 10 banks presented, each year one bank had losses. Not including the banks shown on the Chart, four of them – Pireus, KBM, Telenor and Alpha Bank had a loss in 4 out of 5 observed years. The largest "loser" of the observed period is the Poštanska štedionica Bank JSC Belgrade in 2016, whose loss also reflected on (non)return on equity.

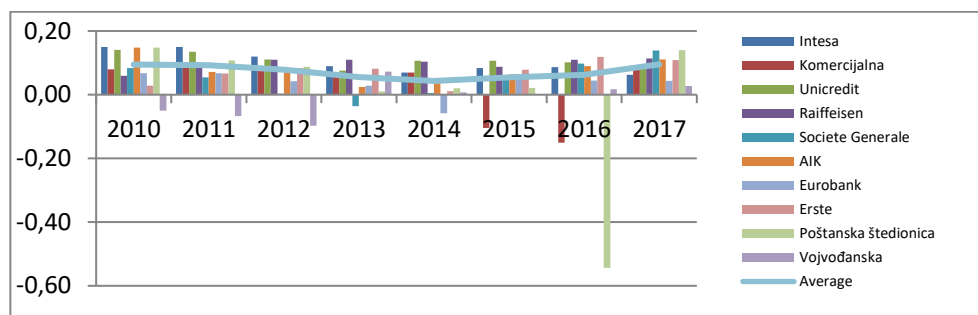


Chart 4. Return on equity

Source: Calculations by the authors based on the data obtained from the National Bank of Serbia

**Return on Assets (ROA) and Return on Equity (ROE)** reflect the profitability of the banking sector (Lukic et al, 2015). Since the link between equity and assets for all banks is rather stable and of the approximately same ratio, both ROA and ROE have similar movements, and by 2013 they point to profitable operations of banks. The rule is that if the efficiency of the bank's operations decreases, i.e. if the income-generating on assets is reduced (ROA decreases), the bank is then forced to take more risk through borrowing in order to achieve the planned return on equity (ROE), which is actually expected by shareholders (Ristanovic, 2017). The growing risk of bank operations was covered by capital assets. This endangered liquidity, so many banks were forced to recapitalize in order to maintain the obligatory level of capital adequacy. This also reflected negatively on profitability because capital increased, the cost of reservations rose, and profit was reduced.

## CONCLUSION

With the outbreak of the global financial crisis, the central banks, along with commercial banks, continued to work to mitigate the effects on the banking and financial sector (Schiereck, 2016). During the crisis, having a conservative policy designed by the National Bank of Serbia, the banking sector was sufficiently resistant to handle all negative and crisis-induced consequences. In the period covered by the analysis, changes in the structure of the banking sector happened. There was a decrease in the number of banks and a decrease in the number of employees in the banking sector, and the amount of total net assets reported an increase. The amount of capital available to the banking sector grew and the dominant share in the total capital was owned by foreign-owned banks. After calculating the ratio indicators, we get an insight into the financial performance of banks in our banking sector (Doojav, 2018). From the first group of ratio indicators we see that the amount of cash that the banks have in disposal is decreasing, but banks still have sufficient amounts of cash in order not to jeopardize their liquidity. On the other hand, less liquid assets mean less cost on the basis of their holding because they generate revenues. By day-to-day innovations in the banking sector, banks are

trying to improve their productivity, and as the ultimate effect their profitability as well since the primary motive when it comes to banks is to make the highest possible profit. Innovation is an effective method to accelerate growth and profitability in service companies, associated with new methods of value creation for both customers and companies (Fereydoon et al, 2018). The problem in the operations of banks occurs when they need to collect loans because, due to slower economic activity, clients are less and less able to fully and timely settle their obligations. Due to the high costs of unsecured loans, the banks' profits were halved, and some of the banks suffered losses. Solving this problem would need to include a more restrictive policy when approving loans and a better monitoring of the creditworthiness of current and potential clients.

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# NECESSITY OF INTRODUCTION OF PENSION DISABILITY INSURANCE REFORM

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## ABSTRACT

Life is a natural course, full of the uncertainty and temptation of every human being. In order to make our lives peaceful and have a peaceful future, we try to provide various ways to ensure that we make our lives safer.

The pension insurance system is very important for every country from a social, economic and financial point of view. Pensions are primarily a social category because they represent the income of people who are unable to earn a living due to age or illness and as such reflect the social function of the state.

In most of the transition countries, reforming processes in the field of pension insurance have been initiated or are under way in order to establish a sustainable functioning model. In Serbia, in the period from 2001 to 2016, attempts were made to reform the pension insurance system in order to solve the inherited unfavorable situation, but still without significant effects.

An integral part of the paper is the results of the research conducted with the aim of obtaining the attitude of Belgrade residents about the existing mandatory pension insurance and trust in the same, as well as the view on the need to take additional measures and activities in order to realize a comprehensive reform in the field of pension insurance. Starting from the established goal of the research, it can be concluded that the hypothesis was established that the inhabitants of Belgrade are not satisfied with the existing situation in the pension insurance system, that they consider the pension fund to be vacant and that as such it does not guarantee safe pensions. This indicates that additional measures and activities of the competent state authorities and institutions should be undertaken in the forthcoming period in order to fully implement the projected reform goals in the field of pension insurance.

**Keywords:** pension insurance system, social insurance, private pension insurance, reforms, research results, attitude of the inhabitants of Belgrade.

**JEL:** G22, G23

**UDC:** 364.35(497.11)

**368.914(497.11)**

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## INTRODUCTION

The pension system is very important for every country from a social, economic and financial point of view. Pensions are above all a social category because they represent the income of people who are unable, due to sickness or age, to earn a living and who need state care, and as such, pensions are part of the social security system, which is the most significant form of social insurance. Modern social insurance was created in Germany in the 80s of the 19th century ([8], p. 72) when compulsory insurance of workers with major social risk factors was introduced, such as age, disability, illness and unemployment. In the period of liberal capitalism, workers with low wages, and there were many during that period, were unable to provide their own essential security. In order to reduce these risks, the state, through the system of contributions, provided the social security of workers. In this system, each of the insured (workers) regularly contributed to those users who were affected with one of the mentioned social risks ([1], p.7).

Pensions are also an economic category because long-term payments, when the population is actively earning, create large assets in the name of saving for old age. Finally, pensions are also a financial category. On the one hand, because pensions are part of public spending, and as such, are part of the public finances of a country. On the other hand, lately, with the reform of the pension system, private pension funds representing old age savings are one of the most important institutional investors in financial markets around the world and have a major impact on the financial systems of countries.

The pension systems of most countries in the world are based on a system of ongoing financing. This system is characterized by the fact that those who work, through contributions, finance the pensions of those people who have completed their working lives. Today this type of intergenerational solidarity is not sustainable in the long run. The main reasons for this tendency are of a demographic and financial nature. For the sustainability of such a pension system, demographic factors are not favorable due to the aging of the population and the increasing share of those over 65 in the total population, on one hand, and low fertility rates, or the number of newborns, on the other. As a result, employees are unable to fund pensions without an increase of their contributions.

The process of globalization, that is, the process of integration of the world economy, has a great impact on the reforms of the pension system, which also requires a reduction in investments in pension insurance. This paper aims to draw attention to the current situation as well as to propose potential solutions that would make the pension system stable and sustainable over the long run, as well as to stress the importance of life insurance in securing material security in old age. The paper will address the provision of material security in the old age through analysis of pension systems both in the world and in our country, with the reforms undertaken, and a special emphasis will be placed on pension system reforms in transition countries, the emergence of pension funds and their role in the financial market, as well as development of private pension insurance in Serbia.

## REFORMS OF THE PENSION SYSTEM AND FINANCIAL SECURITY IN OLD AGE

The reform of pension insurance is a big undertaking that affects the existential issues of the citizens of each country and therefore has a great social and political significance. Those who are working on the reform of the pension system in a country with a weak economy have a particularly difficult task, as it is also burdened by the consequences of war, economic sanctions and bombing. Reliance largely on the suggestions of the IMF and the World Bank by international organizations that have similar recipes for all non-developed countries can hardly have a good outcome ([2], p.121).

Developed European countries have no such problem, as their citizens, along with compulsory retirement, have some kind of voluntary insurance that guarantees them material security in their old age. In these countries, employers have a legal obligation to provide pensions to workers. Employers can pay into pension funds or direct life insurance that is paid as an annuity after retirement. In addition, all citizens can pay voluntary pension insurance, most often with life annuity insurance but rarely with pension funds. In order to maintain the desired level of income in the country's old age population, they undertake various measures, and regulations are adopted which, primarily through the tax policy, stimulate life insurance. The compulsory pension insurance business in some countries is being entrusted to national insurance companies because citizens have confidence in them, and they are also of great importance in supporting the development of the country's economy.

A successful reform involves the drafting of a set of legal, subordinate and administrative acts in order for pension insurance to be a complete system that will provide social justice. In the Law on Insurance applicable in Serbia, voluntary insurance has been given little space. Nevertheless, the least understandable segment of the pension insurance reform is that it is not envisaged to introduce compulsory pension insurance for employees that are concluded by employers. Funds from which the pensions of employees are paid operate on the basis of capitalization, and that is why they have an advantage over public funds. The introduction of voluntary insurance (3rd pillar) only through a pension fund in countries with low average wages and without tradition in that business is also debatable. It is necessary that regulations that would stimulate various types of voluntary pension insurance by a number of measures are a constituent part of the reform. A reform based on drastic reductions in compulsory insurance and voluntary insurance coverage does not have good prospects if a successful reform is one which in the long term protects both the individual interests of citizens and the broader national interests ([3], p.121).

In Serbia, an important way of organizing insurance, which is otherwise widely used in developed countries, is also neglected. It is well-known that non-profit mutual insurance companies largely provide insurance that has a social function (pension, health, insurance and old age care). These are companies that fail to charge the costs of their business (such as pension fund management companies) and through which the solidarity of those who want to protect themselves from poverty in old age is achieved in the best way. It would therefore be desirable to examine the experience of other countries in relation to the business of mutual insurance companies in order to achieve better solutions for categories of citizens such as, for example, farmers or members of independent professions. Obviously, the law favors the establishment of profit joint stock companies as a more desirable way of organizing an insurance company. By contrast, in developed countries, the conditions for the establishment of mutual insurance companies, without which good social policy cannot be imagined, are more favorable than joint stock companies. The issue of the safety of the

performance of pension fund obligations in the future is also open. This is a major obstacle to the development of voluntary pension insurance, because although it is unlikely that the obligations of the fund or the insurer will be executed, this danger cannot be excluded. In the EU, current projects are aimed at establishing transnational rules for guaranteeing obligations under long-term insurance contracts. In some countries, schemes of guarantee already exist in the form of funds in which all insurers are paid in advance, which foresees the establishment of funds that are formed only in the event of a bankruptcy of the fund or insurance company. The NBS argues that the operations of these funds are safe considering that assets can only be invested in the safest and most liquid securities. If so, the question is why there is no guarantee that the fund's obligations will be executed regardless of the possible crash of their business ([7], p.121).

Undoubtedly, a sustainable pension system must be the result of comprehensive economic, sociological, demographic and other research. The rationale for the reform is to be implemented because there is an unfavorable relationship between the working and the dependent population and the aging of the population does not take into account the complexity of all the causes that led to problems in the functioning of Serbian pension insurance. The problem of a large number of 'dependent' population segments should not be solved by a brutal reform of the pension system, but by a more just distribution of social wealth, and by directing all potentials to economic growth and increasing employment. As for the aging of the population, a comparative study should be made to determine the situation in Serbia in relation to other countries.

The data on increased mortality of both pensioners and people who die in their best years of serious illnesses considers how many Serbian citizens will receive pensions, and how long they can use them ([10], p.122).

## **REFORMS OF THE SERBIAN PENSION SYSTEM**

The purpose of the implementation of the Serbian pension reform is to establish a long-term sustainable system that provides greater social and financial security and a higher overall level of pensions.

The basic motive of the reform is to make the pension system resistant to demographic and economic shocks, as well as efficient, effective, and flexible in relation to the needs and preferences of individuals and less dependent on the state.

Compulsory pension and disability insurance in Serbia is based on current financing of pensions and includes the insurance of three basic types of risks: age, disability and death of the insured.

A compulsory component that provides the minimum age-appropriate income (absolute standard of living) is based on a minimum retirement sum, and the component that ensures the maintenance of income in age is based on the score system. Since the end of 2006, a part of the system has also been voluntary pension savings in private pension funds ([5], p.35).

This design of the pension system is the result of a comprehensive reform of the pension system in the 2001-2003 period. At the end of 2005, certain changes were made. The pension system component that provides an absolute living standard in Serbia is realized through a minimum pension. When s/he fulfills the conditions for retirement, those insured whose pension is below the legal level are entitled to a minimum pension. The retirement conditions are the appropriate age limit and minimum length of service.



The minimum pension currently in Serbia is just over 13,221 dinars, i.e. about 20% of the average gross salary. Within the legal changes in the period from 2001 to 2003, a uniform minimum pension amount of 20% of the average salary was guaranteed, instead of the then multiple minimum pensions which depended on the length of service. By the end of 2005, the minimum pension was increased formally to 25% of the salary, but as a result of indexing twice a year, it ranged between 20% and 22%. The minimum retirement amount is within the limits of the minimum or social retirement pensions of the countries in the region, and somewhat lower than the compensation of that type in highly developed countries ([9], p.35).

Due to an inclusion of the total working life, instead of the 10 most highly-paid years, a stronger link between the sum of the pension and the paid contributions is made, eliminating the spillover for those who made progress in their career or had a significantly higher salary in only one part of their work history. This method increases and more precisely determines the difference in the pension sum, depending on the length of service. The new 2003 law also stipulates that the retirement age is increased for over 40 years of service, which was not the case before, but with the idea of encouraging work as long as possible.

According to current legal solutions (from 2005), the retirement age increased gradually and in 2011 it reached 60 years for women and 65 for men, with a minimum of 15 years of service. This age limit was determined by multiple legal changes after 2000.

One of the major reform movements in 2001 was the increase in the age limit from 55 to 58 for women and from 60 to 63 for men (at the same time the minimum age limit was shifted from 50 to 53 years).

