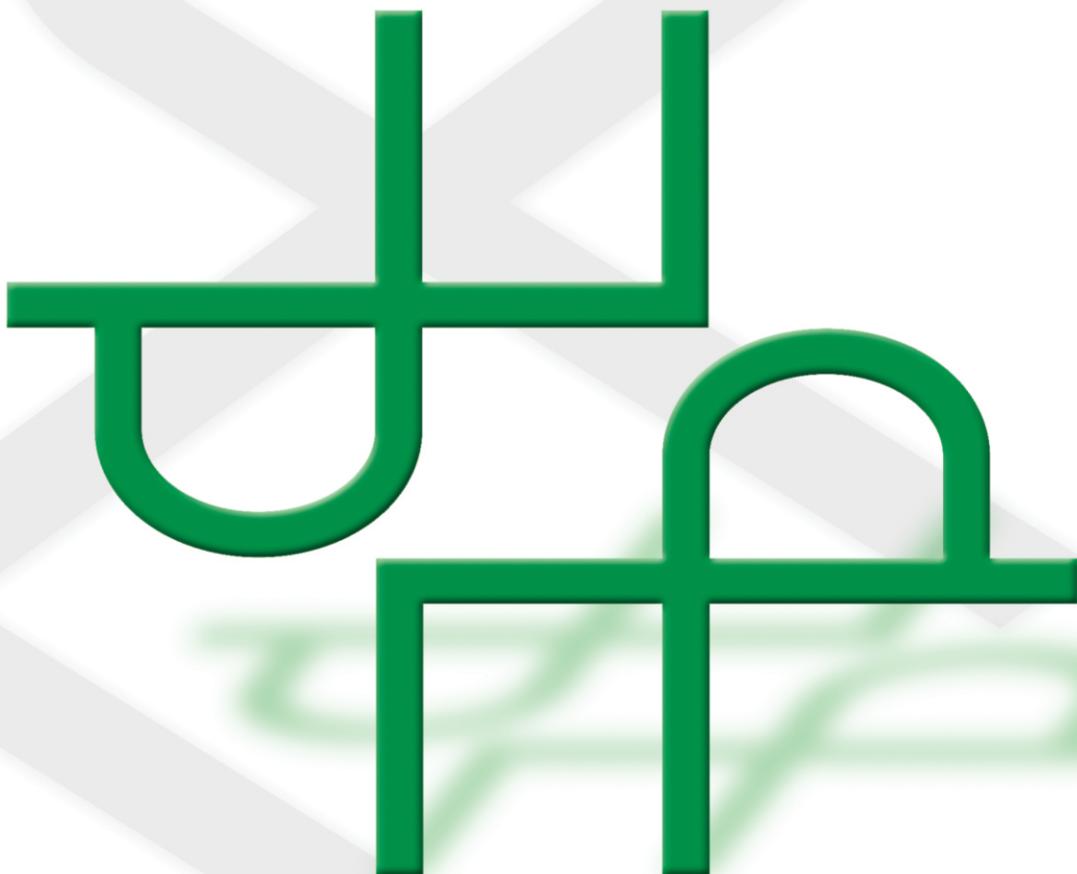


# ЕКОНОМИКА

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3



МЕЂУНАРОДНИ ЧАСОПИС  
ЗА ЕКОНОМСКУ ТЕОРИЈУ И ПРАКСУ И ДРУШТВЕНА ПИТАЊА



# ЕКОНОМИКА

Часопис излази четири пута годишње

Година LXV, VII-IX 2019, број 3

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1. Часопис “Економика” покренут је јула 1954. године и под називом “ Нишки привредни гласник” излазио је до јуна 1957. године, а као “Привредни гласник” до краја 1969. године. Назив “Наука и пракса” носио је закључно са бројем 1/1973. год. када добија назив “Економика” који и данас има.

2. Часопис су покренули Друштво економиста Ниша и Друштво инжењера и техничара Ниша (остало као издавач до краја 1964. године). Удружење књиговођа постаје издавач почев од броја 6-7/1958. године. Економски факултет у Нишу на основу своје одлуке броја 04-2021 од 26.12.1991. године постао је суиздавач “Економике”. Такође и Економски факултет у Приштини постао је суиздавач од 1992. године. Почев од 1992. године суиздавач “Економике” је и Друштво за маркетинг региона Ниш. Као суиздавач “Економике” фигурирали су у току 1990-1996. године и Фонд за научни рад општине Ниш, Завод за просторно и урбанистичко планирање Ниш и Корпорација Винер Брокер Ниш.

3. Републички секретариат за информације СР Србије својим Решењем бр. 651-126/73-02 од 27. новембра 1974. године усвојио је захтев “Економике” за упис у Регистар новина. Скупштина Друштва економиста Ниша на седници од 24. априла 1990. године статутарном одлуком потврдила је да “Економика” има статус правног лица. На седници Скупштине Друштва економиста Ниш од 11. новембра 1999. године донета је одлука да “Економика” отвори посебан жиро-рачун.

4. Према Мишљењу Републичког секретариата за културу СР Србије бр. 413-516/73-02 од 10. јула 1973. године и Министарства за науку и технологију Републике Србије бр. 541-03-363/94-02 од 30. јуна 1994. године “Економика” има статус научног и ранг националног часописа “Економика” је поћев од 1995. добила статус међународног економског часописа.

5. УРЕДНИЦИ: др Јован Петровић (1954-1958), Миодраг Филиповић (1958-1962), Благоје Матић (1962-1964), др Драгољуб Стојиљковић (1964-1967), др Миодраг Николић (1967-1973), др Драгољуб Симоновић (1973-1984), др Миодраг Јовановић (1984-3-4/1988) и др Драгољуб Симоновић (1990-до данас).

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1. The journal EKONOMIKA was initiated in July 1954. It was published as "Nis Economic Messenger" till June, 1957 and as "The Economic Messenger" till the end of 1969. The title "Science and Practice" it had till the issue 1/1973 when it changed its name into EKONOMIKA as it entitled today.

2. The Journal was initiated by the Society of Economists of Nis and the Society of Engineers and Technicians of Nis (the latter remained as the publisher till the end of 1964). The Society of Accountants became its publisher starting from the issue no. 6-7/1958. The Faculty of Economics, Nis, on the basis of its Resolution No. 04-2021 from December 26, 1991, became the co-publisher of EKONOMIKA. Likewise, the Faculty of Economics of Pristina became the co-publisher since in 1992. Starting from 1992, the co-publisher of EKONOMIKA has been the Society for Marketing of the Region of Nis. Other co-publishers of EKONOMIKA included, in the period 1990-1996, the Foundation for Scientific Work of the Municipality of Nis, the Institute for Spatial and Urban Planning of Nis and the Corporation Winner Broker, Nis.

3. The Republic Secretariat for Information of the Socialist Republic of Serbia, by its Resolution No. 651-126/73-02 from November, 27, 1974, approved of EKONOMIKA's requirement to be introduced into the Press Register. The Assembly of the Society of Economists of Nis, at its session on April 24, 1990, by its statutory resolution, confirmed the legal status of EKONOMIKA. At the session of the Assembly of the Society of Economists, Nis, on November 11, 1999, the resolution was adopted the EKONOMIKA was to open its own bank account.

4. According to the Opinion of the Republic Secretariat for Culture of the Socialist Republic of Serbia No. 413-516/73-02 from July 10, 1973 and the Ministry for Science and Technology of the Republic of Serbia No. 541-03-363/94-02 from June 30, 1994, EKONOMIKA has the status of a scientific and national journal. Starting from 1995, EKONOMIKA has been having the status of international economic journal.

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## THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE GOVERNANCE<sup>4</sup>

### Abstract

*The concept that allows the balance between economic, social and environmental goals (as a concept of corporate social responsibility) represents a widely accepted business practice in the developed countries of the world. The growing demands of the business have pointed to the shortcomings of the management concepts that have been focused exclusively on profit. For these reasons, the problems, interests, and goals of the broader groups of stakeholders should be the components of a company's business and must be an integral part of corporate governance. The aim of the paper is to determine the relationship between corporate social responsibility (CSR) and corporate governance. The subject of research is the concepts of CSR and corporate governance, as well as their interconnectedness. The methodology includes an analysis of the available previous research results. The results of theoretical research indicate that there is a relation between both concepts, but that the link is not unambiguous.*

**Keywords:** corporate social responsibility, corporate governance, sustainable development

**JEL classification:** A13, M14, O16

## ПОВЕЗАНОСТ КОРПОРАТИВНЕ ДРУШТВЕНЕ ОДГОВОРНОСТИ И КОРПОРАТИВНОГ УПРАВЉАЊА

### Апстракт

*Концепт који омогућава баланс између економских, социјалних и еколошких циљева (као концепт корпоративне друштвене одговорности) представља широко прихваћену пословну праксу у развијеним земљама света. Све већи захтеви пословања указали су на недостатке досадашњих менаџмент концепта оријентисаних искључиво на профит. Управо из тих разлога проблеми, интереси и циљеви шире групе стејхолдера треба да буду компоненте пословања сваке компаније и морају бити саставни део корпоративног управљања. Циљ рада је утврђивање повезаности између корпоративне друштвене одговорности (КДО)*

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*и корпоративног управљања. Предмет истраживања су концепти КДО и корпоративног управљања, као и њихова међусобна повезаност. Методологија обухвата анализу доступних претходних истраживачких резултата. Резултати теоријског истраживања указују на постојање повезаности између сва концепта, с тим да веза није једнозначна.*

**Кључне речи:** корпоративна друштвена одговорност, корпоративно управљање, одрживи развој

## Introduction

The corporate social responsibility (CSR) is a voluntary concept that allows the balance between economic, social and environmental goals (Hopkins, 2005; Dahlsrud, 2008; Berber et al., 2018) and it is widely accepted business practice in the developed countries of the world. It is a concept that is related to the circular economy, which includes sustainable exploitation of material resources, social responsibility and more balanced development of the economy (Vukadinović & Ješić, 2019). In this sense, modern business models are based on the idea that newly created value should represent value for all parties of interest, and it should include sustainable business conduct (Miletić, 2018). The growing demands of the business environment, like increasing of the government's restrictions on social and environmental issues, the demand of consumers for organic products, and strict requirement from investors (Ha et al., 2019) pointed to the shortcomings of the management concepts that have been focused exclusively on profit (Sekulić & Pavlović, 2018). Corporate governance includes a set of relationships between a company's management, boards, shareholders and other stakeholders. For these reasons, the problems, interest, and goals of the broader groups of stakeholders (Blasi et al., 2018) should also be the components of each company's business and must be an integral part of corporate governance, not just the relations between management and investors - owners. Also, reasons why it is important to make corporate governance more responsible lie in many cases of corporate fraud, accounting scandals and other organizational problems (lawsuits, resignations or even bankruptcy) (Duh, 2017).

The aim of the paper is to determine the relationship between corporate social responsibility (CSR) and corporate governance. The subject of research is the concepts of CSR and corporate governance, as well as their interconnectedness. The methodology includes an analysis of the available previous research results. The results of theoretical research indicate that there is a connection between all concepts, with the link being not unambiguous.

The work consists of three interconnected parts. In the first part, the authors discuss the emerging views on corporate governance. The second part deals with emerging views on corporate social responsibility. The third part is made up of the investigation of the interdependence of the two concepts mentioned above. Finally, in the conclusion, the authors point out the most important findings and possibilities for future research.

## Corporate Governance

Contemporary business environment requires excellence in the field of management so that business organizations can achieve sustainable growth and development. The concept

that applies to this requirement is corporate governance (Vuković et al., 2018). Corporate governance has numerous definitions and understandings. According to Gopalsamy, corporate governance (GC) is defined as “a combination of rules, regulations, laws, and examples of good practice that enable companies to attract financial and human capital to perform jobs efficiently and, therefore, to maximize value in the longer term, while respecting the aspirations of more stakeholders including society” (Gopalsamy, 2008). It is “the system by which companies are directed and controlled” (Cadbury, 2000, p. 8). Corporate governance refers to “a way of managing and controlling by means of principles, rules, customs, policies, and regulations. It offers a system that provides efficiency of processes and operations, reliable and transparent financial reporting, compliance with policies and regulations” (Yilmaz et al., 2017, p. 34).

Definitions of corporate governance tend to fall into two categories:

- “The first set of definitions is concerned with a set of behavioral patterns - the actual behavior of corporations, in terms of such measures as performance, efficiency, growth, financial structure, and treatment of shareholders and other stakeholders.
- The second set is concerned with the normative framework - the rules under which firms are operating, with the rules coming from such sources as the legal system, the judicial system, financial markets, and factor (labor) markets” (Claessens, 2006, p. 93).

The Organization for Economic Cooperation and Development (OECD, 2015), which published its Corporate Governance Principles in 1999, defines corporate governance as “a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined” (OECD, 2015, p. 9). “Corporate governance help policymakers evaluate and improve the legal, regulatory, and institutional framework for corporate governance, with a view to supporting economic efficiency, sustainable growth, and financial stability” (OECD, 2015, p. 3).

Good corporate governance in practice has proved to be of multiple importance. At the company level, good corporate governance brings easier and more affordable access to the new capital, which in the long run leads to greater competitiveness. The application of the highest standards actively promotes a strong corporate governance practice, where individuals are needed who are willing and able to devise and implement a good corporate governance policy. These companies will appreciate and reward their employees more than their competitors who are not aware of the benefits of corporate governance. Corporate societies often attract more investors willing to provide capital at a lower cost. In general terms, well-managed societies contribute to the national economy and the community, they are able to provide greater profits, to strengthen investor confidence in the capital market (World Bank, 2010), which leads to an improvement in the accountability system, thereby reducing the risk that employees in a business are deceived or doing business for their own benefit. Respecting the standards of good corporate governance helps in improving the decision-making process, leading to more successful operations and lower capital costs (World Bank, 2010).

From the perspective of companies, corporate governance is a set of rules that regulate relationships between shareholders – owners and management. Based on the understanding

that company managers have the duty to act in the interests of shareholders, their basic role is to undertake business activities in order to increase the profits of the company and their shareholders. The question which arises is how owners can influence managers to manage their (owners) resources, not in self (managers) interests. By studying the complex nature of relations between owners and managers, the causes of the corporate governance problem are found in the separation of ownership from the management of the company (Babić & Nikolić, 2011). In this relationship, “an agency problem occurs if managers can significantly influence earnings management in order to satisfy their own respective self-interests to the detriment of their shareholders” (Osemene et al., 2018, p. 211), so “compensation for top management must provide incentives to select and implement actions that increase shareholder wealth” (Načinović-Braje & Galetić, 2019, p. 34).

Corporate governance is the structure of managing and overseeing a joint-stock company. In the widest form, this is the relationship between management and employees, or institutions that have invested in the corporation in order to make a profit. This suggests that corporate governance refers to the relationship between management and the owner. The practice of good corporate governance, which protects the interests of, first of all, minority shareholders is decisive for attracting foreign direct investment in each country. The efficiency of the work of the management in the corporation is enhanced by lifelong learning and practicing key procedures in decision making and fostering their realization, as well as control of execution (Sofronijević et al., 2013; Mihajlović, 2016, p. 5).

According to the World Bank, all definitions of corporate governance include several common elements:

- “Corporate governance is a system of relationships, defined by structures and processes.
- These relationships involve parties with different and sometimes contrasting interests.
- All parties are involved in the direction and control of the company.
- All this is done to properly distribute rights and responsibilities and thus increase long-term shareholder value” (World Bank, 2010, p. 6-8).

As it is seen from the abovementioned definitions corporate governance includes “the relationship between shareholders, creditors, and corporations; between financial markets, institutions, and corporations; and between employees and corporations” (Claessens, 2006, p. 94). This way of understanding of corporate governance points to the need of exploration of the relationships between corporate governance and other relevant areas, where corporate social responsibility is being more and more emphasized (Claessens, 2006; Jamali et al., 2008; Said et al., 2009; Jo & Harjoto, 2012; Habbash, 2016; Oh et al., 2018; Dyck et al., 2019).

The following part of the text is related to the explanation of the corporate social responsibility concept. After that, the authors explored the relationship between both concepts and made several conclusions and recommendations for future research.

## The Concept of Corporate Social Responsibility

The increasing intensity of business changes is a reflection of today's modern business. Contemporary business challenges related to the growing competition, increasing customer and consumer demands, the introduction of new technologies, globalization, etc. Consumer awareness of environmental protection and socially responsible behavior has resulted in numerous actions by consumers and non-governmental organizations, which have forced many companies, and above all multinational companies, to take responsibility and engage in these initiatives (Nuševa, 2018, p. 259). This is specific for green tourism, which requires activities like “production of ecologically safe, recyclable and biodegradable products, using energy-efficient operations with minimal or no pollution, efficient waste management, conserving cultural and natural assets” (Gavrilović & Maksimović, 2018, p. 40-41). Since there are present new and changing business conditions, it is important to implement new business models that will enable companies to achieve sustainable development and competitiveness. One of the possibilities is certainly the concept of corporate social responsibility.

The quality of a community has often been the subject of philanthropic activity of individuals, owners, and managers of a company, and, as a kind of responsible behavior towards the community, it was separated from business (Kotler & Lee, 2009). Bowen made one of the first definitions of corporate social responsibility, where he stated that CSR the obligation of business people to seek those business policies, and make those decisions, or to follow those areas of action that are desirable in terms of the goals and values of the society (Bowen, 1953).

Carroll follows the evolution of a corporate social responsibility construct that began in the 1950s, which marks the modern era of CSR. These alternative topics include corporate social performance (CSP), stakeholder theory, and business ethics theory. During the 1990s, CSP continues to serve as a basic construct but continues to turn into alternative thematic frameworks (Carroll, 1999). Dahlsrud found that “socially responsible business concerns the responsibility of the organization and the undertaking of measures within the organization, which exceed its legal obligations and economic goals. These broader responsibilities encompass a range of issues, but are usually summarized as social and environmental concerns – social relations extend to society as a whole, and not just to social issues” (Dahlsrud, 2008). In his work, Dahlsrud (2008) pointed to the 37 definitions of CSR, which means that there are many views and understanding of this phenomenon.

Social responsibility implies that the company independently and voluntarily engages in activities that will contribute to the development and maintenance of the environment, since the concept of sustainable development is based on interrelations, interdependence, and complementarity of development policy and protection of environment along with obeying of ecological principles (Aničić et al., 2019). Thanks to the CSR, the company assesses the impact of its decisions on the natural, social, legal and economic environment in which it operates (Boljević et al., 2015, p. 117). “Corporate social responsibility is the business philosophy and the standard business within the legal framework of modern Western economies. The main goal of CSR is to introduce an interesting relationship between the previously mentioned primary interest to make a profit, scarcity of natural resources and growing demands for labor and frequent occurrences of exploitation” (Čibukčić, 2017, p. 176).

Garriga and Melé tried to clarify the “mapping area” situation by classifying the main CSR theories and related approaches in four groups: (1) instrumental theories - in which the company is viewed as the only instrument for wealth creation and social activity are means to achieve economic results; (2) political theories - dealing with the strength of companies in the society and the responsible use of this power in the political sphere; (3) integrative theories - in which the company focuses on meeting social demands; and (4) ethical theories - based on the ethical responsibilities of companies in society. In practice, every CSR theory represents four dimensions related to profit, political performance, social demands, and ethical values. The authors emphasized the need to develop a new theory of business and social relations that will integrate these four dimensions (Garriga and Melé, 2004).

To summarize, CSR comprises economic performance, social accountability and environmental management (Dahlsrud, 2008) and it consists of four kinds of responsibilities: economic, legal, ethical, and philanthropy (Carroll, 1999; Berber et al., 2014, Berber et al., 2018). Based on the aforementioned concepts, GC and CSR, the authors decided to explore the relationship between them.

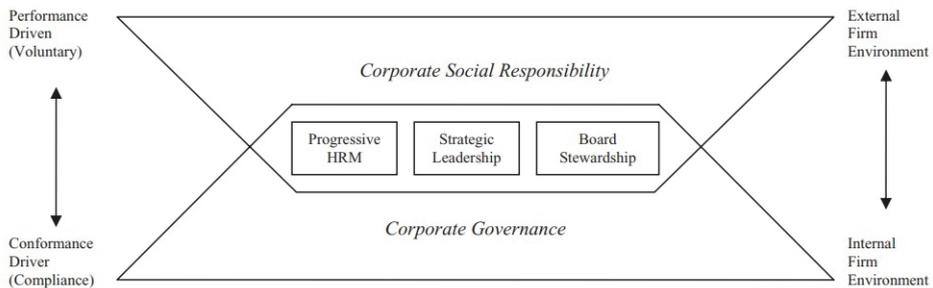
### **The Relationship Between CG and CSR**

Companies increasingly accept the concept of CSR for gaining market reputation, better relations with stakeholders, handling public pressure and long-term strategic interests (Porter & Kramer, 2002). In Porter and Kramer's views on CSR's strategic approach, one can find the arguments that the relationship between CSR activities of companies and society is considered as natural. In explaining critical and strategic natural interdependence, the authors explained that the company must integrate the social perspective into the basic business framework in order to gain greater benefit by a better understanding of competition and the adequate definition of a business strategy (Porter & Kramer, 2006).

By providing CSR, companies can direct their behavior and influence the perceptions and expectations of stakeholders (Haniffa & Hudaib, 2006; Jamali et al., 2008; Michelon & Parbonetti, 2012). Corporate governance drives managers to set goals that relate to CSR (Jamali et al., 2008), while stakeholder theory links corporate governance and corporate social responsibility, suggesting that both should strive to improve stakeholder engagement and organizational legitimacy (Michelon & Parbonetti, 2012). According to Stuebs and Sun (2015) good corporate governance leads to good CSR performances.