### ***The legal framework for pension reforms in Serbia***

The mentioned pension system reform in Serbia was carried out in September 2005 by bringing the following laws:

- the Law on Amendments to the Law on Pension and Disability Insurance;
- the Law on Voluntary Pension Funds and Pension Plans;
- the Law on Payment of Contributions for pension and disability insurance for certain categories;
- the Law on the Public Debt of the Republic of Serbia on the takeover of obligations of the Republic Fund for pension and disability insurance of employees based on unpaid pensions;
- the Law on the Public Debt of the Republic of Serbia on the basis of assuming obligations of the Republic Fund for Pension and disability insurance of farmers arising from unpaid pensions and cash benefits ([12], 85/2005).

### ***The necessity of reforming the Serbian pension system***

The pension system reform is one of the most striking and, at the same time, the most sensitive issues of the overall reform processes of recent decades both in developed and transition countries. The long-term pressure of population aging and the prolongation of life expectancy, the need to reduce, or additionally, prevent poverty among the elderly, the need to reduce fiscal pressures and lower the cost of the labor force, and the inadequacy of certain pension schemes and solutions are strong drivers of the reforms.

In Serbia, there are three categories of pensioners: old-age pensioners, those who were employed and paid a contribution to the pension insurance fund and need to exceed a certain age limit in order to be eligible for retirement; disability pensioners, who receive a pension regardless of their age, based on their state of health; and family pensioners, most often children whose parents have died, who are in full-time education, as well as widows or widowers, if supported by their spouses. Previously, there were three pension insurance funds: the employee fund, self-employed fund, and farmer fund, all of which were consolidated into a single fund at the beginning of 2008.

Due to the unfavorable ratio of actively insured persons and pension beneficiaries, the state is compensating for pension benefits from the budget. Pension costs in our country account for 14% of the gross domestic product and are among the highest in the region. In order to pay out all pensions, the state of Serbia must allocate from the budget as much as 40% of the funds needed for the payment of pension benefits (in 2005 it was about 800 million Euros, or 65 billion dinars).

In transition countries, reforms were most often conceived with the support of the World Bank under the so-called three pillars. Typical reforms in the three-pillar model include parametric changes to the 1st pillar (the current, state PAYG system), the introduction of the 2nd pillar through mandatory additional savings of younger insurers in private pension funds and the development of voluntary pension insurance as the 3rd pillar of the pension system.

### *Transfer of the 1<sup>st</sup> pillar*

The 1st pillar is compulsory, it is financed by the principle of current income and expense (pay-as-you-go), the pension is pre-defined, and the revenues are provided by the state's taxation (contributions). This pillar is managed by the state, so management is centralized. Also, the 1st pillar provides a redistributive function - intergenerational solidarity.

*Table 1 .Review of the age limits for a pension.*

The year when condition for an old age pension are met	Men	Women	Minimum length of service
<b>2006, 2007</b>	63	58	20
<b>2008</b>	63,5	58,5	19
<b>2009</b>	64	59	18
<b>2010</b>	64,5	59	17
<b>2011</b>	65	60	15
<b>2017</b>	65	61,6	15

*Source: [www.parlament.gov.rs](http://www.parlament.gov.rs).*

### ***Transfer of the 2<sup>nd</sup> pillar***

The 2nd pillar represents mandatory savings managed by private pension funds. Managing this pillar of the pension system is usually decentralized to private computing. The 2nd pillar pension depends on the contributions paid and the ability of the selected fund to increase them further, while the risk is borne by the user.

The 2nd pillar or compulsory private pension insurance exists in Croatia, Bulgaria, Macedonia, Poland, Slovakia and other countries. In the Czech Republic, Slovenia, and Ukraine, the 2nd pillar has not been formed, so that the structure of the pension system is the 1st and 3rd pillars.

In the current reform of Serbia, it has been decided that the pension system relies on two components: the current financing of pensions (PAYG) organized within the state fund (1st pillar), to the development of voluntary old-age savings in private pension funds (3rd pillar). During the first wave of reforms, the idea that besides these two components in the pension system there were also mandatory savings in private pension funds, the so-called 2nd pillar, was discarded. Thus it can be concluded that even today the introduction of the 2nd pillar in Serbia is not recommended.

### ***Basic features of the 3<sup>rd</sup> pillar***

The 3rd pillar represents voluntary savings managed by private pension funds, as well as a supplement to pensions from the 1st and 2nd pillars. In this model, the financial risk is borne by the user.

It should be noted that the 2004 Insurance Law envisaged voluntary pension insurance. The Law on Voluntary Pension Funds and Pension Plans, which is part of the aforementioned package of laws of September 2005, began to develop voluntary private pension insurance in Serbia ([13], 55/04 and 70/04).

Simultaneously with the reform of the state pension system, the adoption of the Law on Voluntary Pension Funds and Plans regulates private pension insurance, the so-called 3rd pillar model of the pension system. The essence of the proposed solutions is to create the conditions for the citizens to increase the pension income with pensions from the state pension fund by establishing satisfactory pension funds and pension plans.

Although it is estimated that the introduction of voluntary pension insurance is a very positive thing that will contribute to improving the functioning of the system as a whole, there are, however, certain objections. The National Bank of Serbia supervises the work of the management company for private pension funds ([12], 85/05).

The introduction of the 3rd pillar is not adequately followed in terms of marketing as well as training. This is important due to raising the awareness of the insured about the importance of saving in this way, and preparing pension funds for possible 2nd pillar introduction when they will have a much larger role (experience, management, marketing) and capital market development. The experiences of other countries have clearly shown that training and marketing are very important factors that will determine the effectiveness of introducing a voluntary pension insurance ([5], p.32).

In Serbia, despite the establishment of voluntary pension funds, citizens are more likely to opt for life insurance as a way of saving for old age. Despite the necessity and priority of investing in pension funds, there have been no major developments yet since the establishment of the first funds. Voluntary pension insurance is considered savings through pension funds, because in the field of supplementary pensions, only the law on voluntary pension funds has been adopted ([11], p.3).

According to the data from the Statistical Office of the Pension and Disability Insurance Fund, in June 2017 there were 1,736,154 pensioners in Serbia, which are 5,917 less than the record number of 1,742,071 in February 2015. Reducing the number of pensioners is an expansive endeavor: demise was accelerated and the working-class inflow slowed down, so the number of pensioners decreased rapidly: by 809 in March, 886 in April, 1,719 in May, and in June the decrease was reduced to only 741 people (i.e. pension checks) compared to May.

The largest number of pensioners in Serbia is from the ranks of employees - 1,451,314, far fewer farmers - 212,273, while from the category of independent activities, as few as 72,567.

Private pension funds are one of the largest institutional investors in the world, but in Serbia, where they first arrived in November 2006, they were hardly known. According to the latest data from the National Bank of Serbia, the total value of all pension funds in the last five years has steadily increased, reaching only 12.45 billion dinars, or 120 million Euros in December 2011. When compared with almost 800 billion dinars deposited in banks by citizens, or 7.6 billion Euros, it is clear how much this type of investment is unpopular in our country.

The previous changes in the pension system of the Republic of Serbia have yielded significant results. Some World Bank research shows that deficits in the pension system would be 3 to 4 times higher without previously making changes, which is a very large shift in relation to the initial state ([4], p.18).

### *Assessing the opinions of citizens*

For the purposes of this paper, a survey was conducted to assess the opinion of Belgrade residents towards the existing mandatory pension insurance and assess the attitude of the need for the implementation of additional systems.

The general hypothesis is: citizens are not satisfied with the current situation in the pension insurance system, they believe that the pension fund is empty and does not guarantee safe pensions. This means that the reforms implemented so far have not been sufficient and that reforms need to be continued.

The research was done on the territory of the city of Belgrade on a sample of 120 respondents. The statistical method dominated from the general scientific methods in this study, and the descriptive - survey-research - method was applied from specific research methods, since this variant of scientific description implies an active involvement of respondents in providing information on the phenomena that are the subject of the study, on the basis of which can enter the essence of a research subject and determine its condition, as well as detect causal relationships and relationships. The Statistical Package for Social Sciences was used for statistical data processing. The non-parametric statistical procedure Chi square test and contingency coefficient C were used for data processing.

Nonparametric statistical procedures examine the significance of statistical indicators that apply regardless of whether the data is measured or counted and whether they are distributed regularly or differently. In other words, this means that they do not depend on the shape of the frequency distribution. The Chi-square test is a nonparametric statistical procedure, which means that qualitative (categorical) data is used in its calculation. It should be especially emphasized that other measurement units, other than frequency, are not considered for data processing using the Chi-square test.

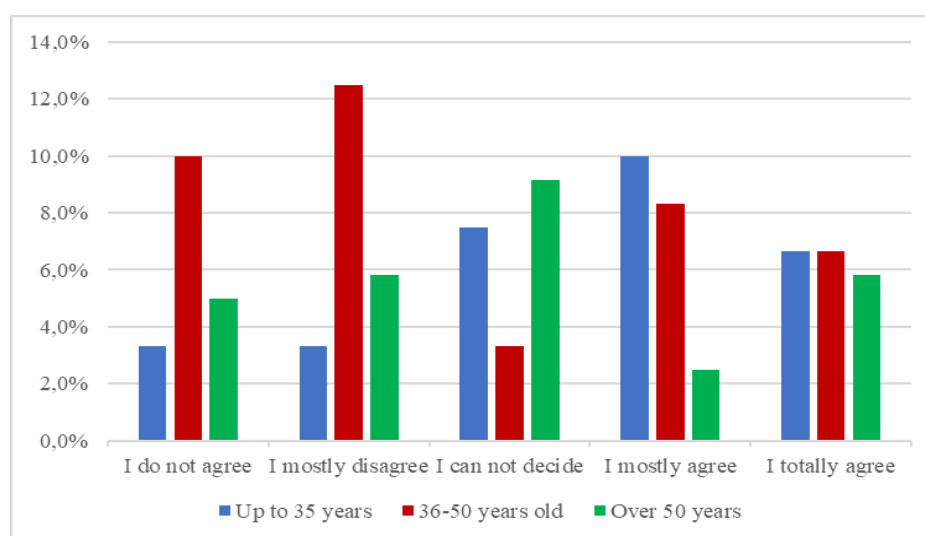
*Table 2. The compulsory pension insurance is excellent.*

Social-andragogical character. of respondents		Mandatory pension insurance is excellent								$\chi^2$ i C	p
		1	2	3	4	5	IN TOTAL				
Pol	1. Males	7	12	10	5	11	45	120 100%	$\chi^2=5,625$ C=0,212	p=0,229 p>0,05	
		5,8%	10,0%	8,3%	4,2%	9,2%	37,5%				
	2. Females	15	14	14	20	12	75				
		12,5%	11,7%	11,7%	16,7%	10,0%	62,5%				
Year of life	1. Up to 35 years	4	4	9	12	8	37	120 100%	$\chi^2=17,483$ C=0,357	p=0,025 p<0,05	
		3,3%	3,3%	7,5%	10,0%	6,7%	30,8%				
	2. 36-50 years	12	15	4	10	8	49				
		10,0%	12,5%	3,3%	8,3%	6,7%	40,8%				
	3. Over 50 years	6	7	11	3	7	34				
		5,0%	5,8%	9,2%	2,5%	5,8%	28,3%				
Professional qualifications	1. Finished elementary school	0	0	0	0	0	0	120 100%	$\chi^2=8,314$ C=0,255	p=0,760 p>0,05	
		0,0%	0,0%	0,0%	0,0%	0,0%	0,0%				
	2. Secondary education	5	10	5	7	9	36				
		4,2%	8,3%	4,2%	5,8%	7,5%	30,0%				
	3. Higher education	1	1	1	0	1	4				
		0,8%	0,8%	0,8%	0,0%	0,8%	3,3%				
	4. High professional	9	7	9	5	7	37				
		7,5%	5,8%	7,5%	4,2%	5,8%	30,8%				
5. Master / Doctor of Science	7	8	9	13	6	43					
	5,8%	6,7%	7,5%	10,8%	5,0%	35,8%					
Years of service	1. Up to 10 years	8	8	8	11	7	42	120 100%	$\chi^2=13,115$ C=0,314	p=0,361 p>0,05	
		6,7%	6,7%	6,7%	9,2%	5,8%	35,0%				
	2. From 11 to 20 years	7	8	4	10	8	37				
		5,8%	6,7%	3,3%	8,3%	6,7%	30,8%				
	3. From 21 to 30 years	4	8	5	3	3	23				
		3,3%	6,7%	4,2%	2,5%	2,5%	19,2%				
4. Over 30 years	3	2	7	1	5	18					
	2,5%	1,7%	5,8%	0,8%	4,2%	15,0%					
Workplace	1. Worker	17	18	13	18	17	83	120 100%	$\chi^2=9,223$ C=0,267	p=0,684 p>0,05	
		14,2%	15,0%	10,8%	15,0%	14,2%	69,2%				
	2. Operations Manager	2	3	5	4	5	19				
		1,7%	2,5%	4,2%	3,3%	4,2%	15,8%				
	3. Mid-level manager	2	4	3	1	1	11				
		1,7%	3,3%	2,5%	0,8%	0,8%	9,2%				
4. Top Management	1	1	3	2	0	7					
	0,8%	0,8%	2,5%	1,7%	0,0%	5,8%					

*Source: Author*

According to the data in Table 2. it is evident that all independent variables are not significantly related to respondent attitudes about whether the compulsory pension insurance is excellent. Namely, the value of the Chi-square test and the contingency coefficient C show that gender ( $\chi^2 = 5.625$ ,  $C = 0.212$  and  $p = 0.229$ ), profession ( $\chi^2 = 8.314$ ,  $C = 0.255$  and  $p = 0.760$ ), work experience ( $\chi^2 = 13.115$ ,  $C = 0.314$  and  $p = 0.361$ ), and the position of the respondents in the company ( $\chi^2 = 9.223$ ,  $C = 0.267$  and  $p = 0.684$ ) are not statistically significantly related to the stated attitude of the respondents (opinion: the mandatory pension insurance is excellent). This means that we do not have significant deviations in respect of the said position.

On the other hand, however, age ( $\chi^2 = 17.483$ ,  $C = 0.357$  and  $p = 0.025$ ) is statistically significant with the view that mandatory pension insurance is excellent. In other words, this means that the respondents' answers were statistically significantly different with regard to age.



*Graph 1. Agreement with the claim that compulsory pension insurance is excellent.*

*Source: Author*

According to the results in graph 1, the young generation places significantly more emphasis on compulsory pension insurance. The younger generation has much more trust in the pension fund than the middle-aged and elderly generation over 50, which indicates that this is a necessity of the modern era. Naturally, this would fully revitalize all the activities on this issue, which must be supported by the state. It is certain that this question cannot be solved by respondents and working organizations, and in the resolution of this issue, the maximum suspension of all state apparatus is expected. This attitude of the young generation is perhaps expected. That is exactly the life period when you need to think about solving the problem of pension insurance. It is interesting that the middle-aged generation disagrees with the view that compulsory pension insurance is excellent. In the elderly generation, one might say that the opinions are identical.

Table 3. I expect a good pension which I can support myself with.

Social-andragological character. of respondents		I expect a good pension from which I can live well								$\chi^2$ i C	p
		1	2	3	4	5	IN TOTAL				
Pol	1. Males	15	7	8	4	11	45	120	$\chi^2=1,164$ C=0,098	p=0,884 p>0,05	
		12,5%	5,8%	6,7%	3,3%	9,2%	37,5%				
	2. Females	29	14	9	7	16	75				
24,2%		11,7%	7,5%	5,8%	13,3%	62,5%					
Year of life	1. Up to 35 years	10	5	4	5	13	37	120	$\chi^2=11,561$ C=0,296	p=0,172 p>0,05	
		8,3%	4,2%	3,3%	4,2%	10,8%	30,8%				
	2. 36-50 years	22	8	5	4	10	49				
		18,3%	6,7%	4,2%	3,3%	8,3%	40,8%				
	3. Over 50 years	12	8	8	2	4	34				
10,0%		6,7%	6,7%	1,7%	3,3%	28,3%					
Professional qualifications	1. Finished elementary school	0	0	0	0	0	0	120	$\chi^2=14,838$ C=0,332	p=0,250 p>0,05	
		0,0%	0,0%	0,0%	0,0%	0,0%	0,0%				
	2. Secondary education	9	8	3	2	14	36				
		7,5%	6,7%	2,5%	1,7%	11,7%	30,0%				
	3. Higher education	1	1	1	0	1	4				
		0,8%	0,8%	0,8%	0,0%	0,8%	3,3%				
	4. High professional	19	5	5	3	5	37				
15,8%		4,2%	4,2%	2,5%	4,2%	30,8%					
5. Master / Doctor of Science	15	7	8	6	7	43					
	12,5%	5,8%	6,7%	5,0%	5,8%	35,8%					
Years of service	1. Up to 10 years	17	6	4	3	12	42	120	$\chi^2=20,345$ C=0,381	p=0,061 p>0,05	
		14,2%	5,0%	3,3%	2,5%	10,0%	35,0%				
	2. From 11 to 20 years	13	5	6	5	8	37				
		10,8%	4,2%	5,0%	4,2%	6,7%	30,8%				
	3. From 21 to 30 years	11	7	0	1	4	23				
		9,2%	5,8%	0,0%	0,8%	3,3%	19,2%				
4. Over 30 years	3	3	7	2	3	18					
	2,5%	2,5%	5,8%	1,7%	2,5%	15,0%					
Workplace	1. Worker	30	12	9	7	25	83	120	$\chi^2=16,197$ C=0,245	p=0,182 p>0,05	
		25,0%	10,0%	7,5%	5,8%	20,8%	69,2%				
	2. Operations Manager	6	5	5	2	1	19				
		5,0%	4,2%	4,2%	1,7%	0,8%	15,8%				
	3. Mid-level manager	5	3	2	0	1	11				
		4,2%	2,5%	1,7%	0,0%	0,8%	9,2%				
4. Top Management	3	1	1	2	0	7					
	2,5%	0,8%	0,8%	1,7%	0,0%	5,8%					

Source: Author

According to the data in Table 3, we see that all independent variables are not significantly related to the views of the respondents about the pension they expect. Namely, the value of the Chi-square test and the contingency coefficient C show that gender ( $\chi^2=1.164$ ,  $C=0.098$  and  $p=0.884$ ), age ( $\chi^2=11.561$ ,  $C=0.296$  and  $p=0.172$ ), profession ( $\chi^2=14.838$ ,  $C=0.332$  and  $p=0.250$ ), work experience ( $\chi^2=20.345$ ,  $C=0.382$  and  $p=0.061$ ) and the position of the respondents in the company ( $\chi^2=16.197$ ,  $C=0.245$  and  $p=0.182$ ) were not significantly related to the stated attitude of the respondent (opinion: mandatory pension insurance is excellent).

This means that we have no significant deviations in respect of the said position. Based on the data from the table, we can conclude that regardless of gender, age, professional qualifications, working experience and position in the company, most respondents disagree with the view that they expect a good pension from which they will be able to live well.

Table 4. A pension fund guarantees secure pensions.

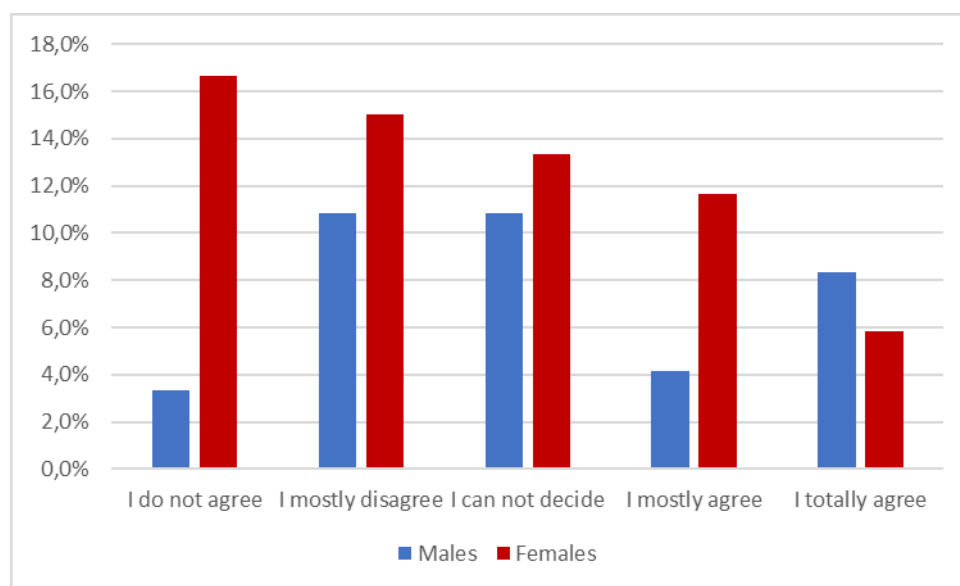
Social-andragogical character. of respondents		Pension fund guarantees safe pensions							$\chi^2$ i C	p
		1	2	3	4	5	IN TOTAL			
Pol	1. Males	4	13	13	5	10	45	120 100%	$\chi^2=9,681$ C=0,273	p=0,046 p<0,05
		3,3%	10,8%	10,8%	4,2%	8,3%	37,5%			
	2. Females	20	18	16	14	7	75			
		16,7%	15,0%	13,3%	11,7%	5,8%	62,5%			
Year of life	1. Up to 35 years	6	8	11	7	5	37	120 100%	$\chi^2=6,890$ C=0,233	p=0,549 p>0,05
		5,0%	6,7%	9,2%	5,8%	4,2%	30,8%			
	2. 36-50 years	8	13	10	8	10	49			
		6,7%	10,8%	8,3%	6,7%	8,3%	40,8%			
	3. Over 50 years	10	10	8	4	2	34			
		8,3%	8,3%	6,7%	3,3%	1,7%	28,3%			
Professional qualifications	1. Finished elementary school	0	0	0	0	0	0	120 100%	$\chi^2=11,845$ C=0,300	p=0,458 p>0,05
		0,0%	0,0%	0,0%	0,0%	0,0%	0,0%			
	2. Secondary education	6	5	8	10	7	36			
		5,0%	4,2%	6,7%	8,3%	5,8%	30,0%			
	3. Higher education	1	1	1	0	1	4			
		0,8%	0,8%	0,8%	0,0%	0,8%	3,3%			
	4. High professional	7	10	9	5	6	37			
		5,8%	8,3%	7,5%	4,2%	5,0%	30,8%			
5. Master / Doctor of Science	10	15	11	4	3	43				
	8,3%	12,5%	9,2%	3,3%	2,5%	35,8%				
Years of service	1. Up to 10 years	7	7	12	9	7	42	120 100%	$\chi^2=18,315$ C=0,364	p=0,106 p>0,05
		5,8%	5,8%	10,0%	7,5%	5,8%	35,0%			
	2. From 11 to 20 years	7	11	8	3	8	37			
		5,8%	9,2%	6,7%	2,5%	6,7%	30,8%			
	3. From 21 to 30 years	6	7	3	7	0	23			
		5,0%	5,8%	2,5%	5,8%	0,0%	19,2%			
4. Over 30 years	4	6	6	0	2	18				
	3,3%	5,0%	5,0%	0,0%	1,7%	15,0%				
Workplace	1. Worker	13	20	20	16	14	83	120 100%	$\chi^2=9,193$ C=0,267	p=0,686 p>0,05
		10,8%	16,7%	16,7%	13,3%	11,7%	69,2%			
	2. Operations Manager	5	6	4	2	2	19			
		4,2%	5,0%	3,3%	1,7%	1,7%	15,8%			
	3. Mid-level manager	3	3	4	0	1	11			
		2,5%	2,5%	3,3%	0,0%	0,8%	9,2%			
4. Top Management	3	2	1	1	0	7				
	2,5%	1,7%	0,8%	0,8%	0,0%	5,8%				

Source: Author



According to the data in Table 4, not all independent variables are significantly related to the respondents' attitudes about whether the compulsory pension insurance is excellent. Namely, the value of the Chi-square test and the coefficient of contingency C show that age ( $\chi^2=6.890$ ,  $C=0.267$  and  $p=0.684$ ), profession ( $\chi^2=11.845$ ,  $C=0.300$  and  $p=0.458$ ), work experience ( $\chi^2=18.315$ ,  $C=0.364$  and  $p=0.106$ ) and the position of the respondents in the company ( $\chi^2=9.193$ ,  $C=0.267$  and  $p=0.686$ ) were not statistically significantly related to the stated attitude of the respondents (opinion: the pension fund guarantees safe pensions). This means that we have no significant deviations in respect of the said position. Most respondents share the view that the pension fund does not guarantee a secure pension.

The independent variable of gender ( $\chi^2=8.672$ ,  $C=0.155$  and  $p=0.070$ ) is statistically significant with the view that the pension fund guarantees safe pensions. In other words, this means that the answers of the respondents are statistically significant in terms of gender.



*Graph 2. Agreement with the claim that the pension fund guarantees secure pensions*

*Source: Author*

By analyzing the data from Graph 2, we can conclude that the claim that the pension fund guarantees secure pensions does not agree with the majority of the respondents regardless of gender, but female respondents are predominant. This is perhaps understandable because women have a more cautious attitude to existence.

Table 5. A reform of the pension system is necessary.

Social-andragogical character. of respondents		It is necessary to reform the mandatory pension insurance						$\chi^2$	i C	p
		1	2	3	4	5	IN TOTAL			
Pol	1. Males	0	1	6	12	26	45	120	$\chi^2=4,088$ C=0,182	p=0,334 p>0,05
		0,0%	0,8%	5,0%	10,0%	21,7%	37,5%			
	2. Females	2	0	9	14	50	75			
		1,7%	0,0%	7,5%	11,7%	41,7%	62,5%			
Year of life	1. Up to 35 years	0	0	6	13	18	37	120	$\chi^2=14,786$ C=0,331	p=0,063 p>0,05
		0,0%	0,0%	5,0%	10,8%	15,0%	30,8%			
	2. 36-50 years	0	0	5	8	36	49			
		0,0%	0,0%	4,2%	6,7%	30,0%	40,8%			
	3. Over 50 years	2	1	4	5	22	34			
		1,7%	0,8%	3,3%	4,2%	18,3%	28,3%			
Professional qualifications	1. Finished elementary school	0	0	0	0	0	0	120	$\chi^2=8,335$ C=0,256	p=0,754 p>0,05
		0,0%	0,0%	0,0%	0,0%	0,0%	0,0%			
	2. Secondary education	2	0	4	9	21	36			
		1,7%	0,0%	3,3%	7,5%	17,5%	30,0%			
	3. Higher education	0	0	1	0	3	4			
		0,0%	0,0%	0,8%	0,0%	2,5%	3,3%			
	4. High professional	0	0	5	8	24	37			
		0,0%	0,0%	4,2%	6,7%	20,0%	30,8%			
Years of service	5. Master / Doctor of Science	0	1	5	9	28	43	120	$\chi^2=20,106$ C=0,379	p=0,065 p>0,05
		0,0%	0,8%	4,2%	7,5%	23,3%	35,8%			
	1. Up to 10 years	0	0	6	15	21	42			
		0,0%	0,0%	5,0%	12,5%	17,5%	35,0%			
	2. From 11 to 20 years	0	0	5	4	28	37			
		0,0%	0,0%	4,2%	3,3%	23,3%	30,8%			
	3. From 21 to 30 years	1	0	1	4	17	23			
		0,8%	0,0%	0,8%	3,3%	14,2%	19,2%			
Workplace	4. Over 30 years	1	1	3	3	10	18	120	$\chi^2=3,573$ C=0,170	p=0,990 p>0,05
		0,8%	0,8%	2,5%	2,5%	8,3%	15,0%			
	1. Worker	2	1	10	19	51	83			
		1,7%	0,8%	8,3%	15,8%	42,5%	69,2%			
	2. Operations Manager	0	0	3	4	12	19			
		0,0%	0,0%	2,5%	3,3%	10,0%	15,8%			
	3. Mid-level manager	0	0	2	2	7	11			
		0,0%	0,0%	1,7%	1,7%	5,8%	9,2%			
Workplace	4. Top Management	0	0	0	1	6	7	120	$\chi^2=3,573$ C=0,170	p=0,990 p>0,05
		0,0%	0,0%	0,0%	0,8%	5,0%	5,8%			

Source: Author

According to the data in Table 5, we see that all independent variables are not significantly related to the respondents' attitudes about the necessity of reforming compulsory pension insurance. The value of the Chi-square test and the contingency coefficient C show that gender ( $\chi^2=4.088$ ,  $C=0.182$  and  $p=0.334$ ), age ( $\chi^2=14.786$ ,  $C=0.331$  and  $p=0.063$ ), profession ( $\chi^2=8.335$ ,  $C=0.256$  and  $p=0.754$ ), work experience ( $\chi^2=20.106$ ,  $C=0.379$  and  $p=0.065$ ) and the position in the company ( $\chi^2=3.573$ ,  $C=0.170$  and  $p=0.990$ ) were not significantly related to the above respondents. This means that we have no significant deviations in respect of the said

position. Based on the data from the table, we can conclude that regardless of gender, age, professional qualifications, working experience and position in the company, most respondents agree with the view that a mandatory pension insurance reform is necessary.