Several types of research on this theme showed that the relationship between CG and CSR exists, and that business success is influenced by both concepts, and their interconnections. Jamali et al. (2008) proposed a model that presents the main interfaces of CG and CSR (Figure 1), where CG is a necessary “building block” for CSR. The main interfaces between CG and CSR are in strategic leadership, stewardship, and progressive human resource management. While CG is increasingly conformance or compliance-driven, CSR falls on the other hand in the realm of voluntary social performance (p. 456).

Figure 1: Relationship between CG and CSR



Source: Jamali et al., 2008, p. 456.

Mentioned authors found that “a company without an efficient long-term view of leadership, effective internal control mechanisms, and a strong sense of responsibility vis-à-vis internal stakeholders cannot possibly pursue genuine CSR, while CG is not entirely effective without a sustainable CSR drive because a company has to respond to the needs of its various stakeholders in order to be profitable and create value for its shareholders/owners” (Jamali et al., 2008, p. 457).

The different research of Said et al. (2009) pointed to the results that two CG variables, government ownership, and audit committee, are associated with the extent of CSR disclosures. They explored the relationship between corporate governance characteristics (board size, board independence, duality, audit committee, ten largest shareholders, managerial ownership, foreign ownership, and government ownership) and the extent of CSR disclosure (as a dependent variable). Government ownership and audit committee are positively correlated with the level of CSR disclosure.

Jo and Harjoto (2012) explored a sample of firms with CSR engagement in the United States during the 1993–2004 period and found that CSR can be understood as a missing link between CG and firm performance since there is a conflict of interest between stakeholders and shareholders. CSR is acting as a conflict-resolution device between stakeholders and shareholders (p. 65).

Chan et al. (2014) explored the 2004 annual report data for 222 listed Australian companies. They found that CSR disclosure is positively associated with good corporate governance. Organizations which provide more CSR information have better corporate governance ratings, those are larger organizations, they belong to higher-profile industries, and they are more highly leveraged (p. 59).

Ferrero-Ferrero et al. (2015) explored the mediating role of CSR in the relationship between board diversity and CSR performance. The sample was made of 146 companies listed in FTSE 100, DAX 30, and CAC 40 in 2009. The results showed that generational diversity enables a more effective design of vision and strategies to address financial and extra-financial aspects, and consequently, it encourages companies to adopt a sustainable approach to their businesses. This study concludes that generational diversity is a key component for improving good corporate governance codes.

Rodriguez-Fernandez (2016) found that companies registered on the Madrid Stock Exchange demonstrate positive relationships between CSR and financial performances. Social policies increment financial resources, and increased financial performances lead to greater

social benefits. Therefore, board members should invest financial resources in developing policies that boost the levels of social behavior components in order to contribute globally to the improvement of society. Similarly, Wang and Sarkis (2017) found that companies that implemented CSR governance successfully generated good CSR outcomes and had better financial performances. CSR outcomes are found to be a mediator between CSR governance and financial performance.

Ali et al. (2017) explored the determinants of the CSR. They found that company size, industry sector, profitability, political, social, and cultural factors, and corporate governance mechanisms determine the CSR. In developed countries factors that determined the CSR disclosure were concerns of regulators, shareholders, creditors, investors, environmentalists, and the media. In developing countries, CSR reporting is more heavily influenced by the external forces such as international buyers, foreign investors, international media and international regulatory bodies (Ali et al., 2017, p. 273).

In their research in Lebanon, authors El Gammal et al. (2018) found that ethical practices fully mediate the relationship between corporate governance and corporate social responsibility towards stakeholders, customers, and employees. Gangi et al (2019) explored the sample of 142 banks from 35 countries in the period from 2011 to 2015 to investigate the relationship between CSR and banking risks. They found the positive impact of effective corporate governance mechanisms on banks' environmental engagement and that banks that are more sensitive to environmental issues also have less risk.

Based on the aforementioned research results it can be concluded that corporate governance and corporate social responsibility have positive relations, but that those relations are usually moderated by different organizational or external factors. Therefore, the relationship between the two concepts is very sensitive to the changes in the internal and external environment of the organizations.

## Conclusion

Companies should not only create profits, but they should also act as subjects that enhance sustainable development and responsible behavior. Corporate practice needs to set the goals for sustainable development and respond to the needs of all stakeholders. Therefore, in order to create a competitive advantage, companies need to focus on productive roles in the global economy and become increasingly involved in the sphere of social responsibility, which creates long-term sustainability, meeting the needs of all suppliers, investors, and employees (Tai & Chuang, 2014), and other stakeholders.

The aim of this paper was to determine the relation between CSR and corporate governance. Conclusions drawn from the previous analysis and discussion can be confirmed by the prevailing theoretical attitudes, as advocated by the famous theory of stakeholders, which emphasizes that the better the company builds and manages relations with the essential factors of the environment, it will be more successful over time (Barnett & Salomon, 2012). Corporate governance is gaining in importance since it makes a significant contribution to increasing economic efficiency and market economy. Also, the nature of the CSR concept has been explained and the authors of this paper presented the main elements and issues of the concept. Namely, the practice and scope of CSR activities are based exclusively on cost-benefit analysis, that takes into account, on the one hand, invested capital (investments

- disclaimer from current consumption for higher results in the future), while on the other hand, and especially the “invisible” and long-term benefits that an organization derives from the investment and implemented activities. It can be concluded that corporate governance and CSR have positive relations, but that those relations are usually moderated by different organizational or external factors. Therefore, the relationship between the two concepts is very sensitive to the changes in the internal and external environment of the organizations.

Regarding future research possibilities, this theoretical research and investigation of the previous results of the authors all around the world make the first step in generating the methodological frame for the investigation of the CSR and corporate governance and its relationship in the domestic economy.

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## THE ANALYSIS OF BUSINESS CONDITIONS IN WESTERN BALKAN COUNTRIES

### Abstract

*The paper analyses business conditions in Western Balkan countries (Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro) and Croatia as an EU member in the period 2006-2018, based on three indicators of Doing Business: a) Country ranking b) Ranking change and c) Distance to frontier measure. The obtained results showed that during the observed period Western Balkan countries significantly, but still insufficiently improved creation of favourable conditions for business activities. By comparing the three indicators above for the Western Balkan countries and Croatia it was found that the EU membership did not automatically mean the presence of more favourable conditions in comparison to those present in the non-member countries of this regional economic integration.*

**Key words:** *ease of doing business, Western Balkan countries, Croatia, ranking, ranking change*

**JEL classification:** . M21, K20, K40

## АНАЛИЗА УСЛОВА ПОСЛОВАЊА У ЗЕМЉАМА ЗАПАДНОГ БАЛКАНА

### Апстракт

*У раду су сагледавани услови пословања земаља Западног Балкана (Албанија, БиХ, Македонија, Србија, Црна Гора) и Хрватске као чланице Европске уније у периоду 2006-2018. на основу три показатеља Лакоће пословања (Доинг Бусинес): а) ранга земаља, б) промене ранга и ц) процене удаљености појединих привреда од најбољих показатеља, тј. мере растојања од границе (Дистанце то фронтлиер меасуре). Добијени резултати су показали да су земље Западног Балкана у посматраном периоду у целини, значајно али још увек недовољно, напредовале у погледу стварања повољних услова за пословање предузећа. Упоредивањем претходно поменути три показатеља за земље Западног Балкана и Хрватске, дошло се до*

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*закључка да чланство у ЕУ не значи аутоматски постојање повољнијих услова пословања од оних који постоје у земљама које нису чланице ове регионалне економске интеграције.*

**Кључне речи:** *лакоћа пословања, земље Западног Балкана, Хрватска, ранг, промена ранга*

## Introduction

The most significant mission of a country related to business is realised in the creation of best conditions for business activities (Cavusgil, Ghauri & Akcal, 2012; Prokopović, Jelić & Veličković, 2017). One of numerous aims that should be realised within the support to business is the decrease of administrative obstacles to business (Pokrajac, 2010, 257; Radukić & Stanković, 2015).

The follow-up of comparative conditions and degree of ease of doing business for which the state is significantly responsible is done with the help of many indicators. The data of Global Entrepreneurship Monitor (GEM) and Doing-Business Index, World Bank Group (GEM 2017/2018 Global Report, n.d.; Doing Business-Measuring Business Regulations-World Bank Group, n.d.) are especially pronounced for their significance.

For fifteen years now World Bank has conducted the research in business ambience in all countries worldwide where the simplicity and ease of doing business is examined in a comparable way. Precisely, ease of doing business identifies how easy it is for a local entrepreneur to start small or medium enterprise according to current legal regulations in a country. Each year, this research spreads over new countries and territories.

Methodology of Doing Business does not include all business domains. The domains that are significant for business such as proximity of large markets, quality of infrastructure services (except those related to foreign exchange and getting electricity), safety of property against robbery and theft, transparency of public procurement, macroeconomic conditions or strength of fundamental institutions are not the subject of direct research by Ease of Doing Business. The indicators refer to local enterprises with limited responsibility that are doing business in largest business cities. Bearing in mind the fact that standard assumptions in data obtaining were used, the comparisons and parameters are valid in all economies. Even more, the data do not only reveal difficulties in doing business, but are also in the function of recognition of the origins of difficulties, thus supporting the creators of policies in design of necessary reforms.

The subject of the paper is the analysis of indicators of Ease of Doing Business in five Western Balkan countries based on the data of Doing Business Index in the period 2006-2018. Bearing in mind official commitment of all these countries to become EU members in reasonable period, the question whether the membership is *per definitum* provided by high ranking of Easy Doing Business is reasonably imposed (Despotović, Cvetanović & Nedić, 2014). This is also the issue of research in this paper. In order to achieve an acceptable answer, besides the Western Balkan countries the paper includes Croatia in all analysed parameters of Easy Doing Business Index. We consider this approach acceptable due to the fact that Croatia became EU member in 2013, and is also a country that once was a part of former country together with four Western Balkan Countries that share the same state border now (Bosnia and Herzegovina, Serbia and Montenegro). The answer will be reached by analysing:

a) Country ranking of Easy Doing Business; b) Ranking change and c) Distance to frontier measure (Doing Business, 2017).

Besides introduction, conclusion and literature, the paper includes three sections. The first section is related to the analysis of rankings of Ease of Doing Business in the countries of Western Balkans and Croatia as a control country based on Doing Business data in the period 2006-2018. The second section considers the changes of rankings of the analysed countries in the period 2006-2018, while the third considers the indicators of Distance to frontier measure for those countries.

## Rankings of Western Balkan Countries by Ease of Doing Business Index

Ease of Doing Business provides total ranking of business conditions by indicators that define measures and standard regulations during life cycle of domestic small and medium enterprises. The countries are ranked from 1 to 190 by Ease of Doing Index, whereby 1 is the highest-ranking (best business conditions) and 190 is the lowest ranking. The Index is calculated as the average for each economy in the Table 1 in the following domains:

*Table 1: 11 domains of business environment*

<b>Indicator</b>	<b>What is measured by the indicator</b>
<b>1. Starting Business</b>	<i>Procedure, time, expenses and minimum initial capital for foundation of society with limited responsibility</i>
<b>2. Dealing with Construction Permits</b>	<i>Procedure, time, and expenses for completion of all formalities for obtaining construction permit</i>
<b>3. Getting electricity</b>	<i>Procedure, time, and expenses for connection of the building to electricity network, reliability of power supply and electricity expenses</i>
<b>4. Registering Property</b>	<i>Procedure, time, and expenses for transfer of property and quality of cadastre administration</i>
<b>5. Getting Credit</b>	<i>System of credit information on crediting and Mortgage Law</i>
<b>6. Protecting Minority Investors</b>	<i>The rights of minority owners in transactions with connected legal entities and rights in corporate management</i>
<b>7. Paying Taxes</b>	<i>Payments, time and total tax rate for the enterprise in order to fulfil all tax duties</i>
<b>8. Trading Across Borders</b>	<i>Time and expenses of export of the product with comparative advantage</i>
<b>9. Enforcing Contracts</b>	<i>Time and expenses for solving commercial dispute and quality of court proceedings</i>
<b>10. Resolving Insolvency</b>	<i>Time, expenses, outcome and rate of return of assets in resolving insolvency and quality of legal bankruptcy framework</i>
<b>11. Labour Market Regulation</b>	<i>Flexibility of employment regulations and quality of work positions</i>

*Source: <http://www.doingbusiness.org/>*

The ranking of Ease of Doing Business does not measure all aspects of business environment that are significant for enterprises and investors or that influence the competitiveness of economy. However, high ranking means that the government has created favourable regulatory environment for the work of economy subjects.

The rankings of countries can be greatly beneficial to creators of economic policies (Cavusgil, Ghauri & Akcal, 2012). In addition, it is useful to know the indicators that are comparable to other economies in relation to regional average. Table 2 shows the data on global ranking by Doing Business Index of Western Balkan Countries in the period 2006-2018.

Table 2. Doing Business – global rank (2006-2018.)

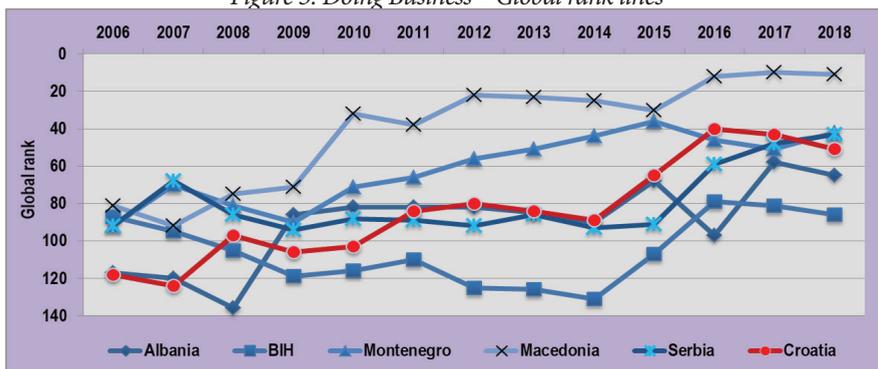
Country	Albania	BIH	Serbia	Montenegro	Macedonia	Croatia
Year/from total						
2006/155	117	87	92	92	81	118
2007/175	120	95	68	70	92	124
2008/178	136	105	86	81	75	97
2009/181	86	119	94	90	71	106
2010/183	82	116	88	71	32	103
2011/183	82	110	89	66	38	84
2012/183	82	125	92	56	22	80
2013/185	85	126	86	51	23	84
2014/189	90	131	93	44	25	89
2015/189	68	107	91	36	30	65
2016/189	97	79	59	46	12	40
2017/190	58	81	48	51	10	43
2018/190	65	86	43	42	11	51

2006 – the State Union of Serbia and Montenegro

Source: <http://www.doingbusiness.org/>

The movement of rankings in the overall observed period (2006-2018) points to undoubted improvement of Western Balkan countries related to relative performances of Ease of Doing Business. All the analysed countries are significantly better positioned on the global list of Ease of Doing Business in 2018 in comparison to 2006. Macedonia made the most pronounced positive jump and improved from 81<sup>st</sup> position in 2006 to 11<sup>th</sup> position in 2018 (even 10<sup>th</sup> position in 2017). The improvement of position was recorded for Serbia (from 92<sup>nd</sup> to 43<sup>rd</sup> position), Montenegro (from 92<sup>nd</sup> to 42<sup>nd</sup> position), Bosnia and Herzegovina (from 87<sup>th</sup> to 86<sup>th</sup> position) and Albania (from 117<sup>th</sup> to 65<sup>th</sup> position).

Figure 3. Doing Business – Global rank lines



Source: <http://www.doingbusiness.org/>

Not only that total rank of Ease of Doing Business speaks a lot, but also the changes in ranking are very significant. Annual variations in ranking can show certain changes related to regulations, but they are mostly relative. Economic ranking can vary even due to improvement or decline of other economies. Some economies that conducted regulation reforms might stagnate (even fall) in case other outpace them, since their business regulation reforms produced more significant effect as measured by Ease of Doing Business.

### Distance to frontier measure

Annual variations in total ranking do not completely reflect the change of business environment or how the change in certain areas occurred. The estimation of distance of certain economies by best indicators and practice in the period after 2005 for specific domain of Ease of Doing Business, except getting electricity, can be followed by Distance to Frontier Measure (DTF). DTF illustrates the distance of economy from the “frontier” of value (complete fulfilment of demands) as well as changes in time. It shows to which degree the economy managed to close the gap until complete fulfilment of demands. Frontier value is defined as a result that originates from the most efficient world practice or best results achieved in specific parameters of indicators within DB in relation to all observed economies.

Table 3 shows data in changes of DTF for Western Balkan countries and Croatia in the period 2006-2018

Table 3. *Doing Business – Distance to Frontier (DTF)*

Country	Albania	BIH	Serbia	Montenegro	Macedonia	W. Balkan	Croatia
Year/from total							
2006/155	50.2	49.9	51.1		54.3	51.8	
2007/175	50.8	50.5	54.3	58.8	56.5	55.0	
2008/178	51.4	50.9	55.2	59.1	58.1	55.8	
2009/181	61.7	52.7	55.9	61.9	61.0	57.9	
2010/183	62.17	52.04	58.33	60.69	63.3	58.6	61.4
2011/183	62.34	53.24	59.05	61.66	63.66	59.4	61.82
2012/183	58.67	54.66	59.73	63.14	66.87	61.1	63.0
2013/185	58.9	55.17	60.63	65.34	70.15	62.8	62.7
2014/189	59.37	56.09	60.64	67.38	74.21	64.6	65.6
2015/189	66.77	63.36	65.25	71.05	79.69	69.8	71.7
2016/189	60.5	63.71	68.41	71.85	80.18	71.0	71.4
2017/190	67.74	63.87	72.87	71.54	81.39	72.4	71.65
2018/190	68.7	64.2	73.13	73.18	81.18	72.9	71.7
2006 – the State Union of Serbia and Montenegro							

Source: <http://www.doingbusiness.org/>

It can be noticed that Montenegro had better while Serbia had worse result than the WB average in the longer part of the observed period. In the first year after its independence, Montenegro achieved significant advantage, which it held for longer period and which is better than WB average. It was in 2016 that these two economies (Serbia and Montenegro)

became equal again (in 2018 Montenegro took 42<sup>nd</sup> and Serbia 43<sup>rd</sup> positions). In 2018, besides Macedonia as a leader in the group, Serbia and Montenegro achieved better results in comparison to Croatia, despite its membership in EU.

### Conclusion

In the period 2006-2017, Western Balkan countries significantly, but still insufficiently improved in creation of better conditions for business activities. By comparing three Doing Business indicators a) country ranking, b) change of rank and c) change of Distance to frontier measure it can be concluded that the EU membership need not necessarily mean the presence of more favourable conditions in comparison to those that exist in non-member countries of this regional economic integration. All the observed Western Balkan countries have more favourable dynamics of Doing Business Index in comparison to Croatia which is an EU member. Macedonia achieved considerably strong growth as an indisputable leader of the region in this domain. Globally speaking, Macedonia entered the most successful fifth of the world countries in 2017 by the indicators of Ease of Doing Business; this could be a precious indicator to other Western Balkan countries, which also made an indisputable progress in the analysed period. However, we have to mention that the weaker dynamics of Croatia in this domain was also a result of its duty to harmonize the reforms of business ambience with other EU members. Therefore, although it looks absurd, the bearers of economic policy of Western Balkan countries have the potential of larger manoeuvring space for doing reforms in business ambience at pre-membership stage; Macedonia is an example that encourages more dynamic approach to the process of achieving conditions of Ease of Doing Business in global leaders.

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## MARKETING CONCEPT INSURANCE COMPANIES<sup>4</sup>

### Abstract

*The aim of the research in this paper is the process of selling insurance services, as the most important business area of every insurance company. This process is viewed from the marketing and distribution angle in classic insurance sales through traditional sales channels.*

*The insured must be at the center of all future insurance activities of the insurance company. Satisfying the needs of the insured is a basic precondition for the successful sale of insurance services, so for every insurance company it is necessary to implement this in its strategy through business policy and business culture.*

*The insurance service can be distributed by different sales channels. It is important that these sales channels ensure the availability of the insurance service at the right time, in the right place and in the appropriate quantities.*

*The paper deals with classical marketing and traditional distribution channels in the function of insurance sales.*

**Key words:** *insurance, sale of insurance services, classical marketing, traditional distribution channels.*

**JEL classification:** *G22, G23, M31*

## МАРКЕТИНГ КОНЦЕПТ У ДРУШТВИМА ЗА ОСИГУРАЊЕ

### Апстракт

*Циљ истраживања у овом раду је процес продаје услуга осигурања, као најважнија област пословања сваког друштва за осигурање. Овај процес је сагледан из угла маркетинга и дистрибуције у класичној продаји осигурања кроз традиционалне канале продаје.*

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*Осигураник мора бити у средишту свих будућих активности друштва за осигурање. Задовољење потреба осигураника је основни предуслов за успешну продају услуга осигурања, па је за свако друштво за осигурање неопходно да ово имплементира у своју стратегију кроз пословну политику и пословну културу.*

*Услуга осигурања може се дистрибуирати различитим продајним каналима. Битно је да ти продајни канали осигуравају расположивост услуге осигурања у право време, на правом месту и у одговарајућим количинама.*

*Кључне речи: осигурање, продаја услуга осигурања, класични маркетинг, традиционални канали дистрибуције.*

## Introduction

In the underdeveloped financial market, such as the Serbian one, in the previous period there was noticeable absence of serious competition and limited choice of financial services on the market. In such an environment, the development of a new financial market, first banking and securities markets, and then insurance, which, after tightening the criteria for business for insurance companies, has entered a new phase of development since 2004, the main feature of which was the strengthening competitiveness and the struggle to attract clients.

From that moment on, insurance marketing gets the significance it did not have before, and even though not all insurance companies operating on the Serbian market had the same importance, it is obvious that the relationship of almost all companies towards this important function of insurance is obvious. With the intensification of competitive relations between societies, it is logical to conclude that the importance of insurance marketing will grow in time.

Marketing is a discipline that deals with market issues, market needs and how to meet those needs. Marketing, as a business philosophy of intensive production, places at the center of its interest the analysis and consideration of all problems related to the turnover and sale of goods from producers to consumers. (Simonović et al, 2012, p. 102-109)

It can be freely stated that sales are one of the basic and at the same time the most important marketing functions in every insurance company. The implementation of this function is in the greatest direct correlation with the overall success of the entire insurance company. In order for a company to be able to successfully sell insurance services, the sales function must be treated as part of integral marketing. This means that it is necessary to plan and generate such insurance services that will, by their quality, price, availability and competitive advantage, meet the needs of potential customers of insurance services, or future insurers

The insurance company must be well aware of its target insurance market, perform the necessary research (such as market segmentation) on a regular basis, then analyze all chances and threats in its environment related to policy, legal solutions, competition activities and the like, then good examine their own strengths and weaknesses in terms of organization, personnel competence, capital adequacy, their own image in public and the like, and on that

basis direct sales potentials to those market segments and sales channels that will be the most optimal for the company and give the best results. (Piljan et al, 2017, p.78)

### **Satisfaction of the insured in the function of sale**

The condition and indicator of successful business of a modern organization is ensuring the satisfaction of all users who influence the achievement of its goals. The fact is that most Serbian insurance companies today are not sufficiently competitive in the global market. (Militeić et al, 2019, p. 289-304)

- In order for the insured to be satisfied with the insurance service, and the insurance company has successfully achieved the sales function, it is necessary to take into account the following factors:
- The quality of the insurance service, which implies the relationship of the company towards the insured before the conclusion of the insurance contract, for the duration and after the expiration of the contract. The insurance premium quality, including the consideration of market needs and opportunities, and the activities of competing insurance companies,
- Adequate selection of sales channels so that the insurance company always gets the most optimal sales effects for each insurance service individually,
- Promotional mix, and motivation of staff, who should dispose of appropriate knowledge and skills.
- The speed and the correct attitude of the insurance company towards the insured in case of compensation for damage or payment of the insured sum is the most important factor in creating the trust, safety and satisfaction of the insured, which in the end leads to the creation of loyalty of the insured towards the company and better sales results, and ultimately to the formation of a stable risk portfolio as the ultimate goal of every insurance company, which ultimately leads to the creation of a profit for society.

### **Insurance market**

The market can be defined differently. One of the definitions could be that the market is the place where the sale of products and services takes place. The market can also be considered a relationship of supply and demand for a particular product or service.

For the insurance services market, it would be the most appropriate definition that it represents the ratio of the demand of individuals and companies that have the need to contract - by purchasing certain insurance services, or they are legally required, and with this need have adequate payment capacity, the desire to meet this need, and authorization for contracting or purchasing insurance services. All four of these factors are important for defining the demand market (need, payment capacity, desire and authority), and the absence of any of these factors negates the existence of the insurance market in the full sense. (Njegomir, 2011, p. 73-84)

In order for the insurance market to function on it, both contracting parties must actively participate: both insurance service providers and providers of such services - insurance companies.

The potential market for insurance services is the sum of all existing insurers and those who for the first time conclude or intend to renew the insurance contract with existing insurance companies, as well as those groups of individuals and legal entities that have all the preconditions for becoming insured.

In order to obtain data on the potentials of the insurance market it is necessary to answer the following key issues:

- Who does the market?
- What is being bought on the market, or what insurance services?
- Why do insurers purchase certain insurance services?
- Which categories of clients most often buy certain insurance services?
- How is insurance purchased, or through which sales channels is taking place?
- When do insurers buy insurance, or at what time intervals?
- Where are they most often buying, or in what places?

We consider the target market for insurance services as individuals and groups to whom the insurance company can offer insurance services in a particular area. When registering and selecting the insurance services to be dealt with, insurance companies define their potential market, or their target market. If the insurance company is registered for life insurance, then the target market of such a company is different from the target market of the company registered for non-life insurance.

A company registered for carrying out reinsurance activities knows that the target market for its services is related to insurance companies, which transfer part of the risk taken into reinsurance.

It is important to note that insurance companies have the same customers of various insurance services that appear in different properties. Namely, although persons, property and liability can be secured, insurance contractors are living people who once appear as car insured, for the second time as insured persons, for the third time as insured persons, ie insured persons in the insurance of a person, and the like.

It can be said that the insurance market allows mass access only to certain assemblies and types of insurance. These assemblies and types of insurance relate mainly to insurance whose obligation is prescribed by law, but also to traditionally accepted insurance, which are so standardized today that they can be offered on the global market.

For all other insurance services, it is necessary to have a differentiated market access. In practice, especially with voluntary property and even more in life insurance, there are customers with different needs, desires and interests. They respond to such requests by the insurance company with an increased range of different insurance services. Customers of these services appear constantly with new demands that insurance companies must satisfy with new and better quality services. In order to achieve a better market approach, it is necessary to conduct market segmentation in order to satisfy the needs of the insured as high as possible, and thus increase the sale of insurance services.

### **Distortion of insurance services and sales channels**

The sale of insurance consists of all those activities and activities that this service offers to potential insured persons, at the time and place that suits them best.

The insurance service can be sold in different ways, or it can be distributed to potential insurers in several ways. All the means of distribution of the insurance service could be classified into three groups:

- Sales of insurance through its own sales network of insurers,
- Sales of insurance through insurance agents, i
- Sales of insurance through insurance brokers.

Market coverage of the insurance service means the existence of a security service on the market, measured by the number of facilities through which the service is sold. There are different distribution intensities that affect the coverage of the insurance service: intensive distribution, selective distribution, and exclusive distribution.

Intensive distribution means the situation in which the insurance service is offered and sold to all distribution channels, in the whole market. It is suitable for insurance services which the insured are obliged to contract by law. When distributing these services, it is very important that sales outlets are located near potential customers or institutions that are linked to further customer activities, such as for example the test stations for the technical inspection of motor vehicles.

Selective distribution is the distribution of certain insurance services only in a specific geographic area. Such distribution refers to those services that the insurer can not offer at the moment in the whole market. The reasons for this may be: the specificity of the service, personnel failure, insufficient development of the branch network and branch offices, etc.

Exclusive distribution is used only for a particular market area. Such a case is, for example, insurance of ships, which is mainly related to coastal or river areas, or transport insurance that is concentrated on large transport nodes.

Promotion promotes and convinces potential buyers to accept a particular product or service. It is communication with individuals, with gatherings of people or with organizations, with the aim of directly or indirectly facilitating the sale of services or products. There are two demands that the promotion must answer:

- The source of the message must use characters that are familiar to the recipients of the message, and
- Characters that may have more meaning for the recipient should be avoided.

The aim of the insurance promotion is to create a knowledge of the specific insurance service, and to convince potential insurers of its quality and reliability of the insurers. The problem arises when determining the effect of the promotion, that is, the problem is how to determine the existence of a causal relationship between promotional activities and its effects.

One possible way is to interview potential insurers about the recognition of the name of the insurance companies and its services that are being promoted.

Promotion methods can be divided into: advertising, personal sales, public relations, and sales promotion.

Advertising is a paid form of informing and assuring potential insurers through mass media: radio and television, newspapers, magazines, catalogs, public transport vehicles, etc.

Advertising can be directed to a relatively large target group, but also to a small segment of the population.

The aim of the advertising can be: promotion of the characteristics of the insurance service, increasing the level of knowledge of the insurance service, information on where the service can be obtained, increasing the market share of the company. (Đokić, 2016, p. 79-93)

The ad text needs to attract attention and create interest in the reader or listener. Therefore, such an approach is called AIDA:

- Attention,
- Interest,
- Desire,
- Action.

Advertising costs are relatively low for one potential policyholder, but they can be significant in the total amount of promotion costs because advertising as a promoter is often used extensively. As a disadvantage, it is emphasized that advertising rarely provides quick feedback on advertising effects.

Personal sales is a form of personal information and assurance of potential insured persons through alternate communication. (Piljan et al, 2017, p. 148) Personal sales are limited to one or several persons as a target group, and provide immediate feedback.

In addition to word communication, communication is also used with body movements (specific movements of the head, eyes, hands, fingers, body position, etc.), and touch communication (handling, tapping, ...).

Publicity and public relations are an unpaid form of informing and assuring potential insurers through a newspaper article or other unpaid promotional material about the insurance company or its services (in journals, in newspapers, on the radio or on television).

There are various special reasons for such promotion, such as opening a new office, hiring new employees, achieving significant business results, achieving significant profit, annual awards, charity actions of the insurance company, and the like.

This kind of promotion is never completely free because certain workers have to collect material, prepare a journalistic story, and perform other activities that require certain material costs.

Sales promotion is part of a promotional mix that encourages customers to make additional purchases of an existing product or service. This is achieved through various sales campaigns, coupons, discounts, prize games, competitions and similar activities, which are intended to encourage and increase sales.

Insurance companies use different methods of promotion. The best combination of all these methods. What methods will the company use and which less depends on the most of the following criteria: available funds for promotion, characteristics of the target market, training and skills of sales staff, choice of channels of sales, and characteristics of the specific insurance service.

## **Making a decision on insurance purchase**

The insurers are consumers who make a daily decision to purchase a variety of products and services that meet their present and future needs. The speed of purchasing decisions depends on the importance of products and services, on the availability of

information about products and services, from evaluating possible alternatives, and from the expected effects after purchase.

The purchase of insurance services is, however, a completely specific purchase. It must be kept in mind to buy and sell the promise in writing, but not all insurance services are the same. Some have to buy because they are required by law, and others are purchased voluntarily according to an individual assessment of utility, so the method of making a buyer's choice is different. (Uzelac, 2011, p. 97-105)

Potential insureds come to information about insurance services in different ways. Some of them are: insurance conditions issued by the insurer, various brochures and prospectuses that are printed and distributed by the insurers at points of sale or sent to the insurer's addresses.

Insurance companies also use large posters, or mobile advertisements, such as billboards, indoor and outdoor panels, etc., then information provided by insurers through means of information, television, radio, newspapers, the Internet, etc. they are definitely the source of information intended for a wide range of potential insurers.

Information on the insurer and insurance services can also be found on the website.

Professional journals are a specific way and source of information for policyholders who want more professional and more detailed information about insurance services.

All the listed ways of informing the insured with the services of the insurer are based on the ability to understand the insurance service by the insured.

The best and the most comprehensive, but also the most expensive way to inform insurers about insurance services is to talk to the seller of this service. Such a way of informing about insurance services provides a two-way exchange of information between the representatives of the insurer and the potential insurer. In such a situation it is possible to ask questions and quickly obtain feedback, as well as clarify possible uncertainties regarding the insurance contract.

## **Channels of distribution of insurance services**

The insurance market is gradually transforming and leaving a centralized management system based primarily on institutional solutions that strongly regulate the operations of insurance companies and which are becoming an increasingly important part of Serbia's financial system. The transformation of the insurance sector is reflected in the fact that ultimately insurance companies as financial intermediaries experience significant changes in the way consumers buy insurance products. Insurance companies that are established as joint-stock companies may place their insurance services through different distribution channels, such as:

- Intermediaries as a channel of distribution of insurance services,
- Representatives as a distribution channel for insurance services,
- Agency as a channel of distribution of insurance services,
- Banking as a channel of distribution of insurance services,
- Internet as a distribution channel of insurance coverage.

This means that individual societies can use and combine different distribution channels, based on institutional solutions. In developed market economies, in addition

to the mentioned, there are also some specific distribution channels. Of all the aforementioned distribution channels, it is most analyzed and expects, from the point of view of reducing transaction costs, the leading channel of distribution will become an Internet sales channel in the near future. (Cogoljević, Piljan, 2017, p.158-178)

Insurance insurance can be viewed as a process of transmitting information. In order for communication to be understood, the common terminology and the way of communication must be harmonized. Communication starts from the source of the message, and the source can be faces, groups or organizations. The recipient of the message or audience is an individual, group or organization that decodes the previously encrypted message. In the process of decoding, signs turn into concepts, ideas or solutions.

Each communication channel has limitations in the amount of information that can be effectively transmitted. This restriction is called channel capacity. It is also important how promotion is used in relation to the characteristics of the subjects to which it is directed. This is of particular importance since it prescribes behavior, that is, the promotion and acceptance of the insurance service.

Businesses in the insurance industry do not promote only to inform, but communicate in order to facilitate and achieve a satisfactory level of information exchange, or the ultimate promotion effect is determined by the degree to which it creates a willingness to accept a service with a potential buyer or increases the frequency of purchases of potential customers. (Stojanov et al, 2015, p. 146-155)

Insurance is an important process of accepting a service. It is composed of five stages: introduction of services, interest creation, evaluation, checking of effects, and acceptance.

Acceptance of insurance offers is a very important task of promotional activity. There are five basic consequences of promotional communication: the category of need, the knowledge of the content of the policy (the mark of insurance), attitude towards the brand, the intention of buying, and the provision of purchase.

Along with this is a promotional mix. Media mass media are TV, radio, print, post office, catalogs, banners, exhibitions and the Internet.

## **Evolution of insurance services**

In order to better understand what are the factors that influence the preference of one channel of the distribution of insurance services in relation to the other, it seems useful to analyze some of the existing theoretical views on the adoption of innovations and channels of distribution of insurance services.

One of the factors that leads to the adoption of innovations in terms of introducing new channels of distribution in the insurance services market is precisely the fact of the prevalence of concrete innovation. Thus, Rogers clearly points to the fact that widespread innovation will lead to a significant change in the market of the distribution channel of insurance services, in itself (Rogers, E. 1995). However, the form of adoption of innovations will differ, for example, in the tourism and catering sector in relation to the insurance sector.

The ability to reduce transaction costs in terms of interaction between customers and insurance service providers has always been recognized as a central motive for

using websites. (Ugrinov, Stojanov, 2011, p. 37) Thus, all predictions about the so-called disintermediation process, or the disappearance of mediators in the distribution of insurance services, were usually based on a reduction in the transaction costs of electronic interaction between customers and insurance service providers. (Tepavac, 2011, p. 115-124) An example is the sale of books by electronic means or the conclusion of transactions in the sale of shares on the stock exchange.

Trust is another factor in the introduction, or adoption of, the Internet as the leading channel for the distribution of insurance services. In particular, it starts from the fact of inverse information, which means that consumers or customers of insurance products are examining the protection of privacy and information security when purchasing insurance policies via the Internet or by electronic purchase of some other products or services, for example through eBay.com. A good example is online shopping in book stores, such as amazon.com. First of all, one should bear in mind that consumers prefer a secure channel of distribution on the basis of which they will make secure payment and purchase of insurance products. (Piljan et al, 2017, p. 367-373)

Banks, insurance companies and clients have different motives for getting banking. For banks, this is a way of product diversification and a source of additional income in the form of commissions from insurance sales, while insurance companies see banking security as a way to increase their market share and total premium income, and clients see bank insurance as a way to get at a reasonable price high quality insurance and in a comfortable way.

Banking uses different distribution channels (so-called sub-channels) and various distribution models. There are three basic models used: an integrative model, a specialist model, a financial planning model.

An integrated model of distribution of insurance services is carried out through existing banking channels and with the help of bank employees, banking officers.

A specialist model distributes insurance services through product experts who are usually employed in or insured by insurance companies.

The model of financial planning is the only model that emphasizes team approach and offers every client the possibility of a complete financial planning package in order to meet the financial needs of the individual.

Each of these models has found its application in practice. It is important to note that the model must be compatible with the bank's database of clients and the strategic goals of the insurance company.

One of the key economic benefits of bank security is savings that are achieved through the efficient use of existing distribution channels of the bank itself. The fact that banks sell their products to each of their clients, while insurers do not say enough. Banks have the advantage of controlling client's financial flows. Information that banks have about their customers' purchasing habits, their economic status and money management are of great importance to insurers.

Banks have increased the conversion rate of potential sale of insurance into real sales by successfully using their customer database, using their customer reputation and existing distribution systems for successful scheduling of meetings (through their own branches, by telephone contact through the Contact Center or by mail distribution), and using sales techniques to distribute customized insurance services for the target market. (Cogoljević, Piljan, 2017, p. 158-178)

Insurance companies do not have such closeness with their clients and thus face the need to shift their focus from technology and insurance administration to the insurer itself. The current structure of the financial services industry in Europe and America is significantly different, as banks in Europe play a major role in the distribution of insurance products. The percentage of life insurance distribution to individuals across banks varies in European countries from 10% in Switzerland to as much as 70% in France, while the percentage of non-life insurance distribution covers 3-10% of the market.

The situation is not so favorable when it comes to the United States. Recent monitoring results of the Association of American Insurance Banks show that banks increase their marketing efforts, but insurance through banks continues to represent a small percentage of total banking revenue. The percentage of banks participating in some forms of general insurance lines has risen, however, earnings generated in the market of bancassurance are still not satisfactory. The report shows that the bank insurance income makes up less than 0.5% of the total income that the bank realizes in its operations.

While life insurance products continue to be the dominant insurance products with which banks participate in the market, there is an evident increase in the market for property insurance and accident insurance. Out of the total number of banks, 26% of the respondents indicated their presence in the auto insurance market and apartment insurance, while an additional 17% showed an interest in joining the market for these products. Also, more than 10% of banks surveyed are planning to distribute products for face insurance.

It is interesting to note that there are differences in costs between traditional distribution systems, but it is interesting that these distribution channels continue to function interactively. Strengthening competition in insurance markets should eliminate the system of independent agencies, which means that the lack of competition is the reason why independent agencies and a direct contracting system coexist.

The term »different services« can also explain why different distribution systems coexist. Insurance companies are used by independent agencies as a channel of distribution of insurance services, although they have far higher costs than some other distribution channels. It is reasonable to expect that more expensive distribution channels mean a loss of market share in a competitive market.

Some authors analyzed the benefits of a distribution channel from the perspective of transaction costs and found that independent agencies sell complex insurance types far more often than insurance companies themselves, while exclusive agencies use insurance companies only to sell standardized insurance products. The authors categorized these transactions on the basis of the frequency of the exchange, the complexity of contracting and the importance of some specific investments that can not be transferred to insurance users.

There are also other ways of coexisting multiple distribution channels in parallel. Reasons are found in market imperfections and differences in service quality. Market irregularities are most often caused by price regulation, slow dissemination of information, and spillage transaction costs.

Of particular interest are the results that relate to the change in consumer behavior and the reasons for the online purchase of auto-liability insurance. The results of the survey show that, regardless of the existence of some distribution channels that can be saved on the purchase of insurance services, consumers are inert with regard to accepting

the purchase of auto-liability insurance, and that they are practically more focused on purchasing policies through independent agents.

### **Factors of sales success in insurance**

Finally, when the significance of insurance marketing is summed up, the conclusion is that successful sales of insurance services depend on the following several factors:

1. Marketing strategy - goals, skills, plans, tasks, ...;
2. Knowledge of the market of insurance services - knowledge of the potential and target market, creation of market databases, market segmentation, market potential of insurance services, taking into account internal weaknesses and advantages;
3. Marketing approach and flexible attitude towards changes in the environment;
4. Quality of service - a service that fully meets the changing interests and needs of potential insurers, a wide range of coverage, clear and unambiguous insurance conditions, and the introduction of changes in existing insurance services: quality, coverage, discounts, bonuses, malays, etc. The brand of services must be a guarantee of quality, fast, fair and equitable payment of damages or insured sums, quick and correct processing of service damage, notice of expiration of insurance, small gifts to the insured, ...;
5. Respecting the insured as a partner - respecting every insured person, recognizing the needs of the insured, acting in an identical manner at all stages of the business relationship (before concluding, for the duration of the insurance, and after the expiration of the insurance contract), to respect the requirements and needs of the insured, to take into account objections and the insurer's opinion, especially treat the so-called. key insurers, be mute and help insured, keep existing insured because it is much cheaper than finding new, ...;
6. Motivation of sales personnel - good interpersonal relations, job security and secure salary, salary level, stimulation, recognition, status symbols (car, business card, ...), possibility of career advancement;
7. Sales staff training - familiarity with the target market, knowledge and assurance about the quality of insurance services, knowledge of the quality of competition services, quality attitude towards the insured, knowledge of the sales talk technique, manner of dressing and behavior with the insured;
8. Availability of services - different channels of sales, sales at places where insureds most often buy a certain service, location of sales outlets, sales in all places in a particular area, sale based on related business transactions (bank loan, insurance of leased items), sale on the basis of the principle of mutual shops;
9. Quality of service promotion - quality and correct liquidation of damages, communication culture with current and potential insured persons, reaction rate on any request of the insured, advertising, personal sales, publicity and public relations, promotion of sales;
10. Insurance services prices - current and appropriate insurance premium, competitive price, for the same price, better quality of services than competition, discounts, bonuses, flexibility in payment methods are offered;

11. Insurers' confidence and security in the insurer - personal experience in dealing with claims, other clients' experience in solving claims, the appearance and behavior of insured employees, public image of insurers, financial strength of the insurer, liquidity and solvency of insurers, tangible assets, office buildings, equipment in offices, vehicle insurers and the like.

## **Conclusion**

Considering the current level of development of insurance business in Serbia, it is quite realistic to expect a dramatic increase in the volume of operations in some future period. This will require some changes in the work of insurance companies in almost all areas, and the biggest change will require a relationship towards clients, potential insurers. This change in customer relationship will go in two ways: individualizing insurance services and adapting to their individual needs on the one hand, and mass distribution of high-standard insurance services via electronic distribution channels on the other. In both cases, the distribution of insurance plays a key role in the development of the overall activity, but also the insurance companies themselves.

For this reason, the channel of direct sales of insurance, among which the most important banking security, agents and brokers, will remain an irreplaceable distribution channel, and electronic channels will never completely replace them for individualized insurance services. On the other hand, we have electronic distribution channels, and the Internet as the most important and most promising among them, many of which are expected because they can offer large coverage and low distribution costs, although the costs of their introduction and the initial period of exploitation are significant.