*Table 6. A reform of compulsory pension insurance can be realized.*

Social-andragogical character. of respondents		Reform of compulsory pension insurance can be realized								
		1	2	3	4	5	IN TOTAL	$\chi^2$ i C	p	
Pol	1. Males	2	0	13	16	14	45	120 100%	$\chi^2=5,761$ C=0,214	p=0,218 p>0,05
		1,7%	0,0%	10,8%	13,3%	11,7%	37,5%			
	2. Females	2	6	24	17	26	75			
		1,7%	5,0%	20,0%	14,2%	21,7%	62,5%			
Year of life	1. Up to 35 years	3	1	14	12	7	37	120 100%	$\chi^2=10,652$ C=0,286	p=0,222 p>0,05
		2,5%	0,8%	11,7%	10,0%	5,8%	30,8%			
	2. 36-50 years	0	4	13	13	19	49			
		0,0%	3,3%	10,8%	10,8%	15,8%	40,8%			
	3. Over 50 years	1	1	10	8	14	34			
		0,8%	0,8%	8,3%	6,7%	11,7%	28,3%			
Professio nal qualificat ions	1. Finished elementary school	0	0	0	0	0	0	120 100%	$\chi^2=17,575$ C=0,357	p=0,129 p>0,05
		0,0%	0,0%	0,0%	0,0%	0,0%	0,0%			
	2. Secondary education	0	1	10	9	16	36			
		0,0%	0,8%	8,3%	7,5%	13,3%	30,0%			
	3. Higher education	0	0	2	0	2	4			
		0,0%	0,0%	1,7%	0,0%	1,7%	3,3%			
	4. High professional	0	2	16	8	11	37			
		0,0%	1,7%	13,3%	6,7%	9,2%	30,8%			
5. Master / Doctor of Science	4	3	9	16	11	43				
	3,3%	2,5%	7,5%	13,3%	9,2%	35,8%				
Years of service	1. Up to 10 years	3	2	13	14	10	42	120 100%	$\chi^2=11,318$ C=0,294	p=0,502 p>0,05
		2,5%	1,7%	10,8%	11,7%	8,3%	35,0%			
	2. From 11 to 20 years	0	2	13	7	15	37			
		0,0%	1,7%	10,8%	5,8%	12,5%	30,8%			
	3. From 21 to 30 years	0	2	6	5	10	23			
		0,0%	1,7%	5,0%	4,2%	8,3%	19,2%			
4. Over 30 years	1	0	5	7	5	18				
	0,8%	0,0%	4,2%	5,8%	4,2%	15,0%				
Workpla ce	1. Worker	3	2	25	25	28	83	120 100%	$\chi^2=10,840$ C=0,288	p=0,543 p>0,05
		2,5%	1,7%	20,8%	20,8%	23,3%	69,2%			
	2. Operations Manager	1	2	7	4	5	19			
		0,8%	1,7%	5,8%	3,3%	4,2%	15,8%			
	3. Mid-level manager	0	2	3	1	5	11			
		0,0%	1,7%	2,5%	0,8%	4,2%	9,2%			
4. Top Management	0	0	2	3	2	7				
	0,0%	0,0%	1,7%	2,5%	1,7%	5,8%				

*Source: Author*

As in the previous case and by analyzing the data in Table 6, we see that all independent variables are not significantly related to respondent attitudes about the possibility of implementing the reform of compulsory pension insurance. The value of the Chi-square test

and the contingency coefficient  $C$  show that gender ( $\chi^2=5.761$ ,  $C=0.214$  and  $p=0.218$ ), age ( $\chi^2=10.652$ ,  $C=0.286$  and  $p=0.222$ ), profession ( $\chi^2=17.575$ ,  $C=0.357$  and  $p=0.129$ ), work experience ( $\chi^2=11.318$ ,  $C=0.294$  and  $p=0.502$ ) and the position of the respondents in the company ( $\chi^2=10.840$ ,  $C=0.288$  and  $p=0.543$ ) are not statistically significantly related to the stated attitude of the respondents. This means that we have no significant deviations in respect of the said position. Based on the data from the table, we can conclude that regardless of gender, age, professional qualifications, working experience and position in the company, most respondents agree with the view that a mandatory pension insurance reform is necessary.

## CONCLUSION

Pension insurance is the subject of debate and analysis in almost all countries of the world because a stable pension system is one of the prerequisites for economic growth and development. It is therefore important that there is pension security, regardless of whether the system can generate revenues sufficient to provide a socially acceptable living standard and their proper funding.

The problem of population aging and a decline in the birth rate leads to an unfavorable relationship between the number of employees and the number of pensioners. Adding to this is the economic crisis that has caused problems in the functioning of national economies in the last decade, all this contributing to the increase of contributions and problems with their collecting. This in turn leads to irregular payments of pensions, as well as an increasing deterioration of pensioners due to the small amount of pensions that often fail to provide to cover their existential needs. It is precisely for these reasons that a reform of the pension insurance system is in progress in many countries of the world. The existing public pension insurance system (1st pillar) becomes financially unsustainable, which necessitates the introduction of an additional one (2nd pillar) and voluntary pension insurance (3rd pillar).

It can be concluded that the main reasons for the reform of the compulsory pension insurance system in Serbia are the same as in the rest of the world: the efforts to reduce public spending and budget deficit, address the aging of the population, prevent early retirement and the need for greater coverage of the insured. The average pension in Serbia is among the lowest in Europe and cannot guarantee material security in old age.

Reforms should not be expected to solve all the problems of the pension system. The World Bank is no longer so categorical in applying the pension reform model which it previously advocated. It can therefore be said that it has conducted one type of experiment to examine how this model will look like in the practice of transition countries. In order to solve the problem of pension system deficits in the long run and improve the position of key retirees, the problem of unemployment needs to be resolved and production increased. This represents a harder path to healing, so to speak, but it is, of course, much more effective.

The globalization process has also affected the pension system as an important segment of the economy (public finances) as a whole, so that, along with unfavorable demographic trends, reforms are inevitable.

In this paper, in one place, the current situation and perspectives of pension systems are analyzed both in our country and in the world. It has been shown that many countries (especially countries in transition) have to transform their systems for financial, demographic and economic reasons.

By analyzing the data from the survey, we can conclude that the general hypothesis is confirmed: citizens are not satisfied with the existing situation in the pension insurance system, they

consider the pension fund to be empty and that it fails to guarantee safe pensions. This means that the reforms implemented so far have not been sufficient and that they need to be continued.

There are significant differences between the populations of men and women regarding this issue: the pension fund is full and guarantees safe pensions. There are significant differences between age and age populations regarding this issue: mandatory pension insurance is excellent.

With other issues, there is no significant difference in opinion regardless of gender, age, professional qualifications, work experience and the position of the respondents in the company.

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## **Part IV.**

# **Marketing and Branding**



# IMPLEMENTATION OF MARKETING IN MANAGERIAL FUNCTIONS OF BANKS

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## ABSTRACT

The marketing implementation as observed through the management in functioning of banks should be seen within the comprehensive management activities in order to achieve better defined business operations. The most common management can be observed through the internal management factors. The internal management control of a management of an enterprise is carried out with the primary goal of achieving much better business. Besides, management is in a constant search for a method by means of better controlling of the management of its trusted legal entity (banks). The aim of this paper is to point out the importance of implementation of marketing within the introduction of controls in banks. At the same time, the author draws attention that management should create conditions in which it will be enabled the process of controls to be regularly revised, that is approaching to the “optimal”.

Key words: marketing, internal control of mechanisms, banks, optimization.

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## INTRODUCTION

Management seeks to establish control mechanisms that will increase the safety and security of business operations of an enterprise. Practically, it means that such mechanisms must be determined as following: establishing of internal control and internal audit, engaging of external audits and including other methods, with the aim of providing full support of management to attempting to increase the business safety. In addition, the established mechanisms of control contribute establishing of mechanisms of remunerations of employees.

The aim of the above-mentioned activities is to decrease the business risk. There is no generally accepted model of control implementation within an enterprise. Management along with the established control mechanisms implies a clear description of the roles and responsibilities when performing control starting from the positions of management, efficiency, implementation procedures within an enterprise, available resources provided to the responsible persons in charge of conducting controls.

Therefore, management provides adaptability to the strategy of an enterprise and the protection of interests of the owner of an enterprise [1].

Foreign authors, especially those coming from the EU such as [2], emphasize the importance of introducing the internal control of mechanisms into the business operations of legal entities. A number of authors, such as [3], draw attention to the implementation of standardization, in particular the International Accounting Standards, by a large number of heterogeneous legal entities. The results published in those papers point out the importance of introducing the internal control of mechanisms in the regular business operation of legal entities, but also to the importance of full implementation of standardization in business.

It is of particular importance for reporting that is performed within banks that finance lending of the economy, and they must take into account how to decrease the risks of funding the economy [2], [3].

## ESTABLISHING OF THE INTERNAL AUDIT IN THE CONTEXT OF INCREASING THE SAFETY OF MANAGEMENT

Depending on the degree of programmed safety of the system, management determines to establish an internal audit, as a whole that will be supportive to the management function. The internal audit is attached to the work of the internal control. It should be emphasized that internal audit and internal control contribute to another control of business management, that is, they contribute to a more reliable work of external audit [4].

Internal control is incorporated into management activities of an enterprise. According to the author of the COSO (the Committee of Sponsoring Organizations), the internal control is inherent in the way how management runs the business [5].

Somewhat broader observation of the internal control involves observing the company policies, procedures, processes, plans, strategies, operations, systems, initiatives, activities, and other actions undertaken by the management in order to achieve the defined business objectives [6]. The system of established internal control is an integral part of risk management and it is integrated into the management structure covering all areas of business operation of an enterprise [7].

It is important to emphasize that the system of internal control cannot provide complete safety in functioning of an enterprise [8].

Implementation of all forms of control in management represents a compromise between expenses and safety. Management should organize activities, plan and manage activities in order to achieve defined goals. [9].

The process of introducing the internal controls, represents a process that is designed by the highest managing bodies. Some authors consider that the supervisory board of an enterprise plays a dominant role, that is, management, with the aim of obtaining a reasonable assurance about the achievement of goals in the following areas:

- • improvement of the efficiency of decision-making by management,
- • increasing the reliability of financial reporting,
- • preserving of the compatibility with applicable laws and regulations; and
- • protection of assets [10].

The International Accounting Standards and The International Financial Reporting Standards enable to management an optimal financial reporting [11], but it is also desirable to develop written clarification related to reporting [12] on the legal entity managed by management [13].

## **SIGNIFICANCE OF DETERMINING THE INTERVAL RISK FOR THE MANAGERIAL FUNCTION OF THE MANAGEMENT**

In the context of observing the implementation of control mechanisms, one of the important positions for general management is to determine the risk interval. There are many methods for determining the risk. In this paper, it is given an overview of the potential impact of risk in relation to the type of activity (Table 1), as well as an overview made through the observation of the impact of the financial condition of legal entities (Table 2).

The impact of economic activity is presented in 9 categories, as well as the risk assessment in the interval 1-5, provided that 1 represent the minimum risk for business management.

*Table 1. Impact of type of activity on risk assessment for management*

<b>Serial number</b>	<b>Name of the sector / type of activity</b>	<b>Risk assessment</b>
1	Public sector enterprises	1
2	Finance and insurance sector	1
3	Processing industry	2
4	Wholesaling and retailing	2
5	Traffic	2
6	Mining	2
7	Agriculture and forestry	3
8	Ltd in liquidation process	3
9	Other	3

*Source: Author (2019)*

In Table 2 it is given an overview of some of the selected factors of an impact on financial condition with a risk assessment that is shown in the interval of 1-5, provided that the minimum risk according to management is validated with 1.

*Table 2. Overview of an impact of the selected factors on the evaluation of the financial condition*

Serial number	Criteria for assessing the financial status	Observation interval	Risk assessment
1	Number of insolvency days in the last 12 months	Up to 7 days	1
		From 8 to 30 days	2
		Over 30 days	5
2	Indicators of indebtedness (ratio of total loans and capital)	Less than or equal to 1	1
		From 1 to 2	2
		Over 2	5
3	Profitability indicators (ratio of net profit and business income)	Above 8%	1
		Between 0 and 8%	3
		Incurred losses	5

*Source: Author (2019)*

## **SOME OF THE IMPORTANT RISKS THAT THE BANK'S MANAGEMENT IS FACED WITH**

There are many risks that the bank's management structure is faced with in the business operation. In this paper, the author points out only some of them, such as:

1. Liquidity risk,
2. Loan risk that includes:
  - • Residual risk,
  - • Dilution risk,
  - • Settlement / delivery risk,
  - • The risk of the other contracting party.
3. Interest rate risk,
4. Market risks,
5. The Bank exposure risk, that is concentration risk,
6. The Bank investment risk,
7. Land risk,
8. Operational risk,
9. Compatibilty risk,
10. Reputational risk,
11. Strategic risk and
12. Risk of options.

In order to show possible influence factors within the corporate responsibility of the banks, the author presents an overview of possible risks that banks are faced with in relation to time observation (short-term, medium-term and long-term), and the objective is to determine the risk interval, which has been defined by the author in the range from 1 to 5, as a programmed possible risk interval.