The touch point of these two diametrically opposed ways of distributing insurance is CRM (Customer Relationship Management), which should allow direct sales channels to provide greater insurance coverage, and add electronic dimension to the individualization dimension in interaction with the insured. High quality and comprehensive CRM systems are not too represented in insurance companies in Serbia, primarily due to high prices and long-term implementation, but the benefits of using them are obvious and their introduction is inevitable.

We have already said that the Internet as a distribution channel for insurance has great potential, but it is not used at all by domestic insurance companies, primarily because of the economic (the number of able-bodied clients belonging to a specific segment) and technical reasons (the widespread availability of broadband Internet access), but positive changes occur year after year. For this reason, among the first three insurance companies (Generali, Dunav and Uniqa), they have enabled their clients to purchase insurance via the Internet. The sales results of these distribution channels were certainly modest, but their introduction was certainly a matter of prestige, and we can observe them partly as an investment in marketing and promotion. More recently, their example is followed by other insurance companies.

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## IMPACT BRANDING ON CONSUMER PREFERENCE TOWARDS BUYING A CERTAIN PRODUCT: COMPARATIVE ANALYSIS OF BRANDS NIKE AND ADIDAS

### Abstract

*Brands Nike and Adidas are considered competitors because both companies produce sports shoes, clothes and equipment and are leading in the global market. The subject of this work is analysis of the impact of brands on consumers' willingness to buy brands like Nike and Adidas, as well as examining the similarities and differences between the brands and their positioning in the global market. The purpose of this work is reflected in increasing the level of awareness of the importance that the companies in BiH build a strong brand as one of the prerequisites for good positioning on the market, and about the impact of the brand on consumers' inclination to purchase specific products. The specified subject and aim of this research has set up guidelines to define the main hypotheses that the citizens of the municipality of Foca believe that brand has a significant impact on them when purchasing athletic shoes, apparel and equipment, and to prefer shopping Nike better than Adidas brand. The research was conducted by a variety of techniques and methods of scientific research.*

**Keywords:** Brand, Nike, Adidas, comparative analysis, consumer, buying a particular brand

*JEL classification:* M31

## УТИЦАЈ БРЕНДИРАЊА НА СКЛОНОСТ ПОТРОШАЧА КА КУПОВИНИ ОДРЕЂЕНИХ ПРОИЗВОДА: КОМПАРАТИВНА АНАЛИЗА БРЕНДОВА НИКЕ И АДИДАС

### Апстракт

*Брендови Нике и Адидас се сматрају конкурентима јер обје компаније производе спортску обућу, одјећу, опрему и водеће су на глобалном тржишту. Предмет истраживања овог рада се односи на испитивање утицаја брендова на склоност потрошача ка куповину брендова Нике и Адидас, као и испитивање сличности и разлика између наведених брендова и њиховог позиционирања на глобалном тржишту. Циљ рада се огледа у подизању нивоа свијести предузећима у БиХ о значају изградње јаког бренда као једног од предуслова за добро позиционирање предузећа на тржишту и о утицају бренда на склоност потрошача ка куповини одређених производа. Наведени*

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*предмет и циљ истраживања су поставили смјернице за дефинисање главне хипотезе која се односи на то да грађани општине Фоџа сматрају да бренд има значајан утицај на њих приликом куповине спортске обуће, одјеће и опреме и да преферирају куповину бренда Нике у односу на бренд Адидас. Истраживање је спроведено уз различите технике и методе научног истраживања.*

**Кључне ријечи:** *Бренд, Nike, Adidas, компаративна анализа, потрошач, куповина одређеног бренда*

## Introduction

Analysis of brands like Nike and Adidas, it can be concluded that the Nike and Adidas competitive brands because it's about brands that have a common market, which is the marketplace for footwear, apparel and equipment. The primary difference between brands Nike and Adidas is considered to be the following difference: brand Nike promotes the existence of competitive spirit and the idea that whoever plays needs to win, while the brand Adidas satisfies itself by participating and game and kept saying “it does not matter to win, it's important to participate “ (Filipović V. 2008). Observing these brands during 2018 leads to the conclusion that the brand Nike stood at the 25th position among the top 100 brands in the entire world market, while the brand Adidas has taken only 50th place.

For the purposes of this research, using the appropriate samples, the survey covered is 80 subjects, citizens in the municipality of Foča (Matović V. 2018). Questionnaire forms are collected through personal interviews. Research process consists of the following activities:

- Creation of the questionnaire,
- Determining the sample that will be conducted the survey and the demographic structure of subjects,
- Interviewing a pre-set pattern of the citizens of the municipality of Foca,
- Sorting and processing the information obtained through the questionnaire,
- Interpretation of the results and
- Discussions.

Questionnaire was created for the purpose of research and consists of 3 parts:

part I - General information on the subject with which to collect data on consumers who participate in research

part II - the tendency of consumers to purchase certain products which are examines consumers' propensity to purchase specific products and examining factors that have influence on the behavior of the customers and

part III—branding's impact on consumers' propensity to purchase specific products, which examines which of the two brands that are subject to research among the citizens of Foca are preferred, as well as the reasons why.

## The results of research and discussion

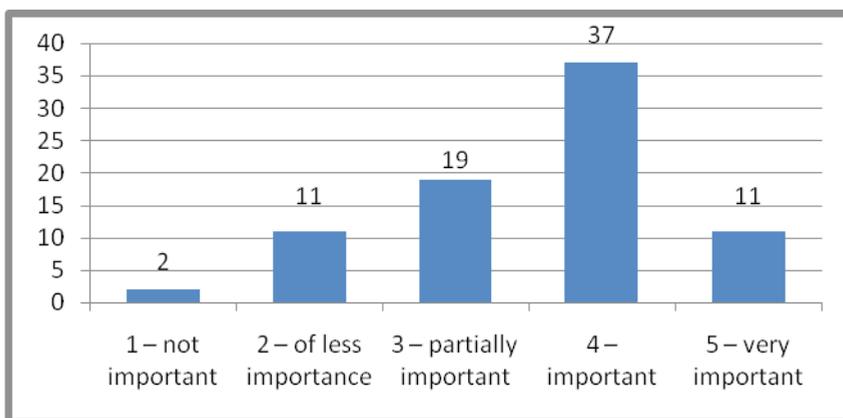
The research was conducted in order to examine the influence of branding on consumer preference towards buying brands like Nike and Adidas. Since respondents were asked to assess the importance of making a certain decision when buying clothes and shoes.

It is about the following decisions:

- -decisions on brand,
- -decisions of the seller,
- -decisions on the quantity,
- -decisions on the time of purchase and
- -decisions on the method of payment.

The first question, the significance of decision which brand to purchase, is the most important point of this research, because the main hypothesis is based on this decision. This decision has proven to be quite significant to the respondents because the average rating of importancesums up to 3.55. Numerical structure that gives an explanation on the importance of thisdecision is shown in the following chart.

Chart 1: the position of the respondents on the importance of deciding brand



Source: own questionnaire

Based on the chart above leads to the following conclusions:

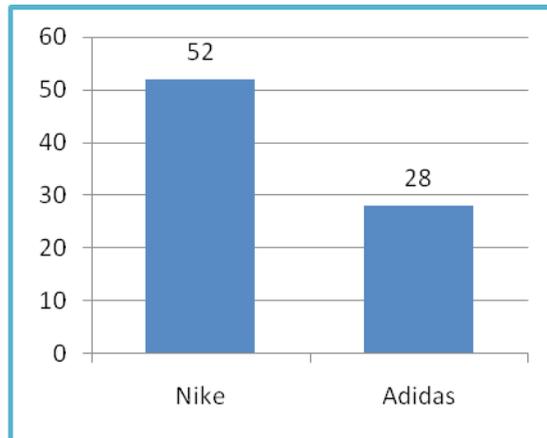
- -2% of the respondents considered that a decision on the brand does not matter,
- -14% of the respondents considered that a decision on brand is less important,
- -24% of the respondents considered that a decision on brand is partly important,
- -46% of the respondents considered that the decision on brand is important and
- -14% of the respondents considered that a decision on the brand is very important.

The survey is also intended to examine to which of the brands, Nike and Adidas, do respondents give priority to when shopping, as well as the reasons why respondents prefer one of these brands in relation to another. The results showed that respondents generally prefer brand Nike versus Adidas brand as follows:

- -52 respondents preferred the brand Nike and
- -28 respondents preferred the brand Adidas.

Above the results of the survey are presented in the chart that follows.

Chart 2: brand preference for Nike versus Adidas brand expressed in percentages



Source: own questionnaire

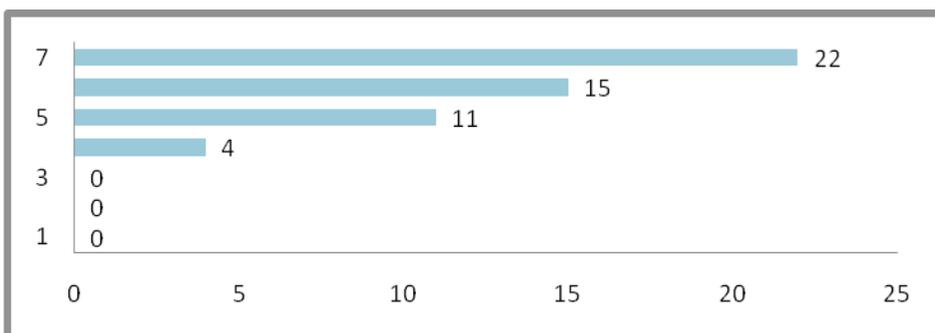
Since respondents were asked to specify the reasons for preferring a particular brand, and they are offered to the following reasons:

- -Quality of the products,
- -Having left better impression on customer
- -Better resonance,
- -Recognizable logo,
- -Easy to remember slogan,
- -Interesting packaging and design,
- -Brand color that varies in relation to competitive.

Respondents have given grades 1 to 7 for each of these reasons for preferring a particular brand, with seven being most important reason, and 1 the least important reason. First presented are the results of Nike brand.

The first reason of brand preference which has been the subject of evaluation is the quality of the products. The obtained results are shown in the chart that follows.

Chart 3: rating the quality of Nike product brand as one of the reasons for preference of this brand



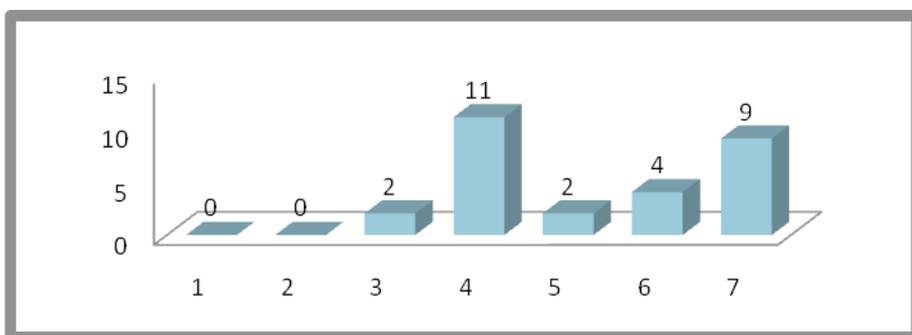
Source: own questionnaire

Data from previous graphs show the following:

- -42.31% of the respondents named the score of 7 of quality of Nike products as the decisive reason for the preference of this brand over Adidas
- -28.85% of the respondents named the score of 6 of quality of Nike products as the decisive reason for the preference of this brand over Adidas
- -21.15% of the respondents named the score of 5 of quality of Nike products as the decisive reason for the preference of this brand over Adidas
- -7.69% of the respondents named the score of 4 of quality of Nike products as the decisive reason for the preference of this brand over Adidas
- -average rating of the respondents regarding the importance of choosing the brand Nike is 6.06.

The first reason for that has been the subject of evaluation by respondents who prefer brand Adidas is the quality of the brand's products. The following results:

Chart 4: rating the quality of Adidas products as one of the reasons for this brand preference

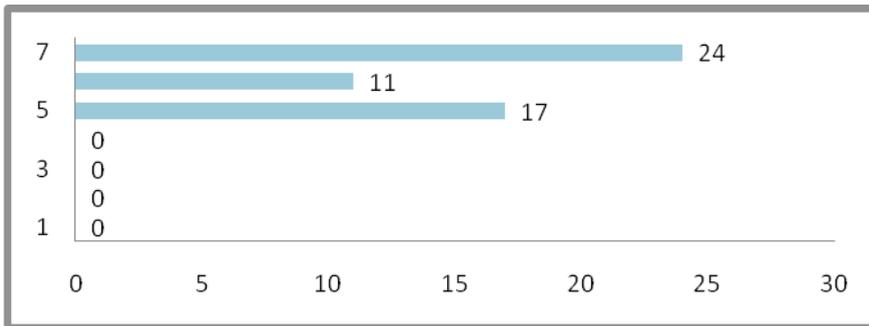


Source: own questionnaire

- -32.14 percent of the respondents considered the superior quality of Adidas products as the reason they prefer this brand and consider this of the highest importance,
- -14.29% of respondents named the score of 6 of the quality of Adidas products as one of the reasons for the tendency to purchase the products of this brand,
- -7.14% of respondents named the score of 5 of the quality of Adidas products as one of the reasons for the tendency to purchase the products of this brand,
- -39.29% of respondents named the score of 6 of the quality of Adidas products as one of the reasons for the tendency to purchase the products of this brand,
- -7.14% of respondents named the score of 6 of the quality of Adidas products as one of the reasons for the tendency to purchase the products of this brand,
- -Average grade of the importance of quality in choosing the Adidas brand is 5.25.

Another reason that has been the subject of evaluation by the respondents is the fact that Nike leaves bigger impact on a customer. The obtained results are shown in the chart that follows.

Chart 5: grading the preference of Nike products due to the better impression



Source: own elaboration

Data from previous graphs show the following:

- -46.15% of respondents graded 7 the reason to choose Nike as the brand leaves the biggest impact on them,
- -21.16% of respondents graded 6 the reason to choose Nike as the brand leaves the biggest impact on them,
- -32.69% of respondents graded 5 the reason to choose Nike as the brand leaves the biggest impact on them,
- -average grade of the importance of choosing Nike, based on the impression it leaves, is 6.13

Another questionnaire deals with the customers that prefer the brand Adidas as it leaves the greater impression on them. The results are in the following table:

Table 1: ranking of Adidas accordingly to how much impact it leaves on the customer

Reason	Grade						
	1	2	3	4	5	6	7
Leaves better impression	1	1	1	3	2	6	14

Source: own questionnaire

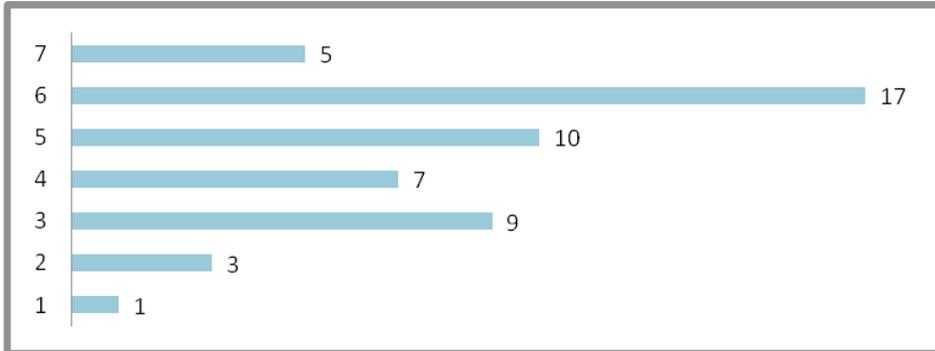
Using the data presented in table 1 leads to the following conclusions:

- -50% of respondents graded 7 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -21.44% of respondents graded 6 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -7.14% of respondents graded 5 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -10.71% of respondents graded 4 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -3.57% of respondents graded 3 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -3.57% of respondents graded 2 the reason to choose Adidas as the brand leaves the biggest impact on them,
- -3.57% of respondents graded 1 the reason to choose Adidas as the brand leaves the biggest impact on them,

- -average grade of the importance of choosing Adidas, based on the impression it leaves, is 5.79.

The third reason which has been the subject of evaluation by respondents that chose Nike over Adidas is the resonance of the brand name. The obtained results are shown in the chart below:

Chart 6: preference of Nike due to the resonance



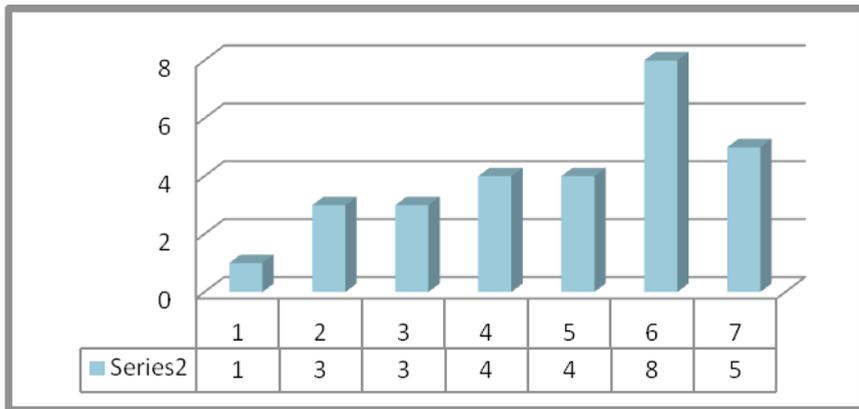
Source: own questionnaire

Data from previous graphs show the following:

- -9.61% of respondents graded 7 the better resonance of the brand name as the reason to choose Nike over Adidas
- -32.69% of respondents graded 6 the better resonance of the brand name as the reason to choose Nike over Adidas
- -19.24% of respondents graded 5 the better resonance of the brand name as the reason to choose Nike over Adidas
- -13.46% of respondents graded 4 the better resonance of the brand name as the reason to choose Nike over Adidas
- -17.31% of respondents graded 3 the better resonance of the brand name as the reason to choose Nike over Adidas
- -5.77% of respondents graded 2 the better resonance of the brand name as the reason to choose Nike over Adidas
- -1.92% of respondents graded 1 the better resonance of the brand name as the reason to choose Nike over Adidas
- -average grade of the importance of choosing Nike, based on the resonance of the brand name, is 4.79.

The third reason which has been the subject of evaluation by respondents that chose Adidas over Nike is the resonance of the brand name. The obtained results are shown in the chart below:

Chart 7: preference of Adidas due to the resonance



Source: own questionnaire

Data from previous graphs show the following:

- -17.86% of respondents graded 7 the better resonance of the brand name as the reason to choose Adidas over Nike
- -28.57% of respondents graded 6 the better resonance of the brand name as the reason to choose Adidas over Nike
- -14.29% of respondents graded 5 the better resonance of the brand name as the reason to choose Adidas over Nike
- -14.29% of respondents graded 4 the better resonance of the brand name as the reason to choose Adidas over Nike
- -10.71% of respondents graded 3 the better resonance of the brand name as the reason to choose Adidas over Nike
- -10.71% of respondents graded 2 the better resonance of the brand name as the reason to choose Adidas over Nike
- -3.57% of respondents graded 1 the better resonance of the brand name as the reason to choose Adidas over Nike
- -average grade of the importance of choosing Adidas, based on the resonance of the brand name, is 4.82.

The fourth reason which has been the subject of evaluation by respondents was if they choose a particular brand because of the recognizable logo, obtained results suggest that Adidas is, with the higher average score of 5.04, more recognizable than Nike with an average grade of 4.27.

The fifth reason which has been the subject of evaluation by respondents was if they choose a particular brand because of the easily remembered slogans, obtained results suggest that Nike has, with the higher average grade of 3.21, more recognizable slogan than Adidas with an average grade of 2.86.

The sixth reason which has been the subject of evaluation by respondents was if they choose a particular brand because of the interesting packaging and brand design, provided the result to brand Adidas, with an average score of 2.57 has a more interesting packaging and design in comparison to Nike with the average grade of 2.19.

The seventh reason which has been the subject of evaluation by the respondents was if they choose a particular brand because of the colour of the brand that is different to their competitors', the survey showed that respondents preferred Adidas to Nike, with the average grade of 1.68 compared to 1.33 in favor of Adidas.

## Conclusion

Based on the research conducted, the conclusion is that the branding has a significant influence on the customers when purchasing athletic shoes, apparel and equipment in the municipality of Foča. The decision that respondents make when choosing the brand has proven to be quite significant to them, because the average grade they gave to it was 3.55. The results showed that 2% of respondents considered that a decision on brand isn't important, 14% of the respondents considered that a decision on brand less important, 24 percent of respondents considered it partly important, 46 percent of respondents considered that the decision matters and 14% of respondents considered a decision on which brand very important. The survey showed that the citizens of the municipality of Foča prefer buying Nike products compared to Adidas ones: 52 respondents prefer Nike brand and 28 respondents preferred Adidas. In this way, the major hypothesis of research is proven: „The citizens of the municipality of Foča prefer buying Nike over Adidas products, and brand has a significant impact on them when purchasing athletic shoes, clothing and equipment”.

Respondents opt for a particular brand because it leaves a better impression on them. This testifies to the fact that the respondents who prefer Nike brand gave an average grade of importance of 6.06 to this reason, while those who prefer Adidas consider it important with an average grade of 5.79.

Respondents who prefer Adidas have graded having a powerful slogan as the reason of purchasing a product average score of 2.86, while respondents who prefer Nike brand graded it with an average score of 3.23.

Based on the facts presented, the conclusion is that managements of BiH companies must focus on strengthening the brand and on building strong brands in order to become competitive on the market. Besides from good branding, the strategy of positioning on the market and in the minds of consumers, as well as the product quality depends mostly on successful business management. The importance of research carried out is reflected in showing how much importance they give to the process of branding companies on the international market, shown on a practical example. This research highlights the importance of developing and positioning of brand if one wants to do business in the international market, and achieve good business results.

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## THE IMPORTANCE OF MANAGING INNOVATION IN MODERN ENTERPRISES<sup>3</sup>

### Abstract

*In the conditions of a dynamic business environment and a constant struggle for survival in the market, innovation becomes the basic factor of the growth and development of an enterprise. Namely, it always leads to new solutions, new ideas, and new ways of doing business. The basic competitive advantage of each modern enterprise is reflected in its ability to innovate its own business. Generally, an innovation of an enterprise results in an advantage over the competition, while the resulting competitive advantage results in an increase in profit, which is the main goal of every modern enterprise. A key precondition for the survival of each enterprise is the continuous improvement of competitiveness, that is, the investment in innovation of products and services. The aim of the paper is to point out the importance of innovations in the business of modern organizations. Innovation-based operations play a key role in fostering prosperity, creating and sustaining competitive advantage. A key aspect of an effective and efficient organization is the active participation of each organizational unit in the innovation process. Innovations are not just the responsibility of research and development, marketing and production units, but involve simultaneous engagement of all functional areas within the enterprise.*

**Keywords:** *innovation, competitiveness, innovative projects, innovation management*

**JEL classification:** *L25, O31*

## ЗНАЧАЈ УПРАВЉАЊА ИНОВАЦИЈАМА У САВРЕМЕНИМ ПРЕДУЗЕЋИМА

У условима динамичног пословног окружења и непрекидне борбе за опстанак на тржишту, иновација постаје основни фактор раста и развоја предузећа. Наиме, она увек води новим решењима, новим идејама и новим начинима пословања. Основна конкурентска предност савременог предузећа, огледа се у његовој способности да иновира сопствено пословање. Уопштено, иновација

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предузећа резултира предношћу над конкуренцијом, а тако стечена конкурентска предност доводи до повећања профита, што је главни циљ сваког модерног предузећа. Кључни предуслов сваког предузећа је стално побољшање конкурентске предности, односно стално инвестирање у иновације производа и услуга. Циљ рада је да укаже на значај иновација у пословању савремених организација. Пословни модел утемељен на иновацијама има кључну улогу у подстицању просперитета, креирању и одржавању конкурентске предности. Кључни аспект сваке ефективне и ефикасне организације јесте учествовање сваког организационог дела у процесу иновација. Иновације нису само одговорност истраживања и развоја, већ подразумевају симултано залагање свих функционалних области унутар предузећа.

***Кључне речи:** иновација, конкурентност, иновативни пројекти, иновациони менаџмент.*

## Introduction

In the contemporary business environment, alongside with the pertinent process of globalization, technological obsolescence, increased sophistication of consumers, and discontinuity, the emphasis is also placed on the turbulence in the external environment of an enterprise, where that turbulence, in some future conditions, can also be internally generated by the enterprise itself, primarily through innovations. According to the intellectual capital theory, which has been especially developed over the last two decades, the management of intellectual capital involves three phases: knowledge management, innovation management and intellectual property management (Krstić, 2014; Krstić & Rađenović, 2018). Innovation, as one of the phases of intellectual capital management, also represents a basic element of the new infrastructure necessary for prosperity in the “new economy” – the knowledge economy.

An innovative approach to the successful business of a modern organization is imposed as an imperative in global market conditions, as well as, a crucial element of entrepreneurship. Innovativeness is one of the most important factor for survival, growth, and development of enterprises and economies. Competitiveness of the economy on the global scale increasingly depends on the ability of the economies of certain countries to be the leaders in the creation and implementation of specific innovations. Innovation-based operations play a key role in creating and sustaining competitive advantage. Namely, the advantage of an organization over the existing competitors depends on the speed and agility of managing the innovation process. The key concepts for strengthening competitive advantage are based on an increase in productivity, which leads to the cost leadership, and/or differentiated supply, precisely through investments in innovations, knowledge and new technologies.

A good business idea, continuous coordination and integration, application of modern technical and technological knowledge, skills and experience represent the basis on which innovation is implemented and on which it achieves desired market effects. An appropriate innovation strategy, which is in compliance with the enterprise’s corporate goals, gives the enterprise an opportunity to decide which type of innovation it wants to develop. Current practice shows that fast innovators, who through innovations conquer

new markets, while retaining the existing ones, have an advantage. Based on a detailed evaluation of the extent and nature of change that innovation brings, enterprises can opt to develop and implement radical and/or incremental innovation. Incremental innovations are seen as small improvements that can be illustrated as solving problems where the goal itself is clear or recognizable. In contrast, the results of radical innovations are brand new products/processes, where the direction of research is known, but the outcome is unknown (Henderson & Clark, 1990).

The new state of society, often referred to as the knowledge society, rests on the possibilities and abilities to create new knowledge and transform it into economic value and wealth through innovation of products, services, and processes. In such a society, innovations become the most important source of market success and sustainable competitive advantage.

### **The Importance of Innovation for the Market Success**

In the era of fast technological advancement, where scientific and technological achievements pervade all aspects of human life, science, technological development and innovation play an important role in fostering economic development. Innovation activities are considered to be the main factor for a stable knowledge-based economy, which has become the basis for competitiveness and dynamic development. It is necessary for an economy to recognize that innovations are the only way for survival in the dynamic business environment, and that systematic innovation, which will find its place in the market, can be achieved only in cooperation with scientific organizations.

Innovations are the main driving force behind the development of enterprises, national economies, and society as a whole. They have a key role in the development of the knowledge-based economy. Innovativity implies the effective implementation of new ideas for the improvement of business, which is aligned with the needs of customers and changes in the market. In the present-day business, it is noticeable the emergence of a large number of innovations, and hence the competition becomes the decisive factor. The advantage of any organization lies its ability to innovate. Only those organizations that manage to bring their technology to the top, and stay there, will have the opportunity to develop further. The main features of modern organizations are application, flexibility, and quality of innovation.

If an enterprise wants to exist and develop, it must accept the characteristics of current economic development. It is necessary to constantly think, plan, organize, perform, control and improve the business process in order to satisfy the market needs as fully as possible, and continually develop new products or services. Modern enterprises are faced with serious challenges: the expansion of the global economy, the struggle for market share, a dramatic shortening of a product life cycle, a reduction in size, etc. In order to meet these challenges, enterprises must constantly increase productivity, improve product and service quality, develop new products and meet customer requirements and desires. Enterprises must be constantly innovative, because the imperative of modern business is the improvement of these components of the enterprise's structure and business.

## **The Role of Individuals in Innovation Management**

An organization is as successful as the respectable and prosperous individuals in it are. According to Peter Ducker (2005), nowadays modern and professional workers are not simple workforce, they are capital that is productive and creates added value for their organization. As a creative and innovative part of every organization, people have a leading role in creating and maintaining its competitive advantage. They want the opportunity to demonstrate to their management that they have the skills to take responsibility for assigned tasks and to implement them by using their creativity and ability to work in a team.

The literature on innovation consistently emphasizes the importance of the role that individuals have in the process of industrial-technological innovation (Boh et al., 2014). Some studies have addressed the issue of generating and incorporating certain elements of support for knowledge and innovation in the organizational structure. Some authors believe that the presence of various expertise, continuous development of new knowledge, as well as organizational support through available resources, constitute crucial elements for creating structures in favour of knowledge and innovation (Anand et al. 2007). Froehle et al. (2000) emphasize the importance of involving people from different functions or different professions in the innovation process, and Avlonitis et al. (2001) view multifunctional participation as an important factor in innovative processes. The reason for the inclusion of people from different functions or different professions is that they bring different knowledge and skills, thus encouraging creativity, learning, and development of knowledge that is required for innovation. This is supported by research conducted by Fay et al. (2006) who found that multidisciplinary positively influences the quality of team innovation, by creating good team processes.

It is very important to involve employees in the process of new services development. The experience acquired during interaction with users can be a valuable support in the creation of innovations, especially as it relates to the information about the services that the users find valuable. De Brentani (2001) has identified employees' involvement as one of the factors that influence the success of the outcome in the inventive process. Such a strategy should contribute to creating a synergy between the innovation and user needs. However, Ramirez (2004) claims that the involvement of employees in innovative processes in many cases leads to a breakdown in the structure of institutional authority. Because of that, the involvement of employees in innovative processes can be a challenge for the organization and specificity for management, which must be ready to give up some of its formal powers. Additionally, one of the contributions to the quality of service innovation is the participation of employees from the first line of sales through their management of processes with customers, as well as, through building friendly relationships and trust.

## **The Management of Innovative Projects**

Innovation projects increasingly represent strategic support and inevitability in the growth and development of an enterprise. Implementation of an idea is realized through an innovation process within one or more innovative projects (related to products and/

or processes). Innovation is both an innovative project and the output of the innovation process (project), thereby innovation consists of two basic elements, the generation (invention) and commercialization (exploitation) of the idea (Trott, 2005).

Nowadays there is a pronounced tendency for all innovations to be realized through projects, regardless of the area they are related to, or the size and structure of the organization. Successful management of innovation projects includes a pre-defined action plan, deadlines for implementation of tasks, so-called milestones, resource planning and etc. Organizations often encounter unexpected difficulties and problems, therefore risking the fulfilment of their goals. In order to avoid these risks, management process should be broken down into three phases: pre-project management, project development, and post-project management.

The pre-project management phase involves the selection and evaluation of the project idea and the very beginning of the project implementation. However, sometimes there is no adequate necessary information and knowledge which can lead to a poor assessment of the idea, capabilities, and capacities of an organization to realize that idea, and etc. The most effective way to avoid this risk is to develop a strategic approach to the process.

Development project management phase involves the integration of different capacities and resources. The greatest challenge in this process, especially for organizations that are still in development, is to find a competent team that can establish an appropriate approach to the management process and responds in a professional and efficient manner to the challenges of project implementation.

Post-project management phase does not relate to the development of the project itself, but to long-term sustainability and further improvement after the completion of the project. It is crucial to learn from the experience and to have good knowledge of the organization itself (Mandić et al., 2014, p. 21). Measuring the present value of innovative projects is very difficult due to uncertainty and it requires more systematic and professional efforts, and all of these indicate that a significant percentage of organizations cannot fully implement innovative projects (Keegan & Turner, 2002).

## **The Key Factors for the Success of Innovation**

Innovation becomes the fundamental factor for the viability of the enterprise and its further development in a globalized economic environment. In times of global economic crisis, investing in innovation is the best way to overcome it. The environment is volatile and future events are every day more and more uncertain and unpredictable. Therefore, the current environment is characterized by complexity, turbulence, globalization and overall complex of new features. The discontinuity of environment prompts organizations to start with large and rapid changes, changes in their view of themselves and their environment, the way of their operations in the environment, and their everyday business.

Innovation is successful if it is possible through commercialization to refund the funds invested in its development and make a certain profit. The correct combination of strategy, structure, system, staff, and environment is required for successful innovation (Afuah, 2003). Productivity, which fosters economic progress, comes down to the economic growth, and the characteristics of a society are the key factor which drives

economic growth through innovation (Castells, 2000) Innovativeness implies building effective mechanisms for the transfer of innovations in the economy and society. Also, the time span between the introduction of innovation and achievement of its full productivity is very important. However, inventions relatively slowly become practice. In order for different inventions to be introduced and spread through the entire economy, factors involved in the production process must be subjected to changes.

A significant number of factors determine the success of innovation. Innovative products and processes are key for the survival of the enterprise and its development. Organizational structure needs to be innovative, but also to enable realization and cultivation of innovation culture, as the dominant component of organizational culture. Organization and innovation culture directly determine the success of innovation, which in turn strongly influences the success of the enterprise. An organization becomes sensitive to the demands and changes in the environment, and hence it is forced to constantly innovate both products and processes. If an organization wants to be innovative, it must learn continuously. The innovatively structured organizations enable innovative activities. They are able to mobilize and support creativity and entrepreneurship, and let their managers take an active role in this process (Quinn, 1985). In highly innovative organizations staff is organized as to support innovation. In addition to the changes in the organizational behaviour and culture, innovative organization stimulates technological innovation as a prerequisite for higher technological efficiency and improved business results. All of this implies that there is a direct link between the organizational level, i.e. the degree of organization's innovative development, and the efficiency of new technology in application. Innovative organizations have multiple positive impacts that can be classified into four groups (Saren, 1990): economic factors, social and behavioural factors, information and communication factors, and organizational and management factors. Economic factors encompass the size of the company, the degree of centralization, etc. Social and behavioural factors include the organization's value system, education of employees, organizational behaviour, etc. Information and communication factors relate to the information system, as well as, to connections or communications with scientific institutions, and in general to the knowledge in the environment. Organizational and management factors incorporate a delegation of responsibilities, motivation system, mentoring, career building (Robbins, 1987).

There is no doubt that organizational culture affects the functionality and success of the enterprise. It affects strategic decisions, including the decision to innovate. Organizational culture determines the capabilities of the enterprise to adapt to the requirements of the environment. By building innovative culture, management contributes to the continuous increase in innovation and their realization. Innovative culture in the enterprise is the one that simultaneously supports the innovative and creative thinking (Krstić, 2009).

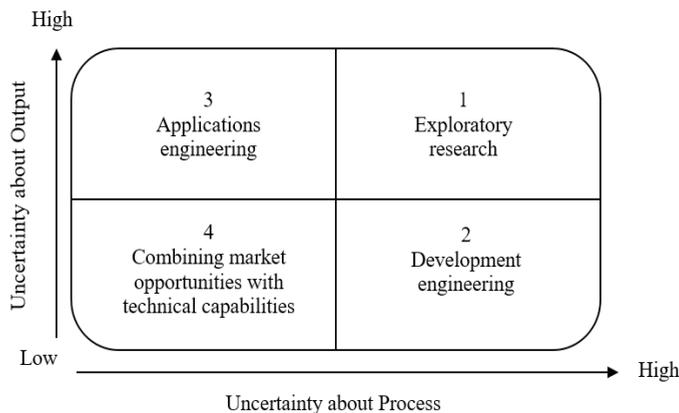
### **The Pearson's Map as an Important Part of Innovation**

The management of the innovation process implies the attempt to develop the creative potential of a certain organization. Also, it includes finding new ideas and fostering creativity. The main characteristic of managing the innovation process is

managing uncertainty. On the one hand, uncertainty comes from the future events which do not follow the course of past events, and, on the other hand, the knowledge about the future is always incomplete. Uncertainty represents “the gap between the amount of information required to execute the task and the amount of information already possessed by the organization” (Galbraith, 1977).

Pearson’s uncertainty map is a tool for analysing and understanding uncertainty and the innovation process (Pearson, 1991). Pearson matrix presents the nature of the uncertainty and the way it changes over time. Actually, the uncertainty framework was a result of a comprehensive analysis of main technological innovations, such as Sony Walkman, 3Ms Post-It-Notes and Pilkington float glass process. The map is based on the two separate dimensions (Figure 1), where the horizontal axis represents the uncertainty about the process (how to accomplish the aim), and the vertical axis represents the uncertainty about the output (what is the eventual goal of the project or activity). Additionally, these axes are split resulting in four fields.

**Figure 1. Pearson’s uncertainty map**



*Source: Pearson (1991, p. 22)*

**Quadrant 1** – involves activities with a high degree of uncertainty about the methods and results. The specifics of this quadrant lies in the fact that the final aim is not clearly defined and there is a problem with the accomplishment of this aim. It is marked as ‘blue sky’ research, because the work seems far from reality, and potential products and markets are still unknown or ‘in the clouds’. This is mostly the field of scientific organizations, which are not exposed to financial and time pressures that are present in the industry. **Quadrant 2** – implies the situation in which the ultimate target is very clearly defined, and hence the business chance may have been noticed, but the way to reach the target is still undetermined. This type of activity is common for development engineering and for enterprises which constantly revise their production process by seeking ways to reduce costs and achieve efficiency. **Quadrant 3** – relates to efforts in detecting ways technology can be used more efficiently. There exists a huge uncertainty about the outcome. This section of activity is called applications engineering. **Quadrant**

4 – implies a high level of certainty. This field is based on innovative activities which combine market possibilities with technical abilities. Therefore, the speed of product development is key to the success.

This Pearson’s map identifies and describes a wide range of organizational characteristics regarding the management of uncertainty in the context of innovation. Hence, it conveys in the very simple way an important message about the very complicated matter of managing uncertainty. Managing the innovation of products and processes is very different. Sometimes, the nature and the type of required products and market are distinctly defined. Contrarily, very little is known about the technology that is being developed and how it can be used.

## Conclusion

Contemporary market conditions are severe and do not forgive mistakes. Besides, technical and technological advances have caused a significant transformation of organizational behaviour and operations, emphasizing the importance of intellectual capital, as a precondition for successful business in a modern business environment. Thus, innovation activities have become the basis for competitiveness and dynamic development, and are considered to be the main factors for a stable knowledge-based economy.

In the conditions of globalised environment, the acquired positions of the enterprise are not permanent. Namely, the readily available and inexpensive information about competitive offers allows consumers to easily obtain required data and decide on the offer that best meets their demands. Therefore, organizations must constantly and continuously invest in innovations, in order to respond more appropriately to changes and challenges posed by the business environment. Modern business requires an innovative way of thinking, acting, operating and functioning. Hence, modern organization must be innovative. Innovation is the basis of business development. Competitive advantage is highly influenced by the degree of innovation. Therefore, innovation is the main determinant for achieving competitive advantage. One of the prerequisites for achieving competitive advantage and survival in a dynamic market is to understand the importance of innovation and product reengineering. In addition to that, an innovative strategy and the organization’s performance in this field are also important. Creating a new market or new product category is the most effective way to compete in mature markets.

An innovative organization is emerging in response to changes that are more frequent and more complex in contemporary business environment. The success of managing changes is crucial for the survival and growth of the enterprise. The strategy of constant innovation and the dynamism of change is the response to the demands posed by the market. The survival of an enterprise in a modern world is increasingly dependent on the ability of management to understand and manage changes.

A learning organisation is able to remain consistent in innovation with the goal to improve quality, customer relations and achieve profitable results. In order for an enterprise to be innovative certain conditions have to be met. Namely, this enterprise has visionary leadership which is open to changes. Also, it is using the potential of employees, thus creating an adequate climate in which it is focused on consumers. Additionally, this enterprise invests in people through training and good communication.

Hence, in order to create competence that will foster innovations, the enterprise needs to invest in upgrading the knowledge of its staff, so they can stay ahead of the competition.

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## ANALYSIS OF COMPARATIVE ADVANTAGES OF SERBIAN EXPORTS AT THE SECTORAL LEVEL<sup>2</sup>

### Abstract

*The aim of the paper is to analyze the position and comparative advantages of the export sectors of the Republic of Serbia, using the RCA index, for the period from 2012 to 2017, both in the overall market and at the most important export destinations, such as the EU and the countries signatory to the CEFTA agreement. The research shows that the biggest potential is the "Animal and vegetable oils, fats and wax" sector, as it has the highest comparative advantage. Of the sectors with the largest exports, "Machines and transport devices" are distinguished, which on the CEFTA market has a significant comparative advantage, which is a sector that includes high-tech products and with its exports can significantly contribute to improving the structure of exports. A drastic drop in comparative advantages is recorded in the "Food and living animals" sector, as the largest part of the traditionally important agri-food sector. The analysis used the available databases of the Republic Institute of Statistics of the Republic of Serbia, using standard mathematical and statistical methods.*

**Key words:** RCA index, SITC, export sectors, comparative advantages, exports.

**Jel classification:** F14.

## АНАЛИЗА КОМПАРАТИВНИХ ПРЕДНОСТИ СРПСКОГ ИЗВОЗА НА СЕКТОРСКОМ НИВОУ

### Апстракт

*Циљ рада јесте анализа позиције и компаративних предности извозних сектора Републике Србије, применом РЦА индекса, за период од 2012. до 2017. године, како на целокупном тржишту, тако и на најважнијим извозним дестинацијама као што су ЕУ и земље потписнице ЦЕФТА споразума. Истраживање показује да највећи потенцијал представља сектор „Животињска и биљна уља, масти и воскови“, јер има највећу компаративну предност. Од сектора са највишим извозом, издваја се „Машине и транспортни уређаји“, који на тржишту ЦЕФТА остварује значајну компаративну предност, а ради се о сектору који обухвата високо технолошке производе и својим извозом може битно допринети побољшању структуре извоза. Дрastiчан пад компаративних предности бележи сектор „Храна и живе животиње“, као највећи део традиционално важног пољопривредно-прехранбеног сектора. У анализи су коришћене распо-*

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*ложиве базе података Републичког завода за статистику Републике Србије, уз примену стандардних математичких и статистичких метода.*

*Кључне речи: РЦА индекс, СМТК, извозни сектори, компаративне предности, извоз.*

## Introduction

Parallel to the reduction of trade barriers, which is a practical result of the globalization process, the competitive position of countries in the world markets has become increasingly important in affecting the countries' growth and development prospects (Ekmen-Özçelik & Güzin, 2014, p. 18). In order to reduce the trade balance deficit, as well as to increase the rate of economic growth, it is necessary to monitor the comparative advantages, both of the overall economy and of its parts. The movement of the trade balance is one of the basic indicators through which the level of competitiveness is perceived (Purić & Jerotijević, 2015).

A comparative advantage can be analyzed at different levels of observation: at the level of the national economy, economic sectors, branches, commodity groups. In the survey, parts of the economy at the sector level are observed. According to the Standard International Trade Classification (SITC) there are 10 export sectors of the Republic of Serbia, whose comparative advantages will be considered using the RCA (*Revealed Comparative Advantage*) index. At the macro level, the RCA index shows the success of the economy in the international context and is most often identified with the notion of competitiveness of the national economy exports, because it includes data on foreign trade, which includes indirectly the availability of factors of production, as well as government policy (Branković, 2015).