*Table 3. Overview of the model of determining the interval risk in relation to the length of time of the bank's impact*

Potential corporate impacts of the bank	Impact of the Bank from a temporal perspective			Numeric values of risk according to corporate positions of impact of the banks
	short-term	medium-term	long-term	
	Stated risk interval (1 = minimum; 5 = large risk interval)			
Responsibility towards clients of the bank	1-5	1-5	1-5	
Responsibility towards employees of the bank	1-5	1-5	1-5	
Responsibility towards local self-government	1-5	1-5	1-5	
Responsibility to the environment	1-5	1-5	1-5	
Comprehensive impacts on ecology	1-5	1-5	1-5	

*Source (Author, 2019).*

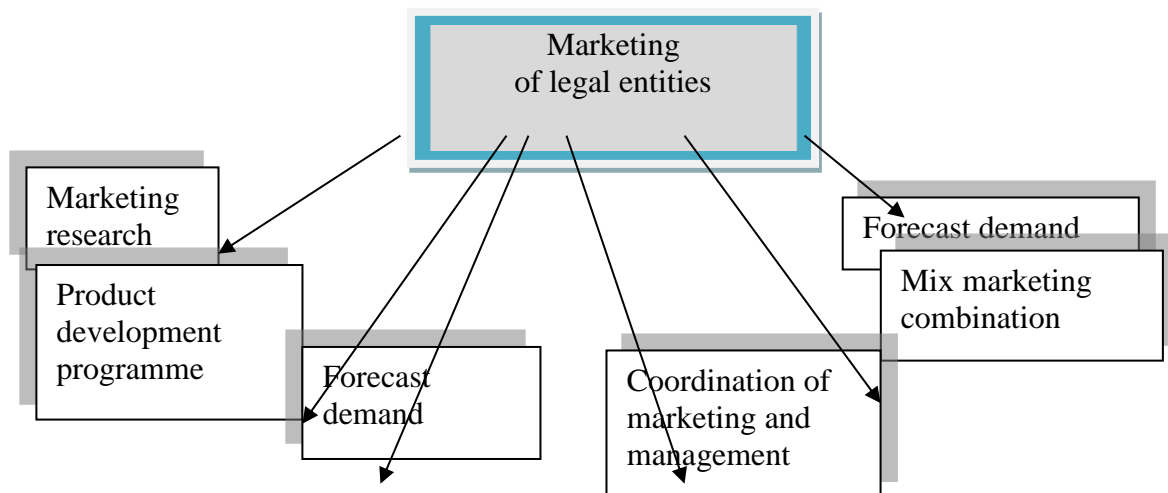
## IMPLEMENTATION OF MARKETING INTO THE MANAGEMENT OF LEGAL ENTITIES

Legal entities invest money in marketing that promotes the main activities of an enterprise in fairs, sport events, global events and at other visible places that can be of promotional significance [14], [15], [16].

Marketing, modern communications, should also consider the factor of competitive advantage [17]. The consequences of socio-economic development, raising the living standard, increase in leisure time etc. change the image of a consumer in the world in the widest context [18], [19], [20].

The implementation of media events is performed continuously throughout the year, i.e. marketing promotion of an enterprise is carried out continuously [21].

The model of possible marketing of a real legal entity in the economy regarding marketing that is carried out by the author is shown in the graph 1 below.



*Graph 1: Model of possible marketing in legal entities*

*Source: Author (2019).*

In its performance and business activities, top management should take into account market orientation by minimizing of all expenses, but with a certain degree of quality in making offers to potential clients, which is reflected in the economy of a large number of enterprises in the real economy which is dealing with several aspects by various authors [22], [23], [24].

The traditional marketing puts the focus of observation in:

- directing activities in favour of a specific event on the market,
- close observation of competition,
- understanding of visitors, i.e. understanding of a consumer as a rational participant, and
- implementation of analysis in realization of marketing of an enterprise.

Wider observation of marketing is directed towards four basic directions:

- experience of a consumer,
- procurement research,
- considering users as rational participants and
- implementation of modern and new methods in realization of marketing.

Based on an active approach to marketing, managers have been given the opportunity to have different approaches in combining marketing mix instruments. Therefore, the classification of the following types of marketing is noticed:

- designed marketing,
- sensitive marketing.

- cognitive marketing, action marketing and
- bonding marketing that essentially combines the above-mentioned types of marketing into a single entity that any enterprise can adopt and implement in accordance with the given circumstances on the market.

It is important to emphasize that professionals who are in charge in implementing of marketing in enterprises in most cases use different marketing activities and they communicate with a large number of potential users and customers in the local and foreign market. Therefore, the marketing mix represents the combination of methods with the aim of achieving the proposed objectives. Decisions related to the marketing mix, in particular decisions on prices and promotion, are made in a shorter period of time, because they are subject to change. Marketing mix combinations show greater stability, since there are many combining possibilities.

Modern marketing that is applied by legal entities should consider: product, service, experience, event, personality, place, assets, organization, information and idea. The increase in income, the improvement of quality of life, changes in the lifestyle of urban people lead to the possibility of offering such products and services on the market.

Modern marketing is largely subject to changes that are conditioned by the implementation of information technologies.

The main goal of modern marketing that is applied by legal entities in the economy is to increase the exchange with consumers over a longer period of time, where loyalty between enterprises and consumers is created.

Thereby the common benefit from such a relationship can be observed in four principles:

- compiling a customer database,
- concept of access of an enterprise to the Internet,
- setting up a banner of an enterprise on related sites and
- enabling easy access and responding efficiently to customer calls.

## **MARKETING CONNECTIONS OF THE ECONOMY AND BANKS**

The objective of these marketing activities is to increase profitability and to acquire and retain consumers. Electronic marketing refers to the implementation of marketing principles and methods through electronic media that is Internet. This allows enterprises to be informed, to advertise and to develop the sale of their products and services in a cheap and widely available manner.

It precisely represents the opportunity for digital marketing by respecting the concept of a sustainable consumer society at global, regional and local level.

The objective of economic activities is the implementation of modern marketing depending upon different market and technical and technological conditions, in order to increase the efficiency of business operation by the use of modern marketing.

The information age has imposed a new era and has changed the traditional distribution channels. The introduction of computer technology by manufacturer and by customer led to a decrease in expenses in many industries, and all of it must be filed, registered and processed by marketing in banks in order to offer to the economy an attractive banking product.

## CONCLUSION

Recently, in the Republic of Serbia, control mechanisms have been recognized and implemented to a significant extent in order to decrease the business risk. The first level of observation is the implementation of internal controls. The second level is the introduction of an internal audit that becomes an external audit support. The third level of implementation is the application and observation of control mechanisms within the public sector of the state. The fourth level of observation is the introduction of internal control mechanisms in other areas of the economy. In this paper, in relation to other areas of the economy, the analysis is mainly done through the observation of banks.

Another segment that is structurally presented in this paper is the significance of marketing implementation in banking institutions. The general conclusion arising from the paper is that management should establish control mechanisms in order to ensure work safety. Secondary conclusion points out to the importance of the implementation of marketing in banks. Banks should examine the behaviour of the economy as outlined in the paper and to provide appropriate responses in order to have interesting offers for legal entities. The last conclusion is incurred after the implementation overview of the use of marketing implementation and the introduction of new technological solutions, i.e. the conclusion is that we must use more methods aiming to promote new bank products and legal entities in general.

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# INTERNAL AND EXTERNAL BRANDING: A CASE STUDY OF SIMPO FURNITURE COMPANY

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## ABSTRACT

This paper focuses on corporate branding application. The research question here is if corporate branding can add value to the incubated furniture company, as well as how to connect corporate branding with value. When researching this question, it is necessary to research further on the division of corporate branding which is internal & external (hereinafter referred to as „int. & ext.”) branding, since a company added-value is from the cooperation and connection of int. & ext. branding. Only when int. & ext. branding work closely together, corporate branding may add more value to a company. In methodology, it was used a qualitative research method, which is company in-depth interviews, in order to research SIMPO's int. & ext. branding experience. This case study is helpful to analyse how corporate branding is connected to an enterprise value. Through SIMPO's case, being the largest furniture manufacturer and among the largest companies in terms of turnover in Serbia which has been a de facto state-owned business incubator for the majority of light manufacturing companies in and around the city of Vranje, it is illustrated that int. & ext. branding must combine in order to add value to a company. Corporate branding can really create value by increasing more adaptability/uniqueness/recognition. All in all, corporate branding is significant and can add value to companies. Corporate branding will play a more significant role in future marketing competition, so research on the corporate branding is likely to become more meaningful and interesting.

Keywords: added value, business clusters, business incubator, case study, competition, corporate brand, innovation, internal & external branding, research projects, technology.

**JEL:** L20, L32, L68, M21, M31, O14.

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## INTRODUCTION

This paper's focus is on corporate branding and it concentrates on the influence of branding on an enterprise value. Corporate branding is likely to become more important in future. Successful branding can deliver better service and satisfaction to the customers. Many companies have realised its great significance for their relationship with consumers, as they can deliver more and better service and have a better reputation. Furthermore, corporate branding can also bring more profit to the brand owner. Corporate branding may play an important role in marketing competition and will surely become one of the deciding factors in future competition. It cannot neglect the human factor either, since people are an important resource that can supply more power to corporate branding. People are operators and executors of corporate branding. On the other hand, external branding may supply a platform for people to manage a company's brand. This paper goes through a case study to look at branding and its ability of adding value to companies, and it looks at the relationship between branding and value. This study is based on the Aaker and Joachimsthaler's theory (2000) when doing analysis of branding as a means to add value to companies. Aaker and Joachimsthaler (2000) have the clear statement that there are close collaborations between branding and value. McCracken (1993) stated that branding has value (it turns out) because it adds value. Branding may add value to the companies in ways like increasing more adaptability/uniqueness/recognition and creating better segmentation. The chosen company here can supply a successful model of branding. Especially when it comes to the combination of int. & ext. branding, therefore, it can better support the viewpoint of the research that branding can be regarded as a means to add value to companies.

## BACKGROUND

Nowadays, global marketing is extremely challenging. Today, for every firm a critical question for its success is that how it can maintain its current customers and how it can make them loyal to the brands (Vanka, 2011). The international market environment is changing faster than ever before. Serious competition gives increased challenges to traditional brands. Vossoughi (1999) mentions that the competition in the future will not only be through price, quality, position and more important is the branding. Berry (1993) stated that numerous competitive variables determine success and new factors are emerging and interacting all the time. The business environment is changing faster than ever before, such changes are occurring in two major dimensions, complexity and turbulence (Robbins, 1990; Achrol, 1991). The overall business environment is more and more complex and challenging. Knox and Walker (1995) stated that branding is a process that takes control over everything the brand does and says. The overall aim of this process is to increase the value of the brand over time. Future competition will focus more on branding instead of the traditional focus on price, quality and position. So how significant will branding become? And what is the focal point about branding? Should it bring more satisfaction to the customers, or should it add more value to companies, so to speak?

### *Problem statement(s)*

This paper focuses on branding with relation to its processes, division and its collaboration with the enterprise value. In view of the above, the research questions can be defined as the following two points: Can branding act as a means to add value for companies? Can int. & ext. branding work separately? What is the relationship between int. & ext. branding when adding value to companies?

### ***Purpose of the research study***

Many aspects of brand have drawn attention to branding these years. There is no company that can neglect the great advantage of branding anymore. The purpose of this paper is on the basis of theoretical issues, through case study to discover the relationship between branding and value – how they connect with each other. Motivations when companies use branding also includes the process which combines int. & ext. branding. In this research, it was discussed how they react to each other. Aaker and Joachimsthaler's (2000) theory on the division of branding related to value has supplied a necessary theoretical support to this research study. The research study is based on a conceptual framework for the corporate branding and enterprise value; exploring branding's influence on the enterprise value.

### ***Study hypothesis & limitations***

This research paper goes through a case study to look at branding and its ability of adding value to companies. It also looks at the relationship between branding and value. When discussing adding value to companies, it is necessary to concentrate on int. & ext. branding, because these two, and the way they are managed, make a necessary condition when adding more value. The chosen enterprise SIMPO Vranje can supply a good model to some companies, especially when it comes to the combination of int. & ext. branding. Therefore, it can better support a research viewpoint that branding can be regarded as a means to add value to companies. This selection of companies delimits this study to only investigate companies that possess a successful branding history. The products process to the consumer is not investigated. This study is limited to investigating a company with a great brand operating in the international market. The study is also limited to the present time and do not consider historical or future actions taken by the company. There are no foreseeable, substantial cost implications in carrying out the necessary research for this study. As mentioned, resources are widely available on the subject of business practices pertaining to quality, product, and service. A minimal cost for office supplies pertaining to the distribution of the survey literature was imposed on the researcher, but has not, in any way, affected the results of this research study.

### ***Previous research studies***

According to Kotler's statement (1997) branding's function is planning a long-term brand strategy, it should watch over a brand's profit, since working closely with advertising agencies to build market share and long term consumer brand loyalty. If this is the case, then the efficacy of many brand managers must surely be to concern (about) these branding questions. However, according to Coupland et al. (2005), who writes that strong branding is built up through a co-creation process involving a number of players, especially the company's core values and brand managers. Sherry (1998) points out that the successful branding derived from an act of co-creation transaction by the company's stakeholders. Coupland et al. (2005) demonstrates that the technologies-based branding is a positive driver in the company's core values. Thus, as Brown et al. (2003), note the branding is a milieu where the company's core values coexist. Kotler (1997) researches branding which is based on differentiation; representing the distinctiveness of a product from that of competitors. Another is added core value that states a branded article has more value for the customer than an un-branded one (Krake, 2005). Kotler (1998) also writes that the yield from a long-term brand strategy will be far greater to provide the explanation about the impact on three areas, financial, strategic and managerial. On the

other hand, Voerman (2003) also confirms that companies that offer strong brands enjoy significant advantages to those that do not. Aaker (1996) stated that there are four key brand assets from which branding is derived. The four brand assets in branding lists are – the perceived quality of the brand, brand awareness, brand loyalty and brand associations. These assets are in close relationship with branding. Branding actually has big influence from other issues like brand identity. The branding aims at creation of value. According to De Chernatony and McDonald (1992), the aim of brand movement is to facilitate the company's task of getting and maintaining a loyal customer base in a cost effective manner in order to achieve as high a return as possible on the value. Comparing with Voerman (2003), Kotler (1997) stated that the two basic factors of branding are differentiation and added values (benefits) respectively. Referring to previous theories, this research paper regards to the following two points:

- In the first statement, Kotler (1997) and Voerman (2003) have stated that branding is related to push strategy in order to support brand awareness. Much research has been done on either branding or enterprise value. Even though, as Kotler (1997) and Voerman (2003) are only focused on branding as a long-term strategy in the market and company's management process, they are orientated on customer's awareness as well as customer loyalty and awareness of the product, but they neglect branding's relation to the company value, the value can be realised as a brand asset. Some people also do research on the enterprise value only, which neglects the connection with branding. The research object here is concerned with the relationship between branding and enterprise value. In that way, both branding and value are important tools in marketing expansion and business operation. Therefore, researches on combinations, find that the relationship of an enterprise value and branding is meaningful. Here, this study focuses on branding's collaboration and connections with value.
- In the second statement, company's competition between different products in the future will concentrate on competition between the different brands and branding will become more significant, as that is what may bring more satisfaction, service (etc.) to the customers, and may add more value to companies. Aaker and Joachimsthaler's (2000) theory have a clear statement on the collaborations between branding and value, this view here can support the research question. The Aaker and Joachimsthaler's (2000) view can supply a good framework and theoretical basement. McCracken (1993) also has similar ideas and stated that branding has value because it adds value. Therefore, chosen theory in this paper comes from Aaker and Joachimsthaler's (2000) and McCracken's (1993).