Such an analysis is also significant from the point of view of changing the production and export structure in order to increase exports, and in particular to increase net exports. The factors that contribute to movements in RCA are economic: structural change, improved world demand and trade specialization (Batra & Khan, 2005, p. 5).

The aim of the study is to identify the most propulsive sectors of the Serbian economy (compared with foreign countries and the entire economy), as well as those with the highest RCA index, for the EU and CEFTA market, as the most important export markets. The modified version of this index ( $RCA_2$ ) will be applied for the analysis of comparative advantages in all export sectors, while the so-called “the net export index” ( $RCA_1$ ) is used in the analysis of the entire economy (foreign trade).

## Methodology

One of the most useful tools in assessing the comparative advantages of the economy and the export sectors is the RCA index. Since it encompasses international flows, apart from being a measure of the comparative advantage of exports, it can be said that it is an indicator of external competitiveness of the economy. It is often also referred to as the index of net exports, because according to the most commonly used and at the same time the simplest form, it represents the ratio of the balance (surplus or deficit) and the sum of foreign trade exchange of the economy (Jefferson Institute, 2003):

$$RCA_1 = \frac{(X_j - M_j)}{(X_j + M_j)}$$

where:

$RCA_1$  – index of comparative advantages of the economy  $j$ ,

$X_j$  – export of the economy  $j$ ,

$M_j$  – importing the economy  $j$ .

In this way, comparative advantages are seen at the level of the entire economy. The index can range from -1 to +1. If the index is positive, the economy realizes comparative advantages; otherwise, negative values mean that there are no comparative advantages, i.e. the presence of comparative disadvantages in the international market.

The measurement of competitiveness and comparative advantages based on different theories (Rikardo, Hecksher-Ohlin) creates a number of difficulties that primarily relate to the coverage of a large number of factors of comparative advantage as well as the difficulty of measuring and comparing these factors across countries and sectors (Božić & Nikolić, 2013, according to: Utkulu & Seymen, 2004). The RCA index application overcomes many problems in measuring comparative advantages, but the disadvantage is that this index does not show the main sources of these advantages (Božić & Nikolić, 2013). He was formulated by *Balassa* in 1965, and has been in use for more than five decades, although he has undergone some modifications. The original formula included only export flows, so it is often disputed for this reason (Greenaway & Milner, 1993).

$RCA_2$  the index is used in the analysis of comparative advantages at lower levels of observation. The formula to be used in the research includes a sectoral level and includes certain trading partners in the analysis (Balassa, 1965; Utkulu & Seymen, 2004; Birovljev, Matkovski & Četković, 2015, Božić & Nikolić, 2013):

$$RCA_2 = \frac{\frac{X_j}{X_t}}{\frac{M_j}{M_t}}$$

where:

$RCA_2$  – index of export comparative advantages of the sector  $i$  of the economy  $j$ ,

$X_{ij}$  – export of the sector  $i$  of the economy  $j$ ,

$M_{ij}$  – import of the sector  $i$  of the economy  $j$ ,

$X_{jt}$  – total exports of all sectors of the economy  $j$  to countries  $t$ ,

$M_{jt}$  – total imports of all sectors of the economy  $j$  from countries  $t$ .

In fact, RCA index of open comparative advantage is the ratio of the relative share of the value of export of sector in total export of the country in a particular market and the relative share of the value of import of sector in the value of total import of a country from that particular market (Božić & Nikolić, 2013, p. 17). In the literature, this formula is most often used in the consideration of the comparative advantages of the agricultural sector.

In this paper, the  $RCA_2$  index will be calculated for all 10 sectors of the economy, according to the Standard International Trade Classification (SITC) of the Republic

Institute for Statistics of Serbia. According to this classification, they are marked with one-digit numbers, from 0 to 9, and they are the following sectors:

- 0 – Food and live animals,
- 1 – Beverages and tobacco,
- 2 – Crude materials, inedible, except fuels,
- 3 – Mineral fuels, lubricants and related materials,
- 4 – Animal and vegetable oils, fats and waxes,
- 5 – Chemicals and related products, not elsewhere specified,
- 6 – Manufactured goods classified chiefly by material,
- 7 – Machinery and transport equipment,
- 8 – Miscellaneous manufactured articles,
- 9 – Commodities n. e. s. in the SITC Rev. 4.

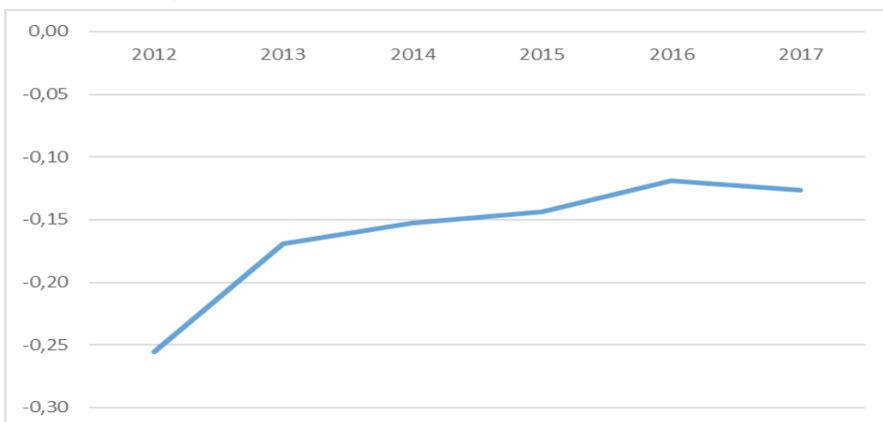
The minimum value of this index is 0, and in the range 0 to 1 denotes the existence of comparative disadvantages. The higher value of the index indicates that the export sector has more comparative advantages in the international market: if the index is greater than 1, this means that the sector achieves comparative advantages, the index value of over 2 shows significant, and above 3 exceptional comparative advantages. This is a modified RCA index -  $RCA_2$  index, which, unlike the original, includes data on total and sectoral imports. Also, unlike the  $RCA_1$  index, it measures the relative export potential, i.e. the comparative advantages of the sector in relation to the total economy.

The research covers a six-year period, from 2012 to 2017.

## Results and discussion

At the beginning of the analysis, the value of the  $RCA_1$  index for the entire economy of the Republic of Serbia will be calculated. Based on Chart 1, it can be seen that the net export index has been steadily growing since 2012 (especially in 2013), while a smaller decline was recorded in the last year of the analysis.

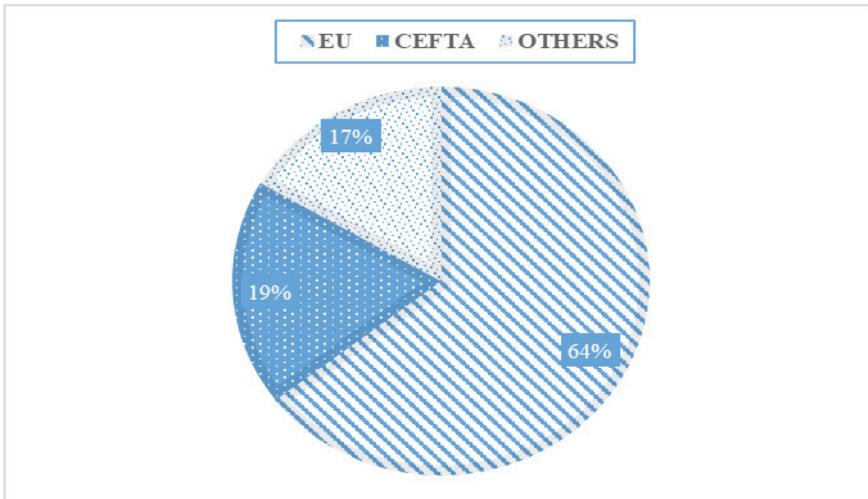
*Chart 1:  $RCA_1$  index of the Republic of Serbia for the period from 2012 to 2017*



*Source: Calculation and presentation of author based on data from the Republic Statistical Office, 2018.*

Looking at the geographical structure of exports, most of the exports (average from 2012 to 2017) go to EU countries - 64%, 19% to CEFTA countries, while the rest of 17% goes to other export destinations.

*Chart 2: Geographical structure of exports of the Republic of Serbia*



*Source: Calculation and presentation of author based on data from the Republic Statistical Office, 2018.*

As the EU and CEFTA are the most important Serbian export markets, the  $RCA_2$  index for both markets will be examined according to the Serbian export sectors. Bearing in mind the results of the analysis from Table 1, it is concluded that sector 4, “Animal and vegetable oils, fats and waxes”, achieves the highest level (exceptional) of comparative advantages in the foreign market. In particular, the  $RCA_2$  index is high (when it comes to this sector) in the CEFTA market. Sector 8, “Miscellaneous manufactured articles”, achieves significant comparative advantages in both economic destinations of exports. The solid results are also shown in the sector 0, which is the main part of the agri-food sector. Except for the sector 9, which recorded a very low share in total exports (1% on average), the lowest  $RCA$  index on the CEFTA market was recorded in sector 3, “Mineral fuels, lubricants and related materials”, while the EU market is the lowest in the sector 5, “Chemical and related products”. This is a very high import dependency of these sectors, because most of the products do not find adequate domestic substitutes (e.g. oil and petroleum products, some chemical products). Generally speaking, the CEFTA market achieves significantly higher comparative advantages in relation to the EU market (according to the calculation of the author 4.19 versus 1.04, the average for the period from 2012 to 2017), due to significantly higher net exports.

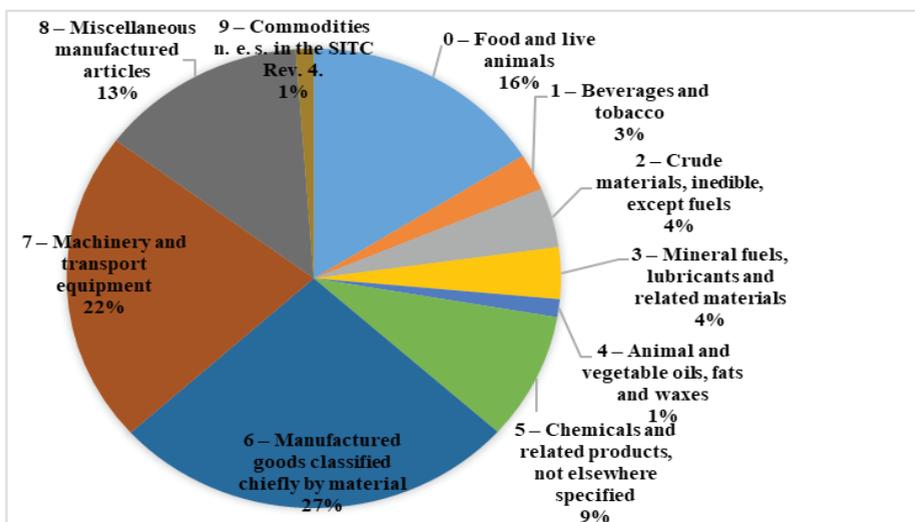
*Table 1: RCA<sub>2</sub> index of export sectors of the Republic of Serbia for the EU market and CEFTA*

Sectors, SITC, Revision 4	RCA <sub>2</sub> , ∅ (2012–2017)	
	EU	CEFTA
0 – Food and live animals	2,24	1,57
1 – Beverages and tobacco	0,96	1,45
2 – Crude materials, inedible, except fuels	1,64	0,40
3 – Mineral fuels, lubricants and related materials	0,51	0,37
4 – Animal and vegetable oils, fats and waxes	3,63	15,64
5 – Chemicals and related products, not elsewhere specified	0,43	1,43
6 – Manufactured goods classified chiefly by material	1,11	0,65
7 – Machinery and transport equipment	1,16	2,29
8 – Miscellaneous manufactured articles	2,15	2,10
9 – Commodities n. e. s. in the SITC Rev. 4.	0,02	0,07

*Source: Author's calculation based on data from the Republic Statistical Office, 2018.*

According to Chart 3, the export structure of the Serbian economy is such that the largest average share is realized by sectors 6 and 7, which together account for half of the total export value. Starting from 2013, export of sector 7, “Machinery and transport equipment”, exceeds the export of manufactured goods, mostly due to the export of road vehicles. This is a basic tendency when considering the participation of the sector in the total value of exports of the Republic of Serbia from a temporal aspect.

*Chart 3: Structure of the Republic of Serbia exports by sector (average 2012-2017)*



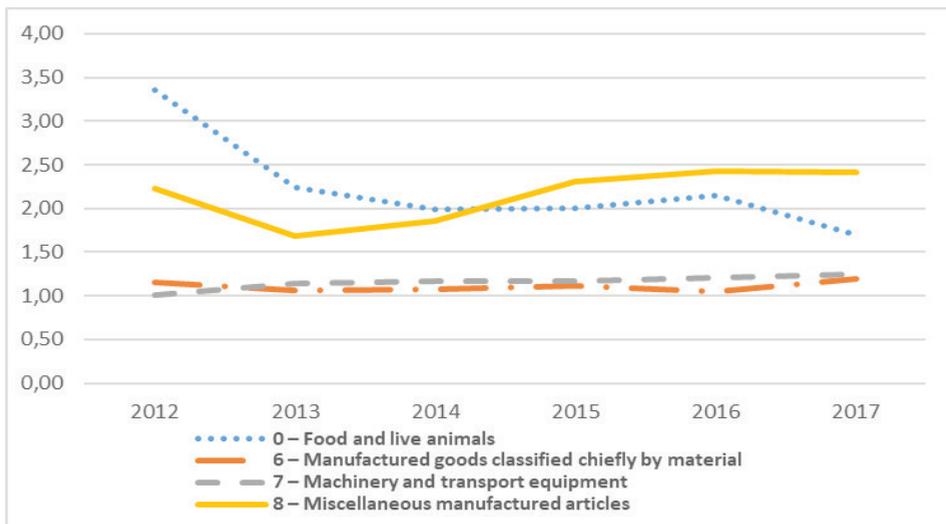
*Source: Calculation and presentation of author based on data from the Republic Statistical Office, 2018.*

Since sectors 6 and 7 are absolutely dominant, it is necessary to take a closer look at the movement of the RCA<sub>2</sub> index in these sectors. In addition to these, the sectors 0

and 8 fall into the, so-called, export-oriented sectors of the economy of the Republic of Serbia.

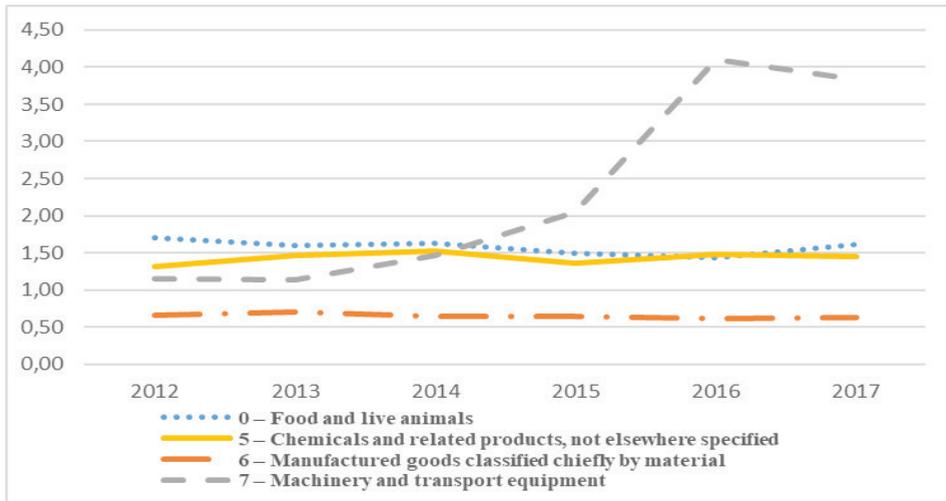
Based on the following chart, where we see four sectors with the highest export in Serbia's most important export market, it can be noted that the  $RCA_2$  index of the “Miscellaneous manufactured articles” sector in the last year of the analysis is the highest, which means that it is a sector that should be significantly encouraged. The negative fact is that the “Food and live animals” sector in the EU market, in the observed years, “lost” significant comparative advantages. The other two sectors, 6 and 7, have an index slightly above 1 on the EU market, but the sector 7 having a mild tendency of growing. The results show that the mentioned sectors, except sector 0, recorded growth in relation to the initial value of the  $RCA_2$  index in 2012. Tendencies on the CEFTA market, also for the most important export sectors, are shown in Chart 5. “Machinery and transport equipment” have exceptional comparative advantages, starting from 2016, which can contribute to the transformation of the economic structure. This is a very positive fact, since this sector is currently the highest value of imports in the Republic of Serbia, but also with the highest share in the export of the Republic of Serbia. Unlike sectors 0 and 5, whose  $RCA_2$  index values are constantly greater than 1, sector 6, “Manufactured goods classified chiefly by material”, achieves a comparative disadvantage that should be overcome by an adequate economic policy.

Chart 4: The  $RCA_2$  index trends in the most important export sectors in the EU market



Source: Calculation and presentation of author based on data from the Republic Statistical Office, 2018.

Chart 5: The  $RCA_2$  index trends in the most important export sectors in the CEFTA market



Source: Calculation and presentation of author based on data from the Republic Statistical Office, 2018.

Table 2 gives an analysis of the  $RCA_2$  index for the export sectors that have significant comparative advantages, or where this index is greater than 2. The basic observation is that Sector 4, as the sector with the maximum  $RCA_2$  index, achieves an increasingly comparative advantage from year to year. In addition, this sector, in both markets in observed years, is in the group of sectors with significant comparative advantages. The negative fact is that there is a trend in the EU market to reduce the participation of the sector with a positive  $RCA_2$  index in Serbia's total exports. The rest of the tendencies, as well as the minimum and maximum values and the value of the median of the  $RCA_2$  index, can be seen in Table 2.

Table 2: Overview of the Serbian export sectors, which have significant comparative advantages on the foreign market according to certain characteristics

		EU		CEFTA	
		2012.	2017.	2012.	2017.
Sectors where $RCA_2 > 2$	Number of sectors	4	2	2	2
	Sector codes	0, 2, 4, 8	4, 8	4, 8	4, 7
	Participation in total exports	38,75%	14,90%	15,23%	16,77%
Min		0,06	0,02	0,08	0,16
Max		5,07	2,41	15,50	52,61
Median		1,24	1,19	1,23	1,47

Source: Author's calculations

## Conclusion

A comparative advantage is the ability of the country to take adequate participation in the foreign market. It is generally estimated based on the value of exports in the specific market. The aim of this paper was to identify the most important sectors of the Serbian economy from the point of view of the  $RCA_2$  index, as a tool applied in the study.

The basic problem of the research was the consideration of the export comparative advantages of the economy of the Republic of Serbia, and especially its parts - sectors. The analysis was conducted for all exports, as well as for the most important export markets such as the EU and CEFTA. These are groups of countries where 83% of total exports are sold.

The  $RCA_1$  index for the entire economy was growing until 2017, when a decline was recorded. However, it is still in the zone of negative values, which speaks of the absence of comparative advantages of the Serbian economy as a whole. Sector 4, “Animal and vegetable oils, fats and waxes”, have the highest comparative advantages in the foreign market, so this should be used because this sector accounts for only 1% of total exports.

Sectors 6 and 7 occupy the largest share in the structure of exports. However, sector 6, “Manufactured goods classified chiefly by material”, and on the EU and CEFTA markets, does not achieve significant comparative advantages, while sector 7, “Machinery and transport equipment”, on the CEFTA market has recorded significant comparative advantages, thus representing an exceptional export potential in this market. This is particularly important, because it is a sector that consists of products with a higher unit export price and which can influence strong industrial and economic development.

The negative fact is that there is a constant decline in the comparative advantages of the sector 0, “Food and live animals,” so that by 2017, it ceases to achieve significant comparative advantages in the international market. In addition, in the EU market, the situation is such that the RCA index worsens. Compared to 2012, in 2017, sectors with significant comparative advantages account for only 14.90% of total exports - a decrease of almost 24 percentage points. A constant level of comparative advantage is observed in the CEFTA market.

In order to further increase the RCA index, it is necessary to reduce the import dependence on oil derivatives and inputs used in the automotive industry, while economic policy makers should support the agricultural sector more significantly (especially the production of beverages and tobacco), which, along with the IT sector, can be a key factor in increasing the net export.

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## COMPARATIVE ANALYSIS OF CRYPTOCURRENCY WALLETS VS TRADITIONAL WALLETS

### Abstract

*In this paper, we deal with comparative analysis of cryptocurrency wallets and traditional wallets. In addition to security analysis, we will observe the most important elements that should ensure a high level of social acceptability. In that regard, we will make a brief overview of the existing mechanisms for disposing a funds expressed in traditional currencies as well as for crypto currencies. Under the traditional safe keeping mechanisms and the disposal of cash, we will consider systems based on payment cards, payment by cash and payments over the internet. The use of digital wallets is reflected in various characteristics. The convenience of using the ability to execute a mobile phone transaction in matter of seconds. Efficiency is reflected in the speed of transaction execution. This paper describes the current state of digital wallets on the market, the choices of a better solution for purchasing and using digital wallets, security of digital wallets and future trends in their development.*

**Key words:** Digital wallet; Cryptocurrency wallet; Cryptocurrencies; Security; Transactions

**JEL classification:** E4, E5, E6

## КОМПАРАТИВНА АНАЛИЗА КРИПТОВАЛУТНИХ И ТРАДИЦИОНАЛНИХ НОВЧАНИКА

### Апстракт

*У овом раду бавимо се компаративном анализом криптовалутних и традиционалних новчаника. Поред анализе безбедности, ми ћемо посматрати најважније елементе који би требали осигурати висок ниво друштвене прихватљивости. У том смислу, ћемо направити кратак преглед постојећих механизма за смештање средстава изражених у традиционалним валутама као и криптовалутама. Према традиционалним механизмима сигурног чувања и располагања готовином раз-*

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*мотрићемо системе засноване на платним картицама, плаћању готовином и плаћањима преко интернета. Коришћење дигиталних новчаника се огледа у различитим карактеристикама. Погодност коришћења је извршавање трансакција у секунди путем мобилног телефона. Ефикасност се одражава брзином извршавања трансакције. Овај рад описује тренутно стање дигиталних новчаника на тржишту, избор бољег решења за куповину и коришћење дигиталних новчаника, безбедност дигиталних новчаника и будуће трендове у њиховом развоју.*

**Кључне речи:** *Дигитални новчаник; Криптовалутни новчаник; Криптовалуте; Безбедност; Трансакције*

## Introduction

Cash payment has been going on for a long time and it's hard to get it out of everyday use, especially for the elderly. Moreover, some smaller businesses avoid paying taxes and therefore payment is only in cash.

Cash advantages:

- Tangible money in the hands of client
- There is no payment of fees after the completed transaction
- There is no need for a bookkeeper

Cash disadvantages:

- Tangible money can lead a person to quickly spend it
- It can be stolen

Payment with credit cards is very popular today in addition to cash payments. Visa and MasterCard are dominating the market. In relation to cash payment, this method of payment comes with the price. Every transaction executed through the card implies taking a commission. (NXGEN, n.d.)

Credit card advantages:

- Purchasing more expensive items by paying the same monthly instalments
- Customer protection in the sense that if it does not receive a paid product, there is a possibility to refund money

Credit card disadvantages:

- Delaying a single instalment payment may cause additional costs
- Paying extra penalties if the limit is exceeded
- By choosing the right card, the client has the ability to control costs

(Credit card cons and pros, n.d.)

Nowadays, information technology has grown in all spheres of business and thus has brought a more modern way of paying services over the internet.

Advantages:

- The virtual transfer of money is much faster than the traditional way of paying.
- The possibility of paying anywhere in the world
- Reduced risk of losing money

Disadvantages:

- Internet connection is required
  - All information about the transactions, the sender and the recipient is stored in the database which represents the lack of anonymity for clients
  - A limited number of transactions and a limited amount of money that can be spent.
- (Advantages and disadvantages of electronic payment systems, n.d.)

A digital wallet for cryptocurrencies is a software program that holds public and private keys and successfully works on different blockchains which allow users to exchange currencies between each other and to keep track of the balance of their currency. A digital wallet can store, send and receive different currencies. Cryptocurrencies are not stored as physical (fiat) money within the wallet. Every transaction is recorded and stored in the blockchain. Sending a Bitcoin or some other currency to a user would mean sending out your own public key. If the user should receive the payment his private key must be in accordance with the sender's public key. There is no real exchange of coins. The transaction was concluded with a record in the blockchain and a change in user digital wallet. (Cryptocurrency Wallet Guide: A Step-By-Step Tutorial, 2018)

These keys are part of the science called cryptography. There are two basic models for security symmetric and asymmetric model. The symmetric model usually comes with secret key and asymmetric model comes with public and private key. The focus will be on asymmetric model, because this model is commonly used in completing cryptocurrency transactions. Asymmetric encryption is an encryption model that uses different encryption and decryption algorithms as well as two keys that are linked with each other (private and public key). The sender should have a copy of the public key of the recipient but in that case it must be considered that the attacker has the same copy. In this case, the sender encrypt the message with the proper algorithm for encryption, and the recipient has the ability to decrypt the message with his private key. So the purpose of this asymmetric model is that the attacker cannot decrypt a message which is encrypted by the public key. (Veinović & Adamović, 2013)

Cryptocurrency wallets can be divided into two major categories and they are: cold wallets and hot wallets. The difference between two of them is that for hot wallets an internet connection is necessary and for cold wallets is not. Hot wallet users usually use them in order to buy something on the internet and hold a small amount of money for that purpose, while cold wallet is just like vault in the bank to store different kind of digital values. The best thing is to have both wallets mainly for security reasons.

Hot and cold wallets can be divided into several categories: online wallets, hardware wallets, mobile wallets, paper wallets and desktop wallets. Online, mobile, desktop and multisignature wallets belong to a hot wallet category and hardware, paper belongs to a cold wallet category. Depending on the choice of digital wallet, each has its own level of security to ensure to protect the private key.

**Multisignature wallets:** In order to access funds after completing a transaction through multisignature wallet, two or three private keys will be needed depending on the level of security. This practice is good for companies that give responsibility to a different employee which means they all need to give their private key to gain access to funds. Example of multisignature wallet is BitGo where user store one key, second key is stored by a person of trust and the third key is kept by company itself. (The difference between hot and cold wallets in the digital currency world, n.d.)

**Online wallets:** Access to this type of wallets can be via web browser. These wallets are vulnerable so it is not recommended to store a larger amount of crypto token to this wallet.

Advantages:

- Transactions are completed in short amount of time
- Recommended to store a small amount of cryptocurrency
- Some of these digital wallets are suitable for storing several different cryptocurrencies and making transfer between them
- Possibility of using TOR network for more privacy

Disadvantages:

- The full control of digital wallet is in hand of third party or central authority
- It is recommended to use a personal computer when using digital wallet and is necessary to have security software installed
- Lack of knowledge in information technologies leads users to the risk of various online frauds

**Mobile wallets:** When using mobile wallets users have access at every place with internet connection.

Advantages:

- More useful and easier to use than other types of cryptocurrency wallets
- Possibility of using the TOR network for more privacy
- A great feature is using QR code for scanning

Disadvantages:

- Mobile phones are insecure devices. A user can lose his crypto tokens if the phone becomes compromised.
- They are susceptible to malware, key logger and viruses

**Desktop wallets:** are considered safer than the previous two types of wallets.

Advantages:

- Very easy use
- Private keys are stored on the user's computer

Disadvantages:

- If a computer has a connection to the internet it becomes vulnerable and requires higher security
- Regular backup is necessary because in some point system may break down and all data could be lost

Higher level of security for desktop wallets can be obtained by possessing an older laptop with clean operating system. This kind of laptops can implement a cold storage method. The concept of cold storage in cryptocurrency is for users who want to store their digital assets for a very long time. There are several types of laptops that can be used as a cold storage for cryptocurrencies. That laptop's only purpose should be for storing digital assets or a lightweight crypto mining rig. It should have a safe operating system such as MacOS, Ubuntu or ChromeOS (Chromebook). The first convenient crypto laptop is Xiaomi Air with a fingerprint sensor as an extra layer of security. Price range for this

laptop starts at 900\$ and represents good investment. Second best investment in crypto laptop would be buying Huawei MateBookX13 with starting price range at 800\$. At this moment Huawei Company is making these laptops only with Windows operating system. The third and the cheapest laptop is Asus Chromebook Flip with the highest price range of 500\$. This is the best-selling laptop with a ChromeOS which is very secure. It has an ability to work with other USB cryptocurrency wallets.

**Hardware wallets:** are one of the most secure wallets. They are usually in the form of a USB device with software in it. Some of them have a screen which means the user doesn't need a computer to complete a transaction. This type of wallet offers more control over the user's cryptocurrency and represents a proper solution to store digital assets for a long time.

Advantages:

- The most secure USB wallets are with the screen on it
- Safer than all the other types of wallets

Disadvantages:

- Very difficult to buy
- It's not recommended for beginners

**Paper wallets:** These are the safest wallets that exist. They belong to cold storage wallets. As the name says, paper wallet is a piece of printed paper with public and private keys. The paper has a QR code which represents the user key and can be used for any transactions. The only concern of the user should be to keep that piece of paper and that is the main reason why this type of wallet is concerned to be the safest.

Advantages:

- Stored in the user pocket or physical wallet without any connection to the computer

Disadvantages:

- It takes more time to complete the transaction

**Multi-currency wallets** can be a good investment for users who want to trade with various currencies. Bitcoin was the first currency, but there are hundreds of different currencies in the market and every one of them has a different infrastructure. (Cryptocurrency wallets types, n.d.)

## The best digital wallets on the market

Before choosing a cryptocurrency wallet important thing to know is that the digital currency is in some countries banned or restricted and some countries allows its use and trade. It is possible to choose a wrong wallet for certain digital currency and to lose the money. Recommended thing for users is to spend some time in order to explore how different types of cryptocurrency wallets work. A few different popular wallets are: Ledger Nano S (hardware wallet), Ledger Blue (hardware wallet), Coinpayments (online wallet), Exodus (online wallet), Jaxx (mobile wallet).

**Ledger Nano S** is a hardware digital USB wallet made for cryptocurrencies. Although hardware wallets are more expensive than the other type of wallets it is a cost-effective investment with a lot of different features. Special attention is devoted to a security and the backup of the private key. It has a small screen in the front of the device so it can be managed without any difficulties. Various functions are available such as exchanging digital currencies, transferring money from account to account etc. Figure 1. shows Ledger Nano S digital wallet.

*Figure 1: Ledger Nano S*



Source: <https://www.ledgerwallet.com/products/ledger-nano-s>

Ledger Nano S has two sizes. 98 mm is the bigger device and the smaller device is 60mm. The main features of these hardware wallets are:

- Multi-currency wallet – This wallet has an ability to store many different popular cryptocurrencies in the same wallet
- Small screen – User can watch on-going transactions and use the button to verify them.
- User-friendly – No matter the device is small, user can still operate comfortably
- Safety measure – For this purpose there is plenty options for security as well as option to lock the wallet using a pin code
- Backup and recovery – In case of losing cryptocurrency money restoration process is very fast

**Ledger Blue** is also hardware wallet made by the same company. It is much more superior than Ledger Nano S with lots of new options. Because of these features this wallet is among the most expensive wallets on the market. Figure 2. shows Ledger Blue digital wallet.

*Figure 2: Ledger blue*



Source: <https://www.ledgerwallet.com/products/ledger-blue>

The most important security features are shown below:

- Security – Ledger blue wallet is based on dual chip technology and has an integrated firmware for protection of digital currencies
- Resistant to malicious software – this wallet cannot be hacked which means that it is 100% resistant to malicious software
- Pin code – user can set 4 to 6 digits code to limit outside access

**Coinpayments** are online digital wallet. The wallet has a high level of popularity because it can store more than 300 different currencies. The only fee they charge is when user completes the transaction through their wallet. For that reason wallet is accepted in many online stores, so it is possible to use this wallet for online purchase. Coinpayments possess great security features:

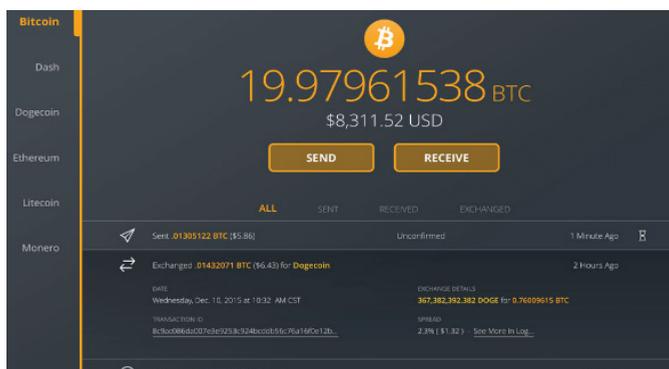
- BitGo services are integrated into this wallet to ensure a high level of security and to make transactions a lot faster.
- Safe – this feature is included with the purpose to protect user’s money from thieves
- Multi-currency wallet – An ability to store different currencies in the same wallet
- Common – Often used in thousands of online stores for online purchasing

**Exodus** is another web-based digital wallet with remarkable design, reporting system and easy to use. When compared to other web wallets, the great thing about Exodus is that it has the similar features and maybe some better than others. Figure 3. shows Exodus interface wallet.

There are many features that this wallet gives but here is the list of the best security features:

- Multi-currency wallet – storing different cryptocurrencies in the same wallet along with other digital assets without additional fee

Figure 3: Exodus interface wallet



Source: <https://www.exodus.io/#>

- Security – Even though this is an online wallet, at the same time is an offline wallet because when wallet is created the information are stored on the user’s computer

- Free registration – Everyone can fill out the form and become an owner of this type of crypto wallet

**Jaxx** is used as mobile and dekstop wallet. Today's mobile wallets offer many security features in case the user loses his phone. In that case, they allow you to switch to another account. Features of Jaxx wallet are:

- Full control – When a private key is being created it's been stored at the user's computer, so even Jaxx company can't see the user's digital funds.
- Easily operated – Usually the online wallets demand a lot of steps to make the transaction. Jaxx model is based on Nada privacy model. This model protects confidentiality and privacy.
- Acceptable – Jaxx can be implemented on every major operating system

### Digital wallets security

The crypto wallet as well as the real plastic wallet can be secured. In the case of the most popular cryptocurrency Bitcoin there are different data transfer functionalities. These things can be security issue but Bitcoin includes very high level of security which implies their proper use. When it comes to placing money on online platforms, attention should be focused on their security. In case of buying wallet for this cryptocurrency, it is recommended to use two-factor authentication. Smart way of storing money in the wallet can be compared with physical wallet. This means that the digital crypto wallet should contain a small amount of money for everyday use.

Backup wallet is just another expression for storing money on some other place or making a copy. Backup wallet can prevent problems that arise from a computer errors or data theft, but this request can be fulfilled if the data is encrypted. Data stored on the network are not one hundred percent secure. Any computer connected to the network can be affected by malicious software. An important safety practice is that data should be encrypted to avoid any chance to be compromised. It should be stored in several different locations. When it comes to different locations, it's not just about online storage but also on hardware devices such as USB, CD, external hard drive etc.

Encryption is very important for digital wallets. Encrypting digital wallet is one of the best ways to secure your funds which are stored inside the digital wallet. In this way, a password is set if someone tries to access the digital wallet. Password must not be lost because if that happens the funds will be lost. The difference between the cryptocurrency and the real money is that if the loss of password occurs, user can make a request to get a new password. In blockchain and cryptocurrency, full responsibility is placed on user. It is very important to create strong password which includes letters, characters, numbers.

Another way of storing and securing data is to use cold wallets. These wallets are hardware wallets which do not have connection to the internet. Offline transaction signing involves two computers sharing parts of the same digital wallet. The first computer should be disconnected from any network and only this computer contains a complete digital wallet and have an authorization to sign the transaction. The second computer has connection to the network and contains the digital wallet only for watching and can create unsigned transactions. The transaction can be done in a few steps:

1. Create a new transaction on the computer that is connected to the network and store it on a USB drive.
2. Sign transaction with the computer that is not connected to the network.
3. Send the signed transaction with computer that is connected to the network.

The digital wallet software version should always be updated because every time when software is updated user will receive an important security updates. Updates can include some new features for digital wallet, it can prevent different problems various severity and many other things. Crypto wallets can use a multiple signature feature where multiple approvals are required for transaction to be spent. This type of protection can be used in bigger organizations such as banks where employees have access to its treasury. Web wallets also include multi signature feature. (Securing your wallet, 2018)

### **Comparative analysis of traditional payment method vs cryptocurrencies**

We've conducted a rigorous comparative analysis between the traditional payment method and cryptocurrency method. According to this author, virtual currencies and mobile banking represent the greatest achievements in information technology so far. The advantage of these methods of payment is that they are easily accessible for each client and much faster than traditional payroll system. Along with this, the problem arises from the security aspects that can lead to identity theft. The solution for preventing identity theft of clients is the use of cryptography. In this way, decentralized networks have a high level of security. Compared to mobile banking, this system is much safer. Mobile banking does not provide PKI (public key infrastructure). The only way to verify authenticity on mobile phones is to get smart cards that have pre-installed symmetric keys. But this is not an anonymity solution that the decentralized systems have. (George F. Hurlburt)

In opinion of this author the biggest reason to use digital wallets and digital currencies is due to significantly reduced transaction fees. This method is much cheaper compared to traditional payment cards. Traditional pay system had freedom to increase commissions because they did not have competition to stop them. Apart from that, another reason for use of digital currencies is the guarantee of user's anonymity. The third reason for their use is that cryptocurrencies are protected from inflation.

On the other hand, because of the anonymity cryptocurrencies can be used for illegal purposes. Due to the large amount of money this kind of transactions would require a lot of high commissions if the client would use the traditional payment system or at some point it may come to account blocking. (Moore, The promise and perils of digital currencies, 2013)

Based on the research, there are various aspects of comparison between cryptocurrencies payment method and traditional payment method where some of them are given in the next table.

*Table 1: Positive and negative aspects*

<i>Aspects</i>	<i>Traditional payment</i>	<i>Crypto payment</i>
<i>Social acceptance</i>	World-wide (+)	Limited (-)
<i>Authority</i>	Central authority (+/-)	Decentralized network (+/-)
<i>Flexibility</i>	Service provider (-)	Without service provider (+)
<i>Payment processing</i>	Necessary third party (-)	Direct payment between nodes (+)
<i>Transaction speed</i>	Couple of days (-)	Instantly transactions (+)
<i>Transaction fee</i>	Expensive charge fees (-)	Low or free transactions fees (+)
<i>Refoundry</i>	Changeful transaction (+)	Permanent transaction (-(-)
<i>Anonymity</i>	Client identified (-)	Alias authentication (+)

The table 1 gives an overview of positive and negative aspects gained through the comparative analysis of traditional and crypto payment. Positive and negative aspects are shown in table columns indicating the advantages and disadvantage both payment systems.

**Social acceptance:** The traditional payment system is used everywhere in the world and it represents the standard. However, the crypto payment system is forbidden in some countries, which therefore limits its usability comparing to the traditional payment system.

**Authority:** The traditional payment method provides a certain level of security from their viewing angle, but on the other hand, this security in the centralized system is not 100% secure.

For the crypto payment, this is the huge improvement in the payment system because all nodes in the decentralized network have their own copies of all executed transactions in relation to the traditional payment system. A disadvantage of this system may be that there is no central authority in charge of saving the clients' money.

**Flexibility:** An advantage of the crypto payment method is the ability to send worldwide transactions at a given moment with very low fees while in the traditional payment system it takes much longer to execute the transaction.

**Payment processing:** There is no need for approving the transaction by a central authority and many other different restrictions for the crypto payment system.

**Transaction speed:** The benefit of using the crypto payment method is that the transactions are executed instantly.

**Transaction fee:** An advantage of using crypto payment method is that the transaction fees are very low or free of charge.

**Irreversible:** In crypto payment method, the client should think before executing the transaction because there is no way back once the transaction is executed.

**Anonymity:** Information about the clients or nodes are hidden in the crypto payment method.

## Conclusion

For the current year 2018 it is predicted that the use of digital wallets for cryptocurrencies will increase and that the use of physical wallets will be reduced. The most popular crypto currency, Bitcoin, reaches the highest record profits and slowly gets a reputation as legitimate currency. Based on the research so far it can be concluded that these wallets are very safe as well as suitable for use as the additional costs are minimal in relation to the costs when paying with physical money. Payment in cryptocurrencies provides these minimum costs because two nodes that execute a transaction operate directly where there is no inclusion of a third party. The only cost is payment to the network in which transaction is executed, for example Bitcoin network. Depending on the speed of transaction execution, there are different fees (in dollars per transaction) but they are much smaller than in traditional payment system.

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## ACCOMMODATION CAPACITIES AND THEIR UTILIZATION IN THE FUNCTION OF TOURISM DEVELOPMENT: CASE OF IVANJICA

### Abstract

*The development of the tourist offer of Ivanjica municipality can be shown, amongst other things, through the state of accommodation capacities and their utilization degree. The aim of this work is to show the accommodation capacities and their utilization in the municipality of Ivanjica and their influence on the development of the tourism of the area mentioned. Tourist activity is an important factor in increasing the economic activity of a country. The high-quality accommodation capacities provide this municipality the excellent conditions for the development of different selective forms of tourism. The results of the statistical analysis of the tourist traffic of Ivanjica municipality for the period 2011 - 2018 are presented in this work. Secondary data obtained from Tourist organization of Ivanjica were used in the research. Based on the results of the analysis, conclusions on the current situation are drawn and recommendations for future activities and researches are made, with the aim of improving the sustainable tourist development of the municipality of Ivanjica.*

**Key words:** *tourism, destination, Ivanjica, accommodation capacities, rural tourism.*

**JEL classification:** *L83, Z30, Z32*

## СМЕШТАЈНИ КАПАЦИТЕТИ И ЊИХОВА ИСКОРИШЋЕНОСТ У ФУНКЦИЈИ РАЗВОЈА ТУРИЗМА ИВАЊИЦЕ

### Апстракт

*Развијеност туристичке понуде општине Ивањица може се приказати, између осталог, кроз стање смештајних капацитета и степена њихове искоришћености. Циљ рада је приказ смештајних капацитета и њихове искоришћености у општини Ивањица и њихов утицај на развој туризма поменуће области. Туристичка делатност је битан чинилац повећања економских активности једне земље. Висококвалитетни смештајни капацитети овој општини омогућавају изванредне услове*

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*за развој различитих селективних облика туризма. У раду су приказани резултати статистичке анализе туристичког промета општине Ивањица за период 2011-2018 године. У истраживању су коришћени секундарни подаци добијени од ТО Ивањица. На основу резултата анализе, изводе се закључци у вези тренутне ситуације и дају се препоруке за будуће активности и истраживања, а све у циљу побољшања одрживог туристичког развоја општине Ивањица.*

**Кључне речи:** туризам, дестинација, Ивањица, смештајни капацитети, рурални туризам.

## Introduction

Tourism is one of the most complex, most dynamic economic and socio spatial phenomena of the modern world, which has become a global phenomenon in a relatively short period of time (Šušić, 2019, p.27). Knowing that the tourism sector is able to generate significant social, economic and cultural benefits and development, looking for novel ways to improve this sector is more than justified (Gavrilović, 2018, p.36). Tourism is one of the largest and fastest growing industries in the world (Edgell, 1990, p.3). In both developed and developing countries, tourism is often supposed to be a viable means of raising the economic activity of the regions (Hall, 1999, p.274). So today, tourism is one of the most important and fastest growing industries, characterized by the need for continuous diversification of products. Today, tourism has grown from one small activity to an activity that is crucial for the economic growth and development of a country (Lakićević, 2018, p.99). The latest trends in this industry suggest an increased demand for new alternative forms of tourism, where rural tourism takes a significant place.