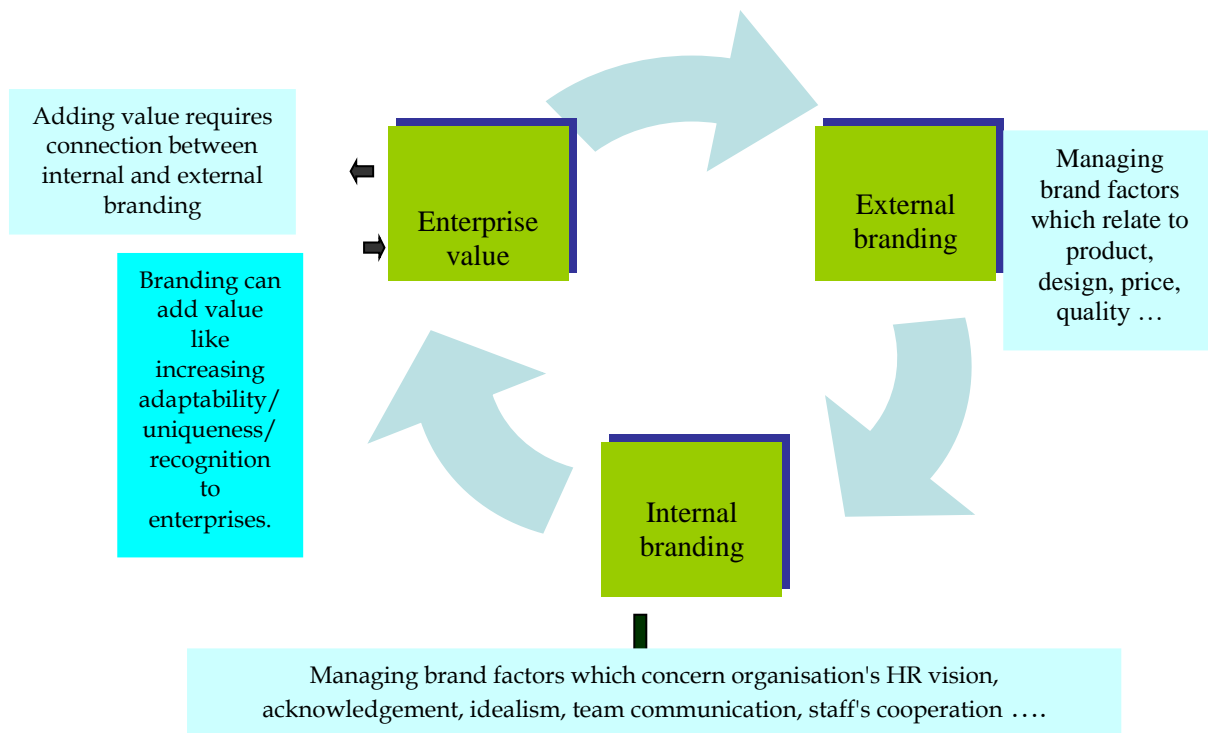
There are many definitions of branding. Ryder (2003) has the definition that branding is the application of marketing techniques to a specific product, product line, or brand. It seeks to increase the product's perceived value to the customer, thereby, increase brand franchise and brand equity. Comparing with Ryder (2003), Davis (1995) indicates that branding should take a long-term perspective and suggests that organisations wants to change the ways that they are managing their brands much more like assets increasing their value over time. Branding tries to increase value for customers and ultimately, increase sales volume (Ashtiani and Bahmanzadeh, 2017). The basic idea of using a brand refers to the enhancement of the value of a product when the producers/manufacturers realise that the price competition leads to lower profitability or to a decrease/reduction in profitability (Satvati et al., 2016). Satvati et al. (2016) also points out that profitability reduction (or the decrease in profitability) through price competition has made or has led manufacturers/producers to apply methods to increase customer loyalty, brand value and brand equity. Clearly, it is important that branding is working towards a common goal and a mechanism for achieving competitive advantage for companies, through differentiation, which creates the core

value for the companies. It is relationships that would exist if brand equity were to be managed both strategically and operationally. Here it is referred to Aaker and Joachimsthaler's (2000) viewpoint to describe branding as a great function positive influence on the enterprise value. His concept of branding is closer to the practical experience which can then better support this research study. Aaker and Joachimsthaler (2000) illustrate the branding in a way that can conclude that branding is a long-term process, changing the ways of managing a brand which can relate to and increase value. Comparing with other theories, Aaker and Joachimsthaler's theory better supports the research questions, because Aaker and Joachimsthaler (2000) stated that branding has a positive influence on the enterprise value.

### ***The connection between branding and enterprise value***

The term branding is used and expanded on by many authors. Van Kralingen (2002) mentions branding as part of identity, stating that the branding can be viewed as the glue/bond that holds the core identity elements together. Upshaw (1995) also sees that branding can positively influence an enterprise value and the significant core of companies is the branding. Keller (1999) states about that branding's soul is its spiritual centre. Randazzo (1993) also states that branding connects to the value. However, McCracken (1993) pointed out a discussion concerning branding which provides a good overview that it can add value. According to Aaker and Joachimsthaler (2000), branding may add value in the following ways: 1st – Segmentation, to match the values of the brand to lifestyle requires brand innovation and may supply greater credibility to company's consumers, 2nd – Recognition can help to rapidly establish credibility in new markets, 3rd – Uniqueness to express the uniqueness of position to all int. & ext. audiences and 4th – Finally, adaptability to let brands adapt to the local marketplace while fulfilling a global mission. Aaker and Joachimsthaler (2000) addressed the great influence of an enterprise value which can add adaptability/uniqueness/recognition and segmentation; he also stated that the branding is regarded as push strategy. Branding can create an enterprise value like supplying more adaptability/uniqueness/recognition and segmentation to a company. Based on Knox and Walker (1995) stated that branding is a process that takes control over everything the brand does and says, managing the way in which it is perceived by others. The overall aim of the process is to increase the value in branding over time. Actions have been influenced by the purpose - adding value to companies. Aaker and Joachimsthaler (2000) argue that added-value/benefit includes the value proposition and functional and emotional discriminators. Enterprise value is the term that Knox and Maklan (1998) and later on Knox et al. (2000) particularly mentions is to express what the customer is prepared to exchange for a brand. Jones and Morgan (1994) speak of adding value, and here they are talking about the process of developing brands. Keller (1993) conceptualises branding using an associative memory model focused on brand knowledge and involving two components: brand awareness and brand image – described as a set of brand associations. Using this conceptualisation of branding, Pitta and Katsanis (1995) claim that the leadership can create and enhance brand awareness, then build on this foundation and craft a salient image composed of a group of positive associations about the brand. Pitta and Katsanis (1995) also argue that proper management of these elements helps to create a level of awareness in the target audience, and careful creative activities can form a brand's identity in the consumer's mind. Specifically, Pitta and Katsanis (1995) are concerned that those assets represent the knowledge created in the minds of consumers as a result of all of the marketing programs executed for those brands. Pitta and Katsanis (1995) concluded that in one sense it can be viewed as the result of the total resource investment in the marketing of the brand. According to Keller (2000), branding should always relate to the value of the company. Then branding has really connected with the company's core value.

### *Internal & external branding model with value*



*Fig. 1. Adding value with the internal & external branding model*

*Source: based and referred to Aaker and Joachimsthaler (2000)'s Brand leadership.*

The research model is focused on the relationships between branding and value. Branding includes the int. & ext. branding. These frameworks address that int. & ext. branding should combine together and work closely to create value. The combination of the two factors can make them promote each other as well as increasing value to companies. External branding can supply a necessary platform for internal branding, while internal branding as necessary executor can assist external branding and positively influence enterprise value, though both int. & ext. branding use different paths to manage a company's brand (Aaker and Joachimsthaler, 2000). Keller (2000) also describes that enterprise value can be regarded as the differential response by consumers, customers, employees, other companies, or any relevant constituency to actions, communications, products or services. However, both int. & ext. branding cannot work alone. They should connect closely, and work cooperatively. The framework builds on the idea that a branding is developed as a continual and on-going interaction between a company and its customers. In this way, the organisation's values can therefore be seen as symbols of an organisation's efforts and ambitions on branding.

### *Internal branding versus external branding*

Aaker and Joachimsthaler (2000) stated that the value-creating processes take place in parallel. These are an internal – within the organisation; and the external – in the awareness of customers. Aaker and Joachimsthaler (2000) have mentioned that branding can be divided into int. & ext. branding. As earlier stated, the objective of this internal process is ultimately to create value having in mind the customer's identity as the basis. Aaker and Joachimsthaler (2000)

stated that the employee in the internal branding is executor and operator of branding. According to his viewpoint on value, it is necessary to discuss internal together with external branding and their connection with value. Balmer and Wilkinson (1991) stated that internal branding consists of the organisational resources available to accomplish its goals. These include work ethics and personal values, general cultures and physical resources. One of the important tasks of branding is to acquire these resources and make efficient and effective use of them within an organisation. Internal branding relates to the organisation, human resource factors, etc. Aaker and Joachimsthaler (2000) have stated that internal branding is related to identity, image and vision. Organisations own understanding of the brand and its commitment. According to Wernick (1991) an organisation's relationship with its brand will also affect the total internal relationship to the enterprise value. In this study, internal branding is related to factors like human resources, identity, and organisation's image. The external brand building process is primarily concerned with the relations and interactions between the brand and its customers. The objective of this external process is ultimately to create relationships with the customer's identity. To achieve a strong brand relationship with the customer, it is necessary for there to be an interest in the product and for the choice of brand to be regarded as important; there must be brand sensitivity (Kapferer, 1992). External branding in this research paper is related to factors like product quality, package and so on. Also, external branding supports the internal branding to service a company's brand. External branding is able to supply a necessary platform for internal branding and it is difficult for them to work separately (Aaker and Joachimsthaler, 2000). Both int. & ext. branding use different ways to increase the brand awareness and customer loyalty to the brand. Therefore, both of the two factors should combine, connect closely, work cooperatively and support each other to create value. In general, according to Aaker and Joachimsthaler (2000) external branding can supply a necessary platform for internal branding, internal branding as executor and operator can support external branding and thereby positively influence the enterprise value.

## RESEARCH METHODOLOGY

Research was done on a small sample (qualitative research – interviews with experts). Qualitative research is chosen as research method. In this method, an interview was conducted in a case study with different respondents. Respondents are from SIMPO's group and are in charge of their marketing and branding department in Serbia.

### *Qualitative method*

For the qualitative research is chosen Serbian company SIMPO Vranje as a case study, which means that specific data and facts were gathered during in-depth interviews with respondents. Respondents are in charge of brand management in SIMPO's marketing division. The key respondent's position is a brand manager in their brand management department. In interviews, the researcher had the chance to speak freely. The interviews took place at the respondent's office for two times, and each in-depth interview lasted at least about one hour. There are many reasons to choose SIMPO as a case. For the first, SIMPO is Serbian as well as a Balkans leading furniture brand; meanwhile this company has successful branding experience from the last twenty years. SIMPO's successful combination of int. & ext. branding has created sustainable profit, splendid reputation for the brand. SIMPO's branding really seems to bring satisfactions to the customers. These research questions focus on the combination of int. & ext. branding. The theoretical part is based on the two relationships, internal versus external

branding, branding versus value. The in-depth interview was conducted in a qualitative method to pass through the SIMPO's case, and the necessary data/facts were acquired and gathered from respondents in SIMPO's brand management department. As the research uses a case study method, it is based on both types of data – primary and secondary, and distinctions are made between them. When collecting the primary data, we had the chance to converse/speak with the respondents more than a few times in order to evade uncertain misunderstandings of data and facts. This research method really helps to illustrate and research the connections between int. & ext. branding and between branding and value.

### ***Case study profile: Background of SIMPO's operations***

SIMPO is a shareholding company, with headquarters in Vranje, in southern Serbia, with furniture production and wood processing as its core activities. SIMPO group offered series of home furnishings and accessories of home design with fine/good functionality. Founded in 1963 as a Sima Pogacarevic furniture factory (named after a local fighter from Second World War), the company was unsuccessful in its first four years, until in 1967, when the new CEO was appointed. Then began a period of growth and prosperity for the company. A company with three hundred seventy employees transformed into one of the most successful Yugoslav companies. The company SIMPO was established in Vranje (small town in south of Serbia) and from a small furniture factory it has evolved into a joint stock company with near seven thousand employees. In 1980s, the management decided to diversify the product portfolio and fully integrate the manufacturing process via in-house production of intermediate goods. A number of new lines were introduced, including textile production, fine wood processing and chemicals production. Vertical integration yielded substantial results and the company managed to significantly increase its size and turnover by the beginning of 1990s. SIMPO has vertically integrated the furniture manufacturing process through deployment of several wood and textile processing plants, in order to ensure stable supply of all inputs. Apart from furniture production, the company has also positioned itself in other industry segments such as chemicals production, retail, as well as agricultural and food production. Before the dissolution of former Yugoslavia, SIMPO was the largest furniture manufacturer in a twenty million people market. Due to a time gap between furniture manufacture and sale, the management was forced to enter a range of activities which involved fast turnover goods production in early 1990s. Thus the diversification strategy was also pursued in the last fifteen year period when the company entered a range of agricultural and food production activities and introduced several new wood processing facilities. SIMPO is a production-business group, as well as one of the largest and most successful Serbian companies. Major Fields of development of SIMPO's activities are production of furniture, food industry, trade and transportation. Strategic principle according to which SIMPO has been developed is the rounding up of the production process (from production of wooden construction materials and materials for reproduction, to the production of a most elite final product of superior design, quality and functionality), by which the company is unique in Europe. Modern equipment and state-of-the-art technology are being used, which have been adapted to the technological and ecological criteria of the European Union. Major factories of the SIMPO Company are:

- The furniture factory – SIMPO's core business activity is classified as furniture production
- The factory of upholstery and leather seats
- The factory of laminated furniture



- The crib factory
- The mattress factory
- The decorative fabrics factory.

The SIMPO joint-stock company is a system composed of eighty companies and production units operating in several business activities – manufacturing and sale of furniture, as its main activity, but also in the food industry, agribusiness and services. With its long tradition in wood processing industry, the company is involved in almost every segment of wood processing, producing both intermediary and final products. With the introduction of Laminated Furniture Factory, Interior Furniture Design Factory, Upholstery Factory and Mattresses Factory, the company has successfully integrated the furniture manufacturing process through in-house production of all the required elements. A furniture production process in SIMPO is conducted in the facilities such as Sawmills (sawmill wood processing), Casing Construction Factory (production of casing (wood) constructions for manufacturing of tapestry garnitures, bolsters and bedrooms), Factory Stil Surdulica (manufacturing of solid parts, where wood frameworks for massive and stylish furniture are being produced, as well as surface finishing of garnitures parts), Furniture Factory and Interior Furniture Design Factory (production of household furniture i.e. bedroom and kitchen elements), Mattresses Factory, Tapestry Factory and Gearing Factory (production of chairs for the market, and manufacturing of platforms and metal gearings for bolsters and tapestry garnitures for other companies within SIMPO). Apart from its core activity, SIMPO is engaged in a number of other businesses through its subsidiaries such as: SI-MARKET – retail trade of food and beverages incorporated through a merger with several small and medium sized retail chains; KONDIVA – confectionery production company; SIMPO TEPISI – production of carpets and floor coverings; SIMPO-COMMERCE – wholesale of wood products and construction materials; SIMPO LINE – engineering and interior furnishing; SIMPO DEKOR – production of cotton materials or textile manufacturing generally; SIMTAK – upholstery production; SIMPO VLASINA – animal farming; Simpo Cveće – horticulture; SIMBI – trading medicinal herbs; SIMHEM – phosphate free detergent production; SIMPO DRVO – production of grave wood; and VESO PO – production of non-alcoholic beverages. It employs about five thousand workers, who mainly work in the production facilities concentrated in the most undeveloped municipalities in the south of Serbia and in the north of Kosovo and Metohija, in Zubin Potok. The business concept of SIMPO is fully dedicated to the development of the south of Serbia and better standard of living of the people living in that region, which is confirmed by the fact that today SIMPO employs as many as 28.2% of the total number of employees in the manufacturing industry of the entire Pcinja District. With the annual production worth more than seventy million euros, it has had a substantial share in the generation of GDP and it is an important economic factor in the country. In 2012, SIMPO exported to the markets of thirty countries 54% of its annual production.

## RESULTS AND DISCUSSION

Results and discussion section contains case study analysis, as well as further managerial & business performance implications.

### *Current facts about SIMPO*

SIMPO was a leading furniture producer and exporter in former Yugoslavia, but production stalled during the 1991-99 Balkan wars and Serbia's international isolation until the change of

government in 2000. According to its official website, the company is worth (at least) an estimated eighty million euros. SIMPO's estimated worth is seventy million euros, and 70% of the company is jointly owned by the state and small shareholders. Since the restructuring of its ownership structure in 2002, 59.5% of its stakes have belonged to small shareholders. A further 10% and 30.5% belong to the state-run Retirement Fund and Share Fund respectively. Because of its location, SIMPO has been described as a company of strategic importance for Serbia and a guarantor of the future economic growth of the whole region. The problems facing SIMPO are causing great upheaval among the small shareholders who own about 26% of the company. In addition to the debts it owed the state, SIMPO owed a further forty million euros to suppliers and public companies for unpaid utility bills and fuel. After the change of government in 2000, SIMPO had to repay to the state debts amounting to one hundred fifty million euros, due to excess profits generated through borrowings at favourable rates from state-owned banks. Due to that, the government had obligations towards SIMPO, and the state is obliged to return to SIMPO one hundred fifty million euros collected as excess profits, as it has done with other companies. In addition, SIMPO used to own property in the other countries of the former Yugoslavia, with a value around one hundred eighteen million euro. SIMPO's shares have plummeted on the Belgrade stock exchange to below thirty euros, close to half their value a year ago, because of the extent of its debts. The possibility that saved the company was being to reschedule its debt to the state.

### ***SIMPO group - incubated companies***

SIMPO Group has a complex organisational structure as a result of the diversification of its business operations and deals with several economic activities – manufacturing and marketing of furniture, food industry, agribusiness and services. Today, SIMPO comprises a team of five thousand associates in thirty enterprises and several dozens of production plants. The majority of production capacities are located in southern Serbia in the vicinity of the city of Vranje. SIMPO has been operating on the international market for more than forty years, and today it exports its products to three continents, and to more than thirty countries – worldwide with an export representing 65% of production. According to Stosic Mihajlovic (2013), until recently it was present on the international market, in almost every continent. An average annual export growth of 20% confirms that the foreign buyers, whose number has been increasing by 30% on average every year, have recognised SIMPO as a reliable and demanded partner. SIMPO is a leading regional company trading in furniture and accessories, with its own logistics and the retail network of sixty department stores and showrooms in five countries. Within the wide range of its activities, the core business of the SIMPO Group is furniture industry, in which it ranks among the largest European manufacturers. The company was ranked among Serbia's top eighty-five companies in terms of operating revenues in 2008: dropped out from 2005's top sixty companies ranking; and twenty-five largest exporters in 2008 bringing up to 19.56 million euros in exporting goods: with a slight increase above 18.3 million euros in 2006. In terms of ready-made goods, SIMPO has achieved highest output level in 2005. In 2009 despite the economic downturn and low level of bank financing, SIMPO achieved growth in sales compared to 2008 and the highest sales growth were recorded in mattresses and cupboards segment. In this activity, the company has the rounded-off production process, from raw materials and intermediate goods to final product, which makes it unique on the European market. Such a concept enables the maximum control of quality, costs and just-in-time delivery, which makes their products competitive both on the domestic and international markets.

### ***Export growth and new markets in spite of the crisis***

According to Lotfifard and Borojerdi (2018), marketing mix (product, place, price, and promotion) has a positive and significant effect on export performance. SIMPO has established a strong presence in both international and domestic levels with over one hundred seventy (170) retail outlets and over eighty (80) furniture retail outlets in prime locations in Serbia and the region. From the beginning of 2012, SIMPO has been exported to thirty countries and recorded an export growth of 25% as compared to 2011 ([www.simpogroup.com](http://www.simpogroup.com), 2013). Export growth to the France is particularly important, because it is one of the most demanding Western Europe markets (*ibid.*). The agreements have been made with the French partners for export to that country in the value of ten million euros in the coming year (*ibid.*). These agreements are very important for the Serbian furniture industry, because they relate to the export of furniture with high prices and the original SIMPO design for the most exclusive trade chains (such as Crozatier, Cuir Centre and Roche Bobois), where the SIMPO's products will be placed in the special branded space with the made in Serbia mark/logo (*ibid.*). Along with the living room UNI, the sofa-bed program and their board-furniture program is being sold on the French market as of 2014. SIMPO Company has made an important breakthrough in the Near East market (*ibid.*). At the end of August 2012, SIMPO's showroom was opened in the capital city of Kuwait in the area of more than eight hundred square meters, in association with a local partner, the company AFGI International (*ibid.*). Israel is a new market for SIMPO in 2012 (*ibid.*). With the company Wissmann, the largest furniture trading company in that country, with ten trade centres, SIMPO have agreed the cooperation that includes supplies of upholstery and board furniture for their facilities across Israel (*ibid.*). SIMPO Continues Supplying IKEA. The cooperation with the Swedish IKEA, their major partner, has recorded a two-digit growth in 2013, too. IKEA has placed an order for all articles from SIMPO's regular product portfolio, which it plans to market through its three hundred thirty-three stores in forty countries. KIKA, the Austrian chain, sells the SIMPO's furniture from the end of 2012 in Austria, Croatia and Serbia. In addition to that, it includes SIMPO's products in its centres in Romania from the end of 2012, and in Slovakia, the Czech Republic and Hungary from the current 2013, too (*ibid.*). According to Business Week ([www.businessweek.com](http://www.businessweek.com), 2013), SIMPO plans a biomass plant with Slovakia's Grafobal Group Energy.

### ***The leading SIMPO's product on the French market***

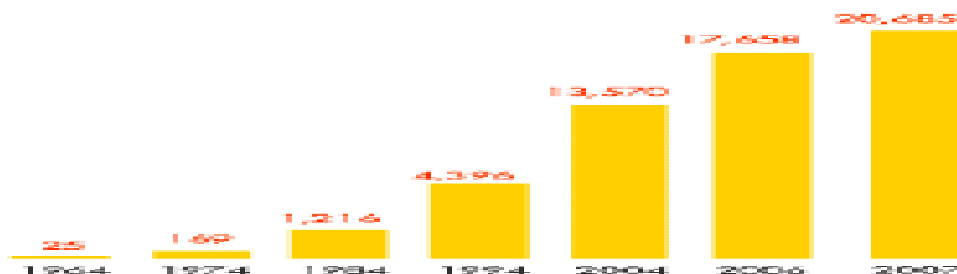
From the beginning of 2012, SIMPO has trebled the value of contracts on export to France and increased the deliveries to five million euros ([www.simpogroup.com](http://www.simpogroup.com), 2013). Export of exclusive furniture trebled "Esterel Suite" which is the leading SIMPO's product on the French market. As of September 2013, the SIMPO's management agreed that the value of monthly deliveries would be around one million euros, and the first agreements were made for export to the French market (in the coming period) in the value of ten million euros. The agreements reached are especially important for the Serbian wood processing industry. That way, SIMPO Group has become one of the leading suppliers on the French market in the segment of exclusive furniture. SIMPO has made a powerful breakthrough on the demanding French market owing to the constant investments into innovations, design and market research, and the traditional superior quality of its products (*ibid.*). Following the most topical European trend of product personalisation, among other things, SIMPO enables its buyers in France to add details and functionality to the chosen model of sofas, according to their specific aesthetic requirements and needs (*ibid.*). Stosic Mihajlovic (2013) emphasises that with this approach SIMPO fully meets the national export strategy requirement as it increases exports and growth of GNP.

### ***SIMPO the winner of the recognition awards***

The award “The Best of Serbia”, as the best corporate brand for 2012 in the category of durable consumer goods was awarded to the SIMPO company, which has won this recognition for the record fifth time ([www.pks.rs](http://www.pks.rs), 2013) – making SIMPO the absolute record breaker in the category also acquiring the status of the “Corporate super brands Serbia” 2012-2013 awards ([www.simpogroup.com](http://www.simpogroup.com), 2013). In the traditional campaign organised by the Ministry of Trade, Agriculture, Forestry and Water Management, the Chamber of Commerce and Industry of Serbia and the daily business newspaper „Privredni pregled“, SIMPO won this national recognition also in 2005, 2008, 2009 and 2011. The campaign was launched in 2004, and it was focused on strengthening the image of domestic brands and competitiveness, with the support of innovativeness and the promotion of local brands. One hundred and fifty companies competed for twenty recognition awards „The Best of Serbia“ for 2012, in the category of the commodity, corporate, service and personal brands, and the winners were selected on the basis the financial results, market research and evaluation by business partners and consumers who voted via internet. The aim of Corporate super brands Serbia 2012-2013 awards, a leading global platform for brand promotion which exists in over ninety countries across the globe, was to award the most successful companies in Serbia by applying the strictest methods of selection with the key grading criteria which included public appeal & reputation, lasting consistency & reliability, corporate responsibility (via market with quality & price & services, corporate relations with legality & transparency, working environment & procedures, social responsibility with sponsorships, cultural & public events and environmental protection). That is how seven of the best corporate super brands in Serbia were selected within each category.

### ***Success of SIMPO's external branding***

The external branding has brought great success to this company. SIMPO has kept a more than 10% growing speed from 1998 in the global market and it has been experiencing hard competition during the 1990th. The turnover reached to 1.216 million euros in 1984 and 20.685 million euros in 2007, which means an increase of sixteen times over the last thirteen years (Figure 2). In the past ten years, it has kept an increasing advantage with their competitors, and they are now the absolute region leader in furniture design and product quality (source from respondents). It is important to train, empower, and reward employees so that they are able and willing to live with the brand when interacting with customers, suppliers, other partners, and mass media and so on. The foundation of SIMPO's success has been to offer consumers good value for money.



*Fig. 2. Turnover of SIMPO store displayed in value of million euros - Sale tax not included*

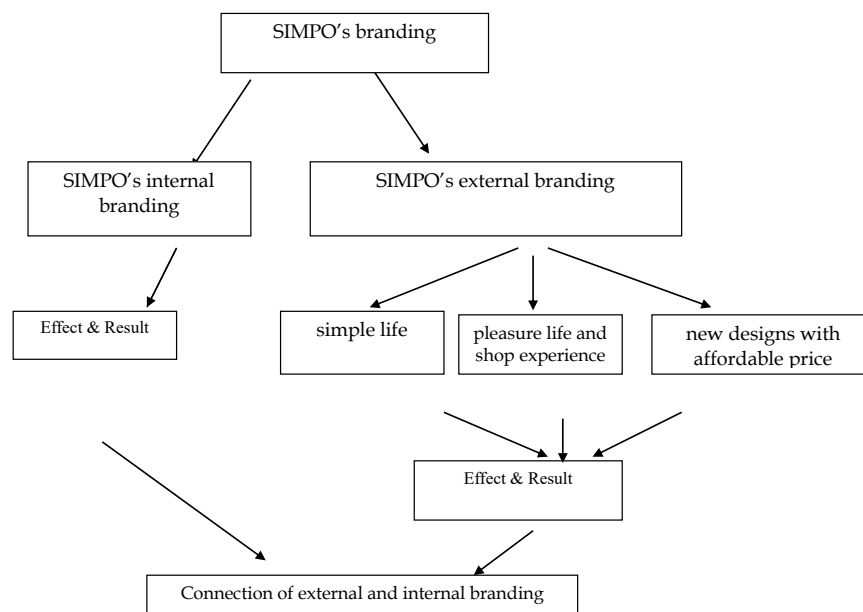
*Source: data obtained from the 2007's Annual Report – available at [www.simp.rs](http://www.simp.rs) (2012)*

### *Great results of internal branding*

SIMPO's internal branding has obtained great success. Internal branding has increased staff's enthusiasm. They are more active in contact and communication with customers, which is an important "energy factor" to sustain SIMPO's brand. Loyal customers, return despite offers by the competitors (source from respondents). The visiting customer's number has kept an increasing rate of 15% in the last twenty years. In 1984, there were around sixty thousand visitors to the SIMPO group, in 2007 there were approximately six million visits to SIMPO stores, a ten times increase.

### *The basic structure analysis of SIMPO's branding*

The empirical findings were analysed through the analytical model presented in the theoretical framework. It focuses on the SIMPO Group to discover if the corporate branding can act as a means to add value to companies. After this, a summary of the analysis was made to create a clearer picture and find (or discover) the connections between int. & ext. branding with value. In SIMPO's case of branding, innovative thinking is important as exemplified by its integration of form, functionality, and low price. SIMPO represents a modern and casual style. Providing people with a new identity and changing their homes (source from respondents). There are hundreds of inspirational displays in the SIMPO stores from realistic room settings to real-life homes, all with product combinations that provide fresh ideas and know-how/expertise supported by the knowledge of contemporary interior design. This gives visitors huge possibilities to find solutions that best suit their needs. Products in SIMPO are offering a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them. The SIMPO range includes products for every part of the home. Low price is a prerequisite for the SIMPO Concept to realise the SIMPO vision - to create a better everyday life. SIMPO keeps products at extremely low price levels (respondents' data source).



*Fig. 3. The basic structure of SIMPO's branding which is a close combination of int. & ext. branding*

*Source: Data obtained from respondents*

***The existence of internal branding without external branding:***

Internal branding is concerned around organisations, HR's visions, and acknowledgements. Balmer and Wilkinson (1991) and later on Balmer (1995) stated that the internal branding consists of the organisational resources available to accomplish its goals. These include work ethics and personal values, general cultures and physical resources. One of the important tasks of branding is to acquire these resources and make efficient and effective use of them within an organisation. These ethics, cultural & personal value, and physical resources should be based on external branding as a necessary condition. SIMPO staffs manage brands; communicate with customers about brochures, design, etc. If internal branding do not cooperate with external branding, it will be very hard to add adaptability/uniqueness/recognition, to the company's brand, which then cannot add value to the company. Therefore, it is difficult for internal branding to work alone without external branding. Internal branding should work cooperatively and connect closely with external branding.

***The existence of external branding without internal branding:***

A company's brand can possess an affordable price, fine quality, good design, etc. However, no matter how many good points there are saying about it, it is not advisable to neglect the human factor. Human resources (HR) are significant in branding in order to add value to companies. The staffs are an important factor that encourages customers to buy from you and not your competitors even when there is product parity and similar pricing (Drees, 2006; www.brandchannel.com, 2006). It is perhaps the most challenging part of branding's factor. There is a profound effect on customer loyalty when it comes to employees, whether being distributors, managers, etc., and according to Drees (2006) it has been proven that people are a powerful part of the customer loyalty equation. Their knowledge about the brand or service, their friendliness and approachability, their motivation and dedication to serving the customers are all tied directly to a company's brand and its course in connecting adaptability/uniqueness/recognition to the company's brand. It is no surprise that some companies with highly qualified people have the best brands. If there were no internal branding in the SIMPO plush dog case, maybe this brand would have failed. External branding factors need the support from internal branding factors in order to realise its functions and purpose to increase the adaptability/uniqueness/recognition of the SIMPO brand or whatever brand for any company. Therefore, it is difficult for external branding to exist without internal branding.

***Branding add value by way of increasing more adaptability/uniqueness/recognition:***

Referring to the theoretical section, McCracken (1993) stated that branding has value because it adds value. The discussion in De Chernatony et al. (2000) about the branding that can add value provides a good overview. Upshaw (1995) also saw that branding can positively influence value, and the core of the core is – the branding. Regarding theoretical issues, Aaker and Jacobson (2001) have mentioned that branding can increase adaptability/uniqueness/recognition, which then connects to an enterprise value. SIMPO manage their brands to draw people's attention through splendid design, colourful display rooms, and by bringing new inspiration and fashion ideas to their customers. The SIMPO brand requires shops to innovate for people like including some kind of entertainment place or relaxing area. Their branding greatly increases brand awareness, and so, in this way, customers are more loyal to the SIMPO brand. Customers feel great comfort and care when SIMPO offer

employee's excellent service. People become more and more loyal to SIMPO's brand. Purchase in SIMPO is not only a payment, but also an enjoyment, a taste of the brand. People who are attracted by this well-managed brand, will most likely adapt SIMPO's new products, new designs. Branding can improve adaptability to companies. Management of a brand is in order to keep competitive advantage to brand competitors, so companies try to manage their brand in a unique way compared to others. Branding includes improving a brand's visual impression and to give it a personal image, in this way, people can easily remember a certain brand. At the same time, companies can obtain more uniqueness by running brands this way. Recognition comes through branding which means branding can spur your customers to be more loyal to your brand. Vanka (2011) claims that corporate recognition can be gained through corporate branding which is helpful for better market share. Branding has a positive influence by increasing adaptability/uniqueness/recognition to the companies. Similarly, adaptability/uniqueness/recognition directly leads to the enterprise value. Branding can add value by way of increasing more adaptability/uniqueness/recognition.

### ***Branding add value through the combination of internal & external branding:***

According to McCracken (1993) in an increasingly competitive global marketplace, it is ever more important for companies to ensure branding. He further stated that branding has value since it adds value. Speak (1998) mentioned that branding can enhance a company's relationship-building skills. All these researchers have clear statements that there are close collaborations between branding and value. Branding can add value to the companies by way of increasing more adaptability/uniqueness/recognition. Branding increases employee engagement; offers a strong vision and attracts customer's attention. SIMPO's branding steps make this brand more distinctive and consistent. Branding improves the capacity to build a relationship between the SIMPO brand and customers. All these successful results are obtained through the combination of int. & ext. branding. This illustrates that a combination of int. & ext. branding can increase more adaptability/uniqueness/recognition. The connection of int. & ext. branding ensures that people feel more confident to a company's brand. The connection of int. & ext. branding keeps a certain brand more credible and attractive. Especially, internal branding requires the platform from external branding, and external branding requires executors or operators from internal branding. Success in SIMPO's case lies in the cooperation of int. & ext. branding; these two factors cannot work separately. They should work closely. Therefore, in general, branding can add value to companies. Only the connection of int. & ext. branding can add value to companies.

### ***The close connection between the internal & external branding***

The combination of int. & ext. branding gives SIMPO splendid results. Branding has delivered great service with satisfaction for customers and the company as well. At the same time, SIMPO also keeps a fast developing rate in the furniture industry. The SIMPO group brings more arability, uniqueness, recognition in this way. There are many examples that the SIMPO group ensure int. & ext. branding work closely, as well as customer service staff may find that customers are easily getting too tired in the huge shopping centre when they walk around, especially the children always get tired. The front line employees feedback this information to design departments, and they cooperate with the design department to design more entertainment facilities and colourful display rooms as well as children's playrooms, restaurants, etc. (source from respondents). A single department cannot manage with brands by

itself. Departments should always work together because they possess different knowledge, in other words, there is different information in connection with different functions. These departments in SIMPO always support, share information, knowledge, data, experience (etc.) with each other. They know brand does not belong to a single person, but it belongs to all of the staff, so they cooperate in teams to create a better brand. Another example, in 2011, SIMPO's product department planned to design a plush dog in both big and small series for the Asia Pacific market. Some staff in the customer service department disagreed regarding the size. They had (practical) working experience in Asian markets, and they realised that normal Chinese and Japanese families have a too limited room space to store very large plush dogs, and if it is too small, children are likely to put a small plush dog in their mouths. Finally, the different departments worked together to design a very successful product, which was then very well received in the Asian Pacific market. Every staff member has shown efficiency and effectiveness when it comes to responsibility for answering colleague's questions, customer's questions (data source from respondents). Corporate branding brings great value to this company. According to domestic daily business newspaper „Privredni pregled“ (www.pregled.rs, 2013) and from its primary international source weekly business magazine “Business Week” (www.businessweek.com, 2013), SIMPO is highly ranked regarding brand value. This means that SIMPO is among the leading brands in Eastern Europe furniture industry. Branding requires staff to operate, accomplish its aim. Internal factor can execute the external functions because staffs work directly in the Frontline. In the same way, external branding supplies a platform for the internal branding. Both int. & ext. branding should work closely to increase customer's awareness and loyalty. Both int. & ext. branding uses a different path to manage a brand, but they should combine by cooperating closely. Aaker and Jacobson (2001) said that branding could bring adaptability/uniqueness/recognition to companies, requiring the two factors work closely together. As earlier illustrated, external branding cannot work alone without internal branding in order to bring significantly more adaptability/uniqueness/recognition for a brand. Meanwhile, internal branding cannot work alone without external branding to bring more adaptability/uniqueness/recognition as well. Therefore, branding requires that int. & ext. branding work closely together to when adding value. One of these two singled out is not enough to service branding in order to add value to companies. In that way, successful branding requires int. & ext. branding to connect closely and work cooperatively. Real value derives from the combination of int. & ext. branding. Branding really brings values for SIMPO, by way of the combination of int. & ext. branding; branding can bring more adaptability/uniqueness/recognition as well as value to companies.

***SIMPO's further steps could lead to business entity transformation/change from an incubator to cluster***

The creation of clusters is not a government function, neither is it a tailor-made solution, and in fact, clustering involves many roles with each participant having certain duties, but the whole process needs coordination (Vanka and Heijman, 2013a). Additionally, Vanka and Heijman (2013a) suggest that the monitoring and supervision of the whole process, the identification of the needs and a permanent exchange between the participants are all organised as a cluster. Vanka and Heijman (2013a) also claim that one cluster can help to create another; where starting one process means that many others may follow. An SIMPO Line from Vranje in front of the wood - processing sector has singled out with five domestic companies that have represented out mapped region, and together with over twenty companies from other countries within the Adriatic Cluster Club Project have applied for project with inter-company B2B



meetings which are planned during the phase of the realisation, and are in negotiations related to the realisation of the first concrete activities with the new partners. Complementarities between firms can help join the bidding and scale benefits on contract tenders; or joint marketing of products and services: when the producers have formed groups within one sector, it is already possible to organise joint marketing efforts toward consumers at the national level, as well as toward the domestic and foreign investors, in order to attract additional investments (Vanka et al., 2012). Vanka et al. (2012) also mentioned that a cluster constantly invests in marketing of location and industry, thus attracting buyers and making a landmark for the region. Later on, Vanka and Heijman (2013b) points out that cluster can also influence the local region as can a big corporation. The supported claim figures that a region's most famous product and companies are treated as regional landmarks (Vanka and Heijman, 2013b). The Adriatic economic cluster club is a project co-financed by the EU under the IPA Adriatic cross-border cooperation program. The aim of the project was to support the acceleration of the creation and strengthening of the cluster system in the nautical sector, the shipbuilding sector and related sub-sectors, with particular emphasis on the support of SMEs. For micro and small companies, according to Vanka and Heijman (2013b), clusters represent a chance to compete on the market and to attach the label of a recognisable brand; but for large companies, clusters are a way of controlling the local competition and the market, as well as of achieving export. Competition and the functioning of free markets guarantee the success of the sector and as a result, regional development (Vanka and Heijman, 2013a). The project also improved innovation of production systems, all through cooperation, development of business opportunities and market research. Within the project, a cross-border partnership has been established, consisting of sixteen partners from six different countries (Italy, Serbia, Croatia, Bosnia and Herzegovina, Greece and Albania), whose task consists in analysing existing clusters through mapping and identification of the manufacturing sector that is related with the nautical production chain, with special emphasis on following industries: wood industry, mechanical industry, chemical industry, metal industry and textile industry. In addition to that, the partnership promotes the exchange of best practice examples and experiences and entrepreneurial cooperation, as well as finding new business partners. Vanka and Heijman (2013b) suggest that a cluster can launch marketing campaigns and find new customers in international markets. Smaller companies can group functions such as marketing and logistics and outsource them to cluster (Vanka and Heijman, 2013b). The project that is primarily intended for SMEs also envisages business meetings which are held between the selected companies and research centres from different countries. Aforementioned complies with Vanka and Heijman (2013b) previous stands that from a marketing point of view, membership allows companies to present their products and services in a variety of places and occasions, in cooperation with service and government agencies. When a region has a successful cluster, this in a way brands the region and gives it additional value (Vanka and Heijman, 2013b). The benefits for the companies within clusters are the multiple linkages and synergistic/synergetic effects that help them to downsize costs, share knowledge, boost innovation and increase sales and exports; concluding that companies within clusters benefit from the cluster's reputation as a whole, as well as the actions such as fair trades, trade magazines and marketing delegations (Vanka et al., 2012). The project duration lasted until the end of August 2013; showing the project's success with such splendid results. In the end, complying with Vanka and Heijman (2013a) opinion, a win-win situation is created, even if the competition is raised to a higher level.

## CONCLUSION

This paper aimed to research if branding can be regarded as a means to add value to companies and the relationships between int. & ext. branding when adding value to companies. The study discussed the close connection between branding and value; and about cooperative connections between int. & ext. branding. External branding can supply the necessary platform and conditions for internal branding. Internal branding as an executor and an operator can help and support external branding (in order) to positively influence an enterprise value. Single int. & ext. branding ways is not enough to add value for companies; they should combine by working cooperatively and connecting closely. This is the way int. & ext. branding connects to each other. The further growing of purchasing power of the population together with increasingly competitive credit terms offered by commercial banks will allow increasing the demand for durable goods such as furniture. Today, SIMPO is the largest furniture producer and among the largest companies in terms of turnover in Serbia. As far as its market position, SIMPO is positioned as number one domestic furniture producer with a strong and a recognisable brand name and a long tradition in the industry. The company has a distribution network, developed throughout Serbia and abroad, such as Russia, Germany, Bosnia-Herzegovina (BiH) and Macedonia. Numerous high street outlets located in all major cities in Serbia give SIMPO the unparalleled competitive reach/range. The SIMPO case illustrates that the combination of int. & ext. branding is a significant part in the path to bring more adaptability/uniqueness/recognition to a company. Branding is really a means to add more value for companies. Successful branding may provide a company with a differential advantage and values. It keeps the corporate brand interesting and fresh by renewing old products, it creates a desire in saturated markets, and besides that, it is a source of competitive advantage. Int. & ext. branding may become significant solutions to consolidate the company's market position and be instructive for a company's potential reaction to different market conditions. Vanka (2011) points out that it is the game of right positioning at the right time for a corporate brand to make more as well as loyal customers. Firms must first ensure that the customer need is addressed by positioning offers or other marketing-driven content in the context of the interaction (Vanka 2011). The discussion in this article shows how companies manage their brands and what factors are in the game when managing a brand. The int. & ext. branding tools are the significant tools when improving an enterprise value. The work here has not focused much on the customer's behaviour and organisational performance, as well as the connection with the relationship between a company's human resource administration and public relations (PR). If there is the possibility to research further this point, it will discuss them connected with consumer behaviour and organisational performance as well as public relationships.

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