The fact that rural tourism enterprises tend to be small scale and supply a highly seasonal market present several other challenges for rural development. Not all rural areas are equally attractive for rural tourists and simply providing accommodation facilities does not guarantee demand. The total product package must be enough to attract and keep tourists, offering suitable opportunities for spending (Gannon, 1994). The quality of products and services must match tourist's demands and expectations (Long & Lane, 2000).

Rural tourism is a result of the development of cities and industry. Modern trends in tourism, in the era of increasing urbanization, environmental pollution, detachment from nature have led to an increasing orientation of tourism flows towards rural areas, rural destinations. Thus, tourism has become a significant factor in the revitalization of villages in Ivanjica municipality because it ensures the economic and social security of rural households through: establishing migrations to the town and returning to the village of those who have left before, increasing production and enabling the agricultural products placement, domestic crafts and products of old crafts through boarding and non-boarding consumption, preservation of traditional architecture, customs and folklore. Nevertheless, the rural areas of Ivanjica region are areas of exceptional value and represent the true ecological oases. The natural features and tourist potential of Ivanjica are numerous and various. They are distinguished by traditional culture and diversity of ethno-cultural heritage (Marković, 2008).

The municipality of Ivanjica is in the southwestern part of central Serbia. The region of Ivanjica, in relation to the territory of central Serbia, as well as the entire territory

of the country, has a marked peripheral position. The tourist position is somewhat less favorable than some competitive destinations due to spatial dislocation from the main tourist routes. This was not an obstacle for tourists looking for a vacation in an authentic town, surrounded by a mountainous area with environment minimally altered.

Until half a century ago, Ivanjica was a typical rural area, isolated in terms of traffic and it was insufficiently developed. The increasing tourism and traffic in the last few decades have led to the development of tourism as well. Indeed, the beginnings of the rural tourism of the former Yugoslavia are related to the villages of the Moravian region. Today, the municipality of Ivanjica has significant anthropogenic tourist values (archaeological, monumental, ethnographic, ambient and manifestation). Along with natural potentials, they make an enormous tourist potential (Ostojić, 2008). Ivanjica was declared an aerial spa in the area of 2.156,50 ha by the Decree of the Government of the Republic of Serbia.

When speaking of the region of Ivanjica, we need to consider several interesting data that point to the movements and possibilities of further development, of Ivanjica above all, as the most developed and most perspective center, with its hinterland Golija. Also, it should be noted that the Biosphere Reserve “Golija-Studenica” is the first and only reserve in Serbia that is included in the UNESCO program.

All forms of tourism, such as health, rural, sports and recreational, youth, excursion, manifestation, hunting and fishing, are possible in this area. Each summer, Ivanjica organizes a cultural event “Nusicijada”, that was included in the best European festivals by the European Commission “Europe for Festivals, Festivals for Europe” (EFFE). So, tourism in the region of Ivanjica is an obvious reality and the future direction of the economic development of the municipality. Viewed in terms of population, our country has the largest number of events in the world (Lakićević, 2016, p.441). By the implementation of specific activities, cultural resources could be transformed into attractive tourist products and then successfully positioned on the national and international cultural tourism market. Development of cultural tourism creates a good base for increasing the general welfare of the inhabitants and the entire region to which it belong (Žarevac, et.al., 2013, p.195).

### **Accommodation capacities and their utilization**

Accommodation facilities are basic elements of the material-technical base of tourism since they facilitate the visitors' stay in a destination and constitute a basis for the further development of the destination. This is the reason why they are considered to be a core source for the sustainable competitiveness of a destination and their lack “acts as a constraint on overnight visitor numbers” (Ritchie & Crouch, 2003, p. 246).

It is very important to determine how tourism in Ivanjica develops based on supply and demand and utilization of existing capacities. Table 1 shows the tourist traffic in Ivanjica from 2011 to 2018.

Table 1: Tourist traffic of Ivanjica municipality for the period 2011-2018.

Year		N	Mean	Median	Mode	Standard Deviation	Min	Max
2011	Number of rooms	8	53	48,5	26	31,924	18	108
	Number of apartments	5	5,2	5	2	3,421	2	10
	Number of beds	8	133,75	117	94	74,308	42	270
	Number of domestic tourists	6	2526,33	1776	249	2579,928	249	6940
	Number of foreign tourists	5	279,8	88	30	361,334	30	880
	Number of overnight stays of domestic tourists	6	15625,3	5942	1007	25296,012	1007	66350
	Number of overnight stays of foreign tourists	5	728,6	176	65	1036,201	65	2524
	Total number of tourists	6	2759,5	1976,5	279	2690,962	279	7028
	Total number of overnight stays	6	16232,5	7564	1072	25177,437	1072	66526
2012	Number of rooms	8	48,38	33	6	38,037	6	108
	Number of apartments	4	5	2,5	2	5,354	2	13
	Number of beds	8	131,88	107	94	79,319	42	270
	Number of domestic tourists	6	2505,17	2121	240	2289,532	240	6085
	Number of foreign tourists	5	195,6	103	20	261,459	20	659
	Number of overnight stays of domestic tourists	6	15457,5	4327	750	22413,932	750	57680
	Number of overnight stays of foreign tourists	5	399,8	149	30	557,711	30	1376
	Total number of tourists	6	2668,17	2505	260	2359,056	260	6188
	Total number of overnight stays	6	15790,7	5015	780	22348,43	780	57783
2013	Number of rooms	8	37,75	27,5	18	33,005	6	108
	Number of apartments	5	18	3	2	29,436	2	70
	Number of beds	8	132	110	50	84,801	50	270
	Number of domestic tourists	6	2534,5	2080,5	156	2714,937	156	7145
	Number of foreign tourists	5	184,4	65	11	324,021	11	762
	Number of overnight stays of domestic tourists	6	15025,8	4311	277	23423,906	277	60660
	Number of overnight stays of foreign tourists	5	488,6	203	11	764,024	11	1842
	Total number of tourists	6	2688,17	2198,5	167	2778,212	167	7160
	Total number of overnight stays	6	15433	5333,5	288	23329,527	288	60755

2014	Number of rooms	8	37,75	27,5	18	33,005	6	108
	Number of apartmans	5	18,2	3	2	29,878	2	71
	Number of beds	8	132,5	110	50	85,57	50	270
	Number of domestic tourists	6	2161,83	1650,5	108	2296,05	108	5949
	Number of foreign tourists	5	177	56	4	289,778	4	689
	Number of overnight stays of domestic tourists	6	12663,3	2877	191	20377,908	191	51981
	Number of overnight stays of foreign tourists	5	466,2	183	16	727,5	16	1760
	Total number of tourists	5	2749,6	3148	120	2305,064	120	5965
	Total number of overnight stays	6	13051,8	3848,5	207	20292,331	207	52127
2015	Number of rooms	8	37,75	27,5	18	33,005	6	108
	Number of apartments	5	18,2	3	2	29,878	2	71
	Number of beds	8	132,5	110	50	85,57	50	270
	Number of domestic tourists	5	2318,4	1085	41	2685,774	41	6183
	Number of foreign tourists	4	109,5	60,5	15	132,475	15	302
	Number of overnight stays of domestic tourists	5	16280,6	1737	187	24415,522	187	56753
	Number of overnight stays of foreign tourists	4	271,25	104,5	71	356,354	71	805
	Total number of tourists	5	2406	1387	41	2688,631	41	6274
	Total number of overnight stays	5	16497,6	2542	187	24331,077	187	56844
2016	Number of rooms	6	62,17	49,5	32	41,878	18	114
	Number of apartments	0						
	Number of beds	6	156,67	125	42	97,508	42	279
	Number of domestic tourists	5	3477,8	3789	210	3328,542	210	8063
	Number of foreign tourists	4	275,25	32	2	507,213	2	1035
	Number of overnight stays of domestic tourists	5	18655,8	9046	735	25150,27	735	60996
	Number of overnight stays of foreign tourists	4	628,75	116	2	1104,941	2	2281
	Total number of tourists	5	3698	3849	210	3478,161	210	8065
	Total number of overnight stays	5	19158,8	11327	735	24952,429	735	60998
2017	Number of rooms	6	61,83	48	18	42,823	18	114
	Number of apartments	0						
	Number of beds	6	151,17	112	42	97,008	42	291
	Number of domestic tourists	6	3325,17	2510	109	3433,496	109	7966
	Number of foreign tourists	5	185	25	3	329,84	3	770
	Number of overnight stays of domestic tourists	6	16544,7	8059	492	22344,158	492	57888
	Number of overnight stays of foreign tourists	5	389,8	68	6	701,106	6	1634
	Total number of tourists	6	3479,33	2578,5	109	3591,441	109	7981
	Total number of overnight stays	6	16869,5	8879	492	22336,868	492	57903

2018	Number of rooms	6	61,17	48	18	42,654	18	114
	Number of apartments	0						
	Number of beds	6	149,67	125	42	91,577	42	268
	Number of domestic tourists	5	3452,8	4268	177	3111,89	177	7129
	Number of foreign tourists	3	338,67	49	2	542,929	2	965
	Number of overnight stays of domestic tourists	5	19052,4	10781	1048	24046,546	1048	58970
	Number of overnight stays of foreign tourists	3	792,33	736	4	817,956	4	1637
	Total number of tourists	5	3656	4317	179	3289,882	179	7129
	Total number of overnight stays	5	19527,8	12418	1052	23946,246	1052	58970
TOTAL	Number of rooms	58	48,76	32	18	35,849	6	114
	Number of apartments	24	13,25	3	2	22,549	2	71
	Number of beds	58	138,72	112	100	81,348	42	291
	Number of domestic tourists	45	2768,07	2333	41	2631,054	41	8063
	Number of foreign tourists	36	212,89	62,5	15	318,243	2	1035
	Number of overnight stays of domestic tourists	45	16041	4447	187	21539,591	187	66350
	Number of overnight stays of foreign tourists	36	509,5	167	226	722,026	2	2524
	Total number of tourists	44	3002,7	2761,5	41	2722,018	41	8065
	Total number of overnight stays	45	16448,6	6207	187	21456,816	187	66526

Source: Authors

Analyzing the tourist traffic in Ivanjica for the period 2011-2018, it was found that the number of overnight stays, domestic and foreign tourists was constantly declining. Only after 2015 there was an increase in number of overnight stays of both domestic and foreign tourists. Analyzing all other tourist offerparameters, it was found that since 2015 there has been a capacity decrease, i.e. the number of available beds has been reduced.

Some more important accommodation capacities in this area should also be mentioned, and those are: (<http://ivanjica.gov.rs/turizam/>):

- *Hotel Park* - the accommodation facility is ranked with four stars. It has 140 beds in single and double rooms and four suites, a restaurant, festive hall, congress hall, small wellness center; an indoor swimming pool, sauna, Jacuzzi, massage parlor, steam bath and gym, hotel bar, large terrace that enters the city park and a promenade along the river Moravica with waterfall, the visual symbol of the town.
- *City hotel* - it has 42 beds in single, double and triple rooms with their own bathrooms, TVs and telephones in rooms. The integral parts of the hotel are the restaurant and supermarket. The hotel also has 3 exclusive suites within the restaurant “Dubrava”.
- *Institute for Specialized Rehabilitation* - it has 270 beds in single, double and triple rooms, internist-hematological laboratory and a physical medicine and rehabilitation block, an indoor swimming pool, restaurant, park and small sports ground.

- *Golija Resort* - it used to be war and military invalidsresort. It has 152 beds in single and double rooms, a restaurant with 300 seats and a summer garden with 800 seats.
- *Hotel Javor* - the accommodation facility ranked with two stars, owned by the company “Mona”. It has 92 beds in double and triple rooms, entertainment hall and parking space for their guests.
- *Mountain Hut Golijaska Reka* - it is owned by the company “Srbijašume” Golija. It has 92 beds, of which 14 are in the hut itself, in double rooms and 80 in triple rooms and several rooms with more beds in two dependans next to the hut. Next to the mountain hut there is a football field, small sports grounds and a cable car leading to Janko’s stone.
- *Hotel Logos* - the accommodation ranked with three stars, it has 67 beds in double and triple rooms and suites with hydromassage cabins in bathrooms, a restaurant with 60 seats, large hall with 180 seats, mini SPA center with two saunas, Jacuzzi, massage room, table tennis, disco and playroom. It has a parking lot for their guests, and there are sports fields in the immediate vicinity.
- *Ivanjički konaci* - it is equipped with the latest equipment and furniture. There are twelve luxury suites and a separate house as a whole, which has a spacious living room with fireplace, comfortable bathroom, kitchen, two bedrooms and a large covered terrace with a beautiful view of the mountain ranges of Javor and Golija.

Table 2. Utilization of accommodation capacities

Year	N	Mean	Median	Standard Deviation	Min	Max
2011	6	26,1757	21,695	23,86227	1,56	67,5
2012	6	27,9733	13,782	29,03212	0,93	70,61
2013	6	24,6169	13,2557	26,06072	0,32	61,65
2014	6	20,5208	9,7507	24,04831	0,23	52,89
2015	5	24,9223	4,6429	31,33001	0,76	60,68
2016	5	29,1696	20,6886	30,20736	0,92	61,9
2017	6	28,9039	21,9677	29,90339	1,32	63,46
2018	5	33,1356	22,6813	34,25438	1,45	74,04

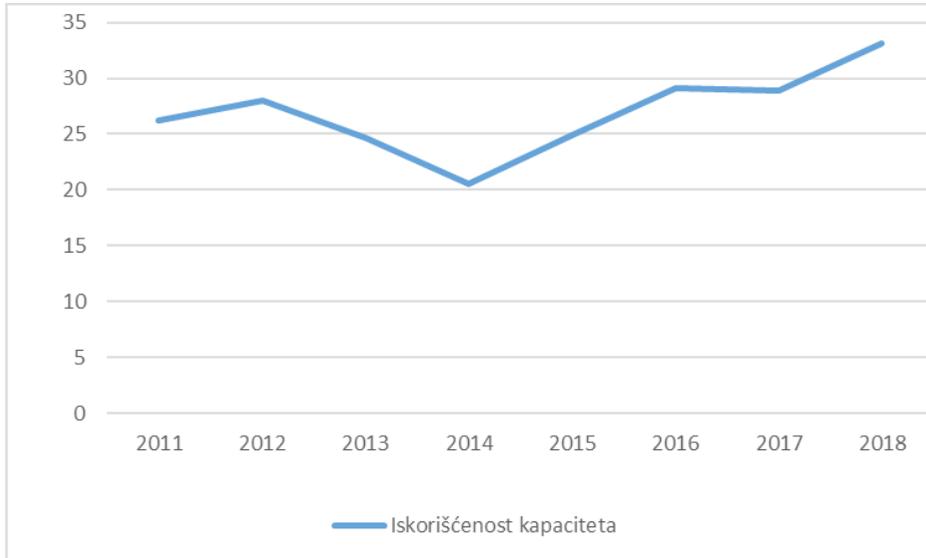
Source: Authors

On average, the best utilization of accommodation capacities was in 2018 with 33.14% (std. deviation = 34.25), while the lowest utilization was in 2014 with 20.52% (std. deviation = 24.05). Also, we note that in the observed period, more than half of individual facilities have below-average occupancy rate ( $M > Me$ ).

By analyzing individual facilities, it is noted that the lowest occupancy rate has a private accommodation. The term private accommodation originates from private ownership. Ingram (1996, p.30) interprets the importance of private accommodation

and the quality of service being offered by taking into consideration the opinions and standpoints of owners of private accommodation facilities in order to obtain highest quality standardisation of private accommodation capacities.

**Chart 1. Average utilization of capacities in the observed period**



*Source: Authors*

On the chart, it can be noted that since 2016 there has been a better utilization of accommodation capacities, and the lowest utilization of accommodation capacities was in 2014.

All these parameters are a good indicator for the further development of tourism in Ivanjica. We should not forget the great activity in attracting new guests by various tourist events, good marketing and various other specific forms of tourism. However, it is obvious that it is necessary to animate a large number of rural households in order to get involved in the tourist offer of rural tourism, and especially to intrigue young people in the villages to give new life to their homes, adapt and revive them with new facilities in order to be attractive to many tourists from urban areas who are looking for peace, tranquility and fresh air which is rich in Ivanjica.

Rural tourism has long been considered a means of achieving economic and social development and regeneration. More specifically, it has been widely promoted as an effective source of income and employment, especially in peripheral rural areas (Sharpley, 2002). Serbia has respectable resources for the development of rural tourism (natural and social). However, practically there is a problem because local stakeholders are not able to recognize the possibility of putting these resources in an appropriate manner in the function of tourism development, as well as the local communities, more broadly (Vukovic, P., 2018, p.81).

## The importance of the mountain Golija for the development of tourism

Golija Nature Park extends to the territory of five local municipalities - Ivanjica, Sjenica, Raska, Kraljevo and Novi Pazar. In July 2001, the Government of the Republic of Serbia issued the Decree to place Golija mountain under the protection of the “Golija Nature Park” and classify it as the First Category of protection as a natural resource of exceptional importance (it was declared the First Category Park in 2000). Then UNESCO categorized it as the Biosphere Reserve (2001), which was the only biosphere reserve in Serbia until recently. In fact, traffic isolation, economic underdevelopment, extreme depopulation and low social standard of the population are key factors influencing the preservation of the natural environment (Miljanović, 2005).

It is an area of 73,000 hectares and it has a plan for detailed regulation of all municipalities together and it develops about 700 kilometers of corridors (traffic and communal). In this regard, the Spatial Plan of the special purpose of Nature Park Golija is a long-term planning document that is adopted for the period up to 2021. In the Official Gazette of the municipality of Ivanjica, the decision was made on the plan adoption for detailed regulation of the ski center Golija on the territory of the municipality of Ivanjica. This plan regulates the area, within the zone of the planned ski resort and part of the tourist unit on mountain Golija (Official Gazette of Ivanjica Municipality, 2017, p.5).

Most of them are in the territory of Ivanjica, since 50% of Golija Nature Park belongs to this municipality. Golija is undoubtedly one of the most beautiful and the richest mountains in terms of forests in Serbia. It is the highest mountain in southwestern Serbia. As mentioned above, based on the natural characteristics, Golija is a part of the International Coordinating Council Act by UNESCO program. This area often carries the epithet of an aerial spa because climatic conditions favorably affect human health (Milovanović, et.al, 2010).

Golia has a good basis for ski trails construction and for mild walks recreation and hiking in the almost untouched nature. Tourism at Golia is developing at a high speed; In the last 10 years Golija has got modern and well-organized ski trails, cable cars and accompanying ski facilities. During the winter, there are guests from all over Serbia and abroad. Tourists visit Golija even during the summer.

There is a hotel “Golija” on Odvracenica, and on the side of Ivanjica, there is also “GolijaskaReka”.

Hotel “Golija”, on the mountain with the same name, has 100 beds in single, double, triple and quadruple rooms and suites. Each unit has a separate bathroom, TV, and most of them have a balcony overlooking the mountain. Besides the hotel accommodation, there are also numerous villas (<http://www.turistickiklub.com/objekat/golija>). Also, on Golija Mountain at a height of 1408 m there is a Sport and Recreation Resort “GolijaskaReka”. It has 106 beds in the hotel and two dependances. Within the resort, there is a football field and sports and tennis playgrounds as well. A special attraction is walking to the Janko’s stone (1833 m a.s.l.), as well as a marked long, health trail.

The facility is suitable for children’s stay (School in nature).

The basic goal of the Plan is to create the conditions for arranging and construction of the planned ski center with ski, recreational and tourist facilities, equipped with the corresponding ski, traffic and communal infrastructure. The immediate goals of constructing and arranging Golija ski center are as follows:

- establishment, development and construction of the planned ski center Golija with the appropriate tourist-recreational structure;
- formation of complexes with accommodation and central public facilities, cultural, entertaining, catering, recreational sports facilities in both indoor and outdoor areas, as well as the content of tourist services in function of ski resorts;
- formation of the starting and ending hubs of the ski resort with entrances and terminals, construction of ski infrastructure (cable cars, ski lifts, conveyor belts, ski trails, ski schools grounds) and accompanying technical facilities in function of the ski resort;
- maintenance of access roads, planning and construction of parking lots and garages, superstructure facilities and technical infrastructure;
- regulating and shaping spontaneously formed subcategories;
- embodiment of the future identity of the tourist zone based on the existing characteristics of the landscape and traditional forms of construction;
- providing a large number of daily excursions, primarily for winter and summer offers;
- establishment of high standards for Golija Nature Park environment protection in the field of water protection, district heating substation, automobile traffic, communal hygiene and noise protection through planned instruments and measures for each individual area;
- providing conditions for the phase construction of the planned ski center.

Full utilization of capacities, intensification of investments in tourism infrastructure and education of appropriate professional staff are also of special importance. Inclusion in the contemporary trends of the international market, supply adaptation to the modern conditions and raising the quality of the supply to a higher level would lead to a greater development of this branch of economy (Marković et.al, 2011, p.81).

## Conclusion

Tourism, as a very important industry activity, has got many manifestations. One of the most important forms of tourism, especially in countries like Serbia, is rural tourism. The municipality of Ivanjica is an example of a tourist region where rural and health tourism is developing, as dictated by the geographical and social characteristics of this area. In order to fulfill its function and help the development of Ivanjica industry, tourism in this area must adapt its products to the needs and desires of existing and potential guests.

It is interesting to point out that Ivanjica and the surrounding areas were pioneers of rural tourism even in the time of SFR Yugoslavia. Although this area has a relatively unfavorable geographical position, compared to other more attractive destinations, future investors in tourism of the municipality of Ivanjica should not consider this as an obstacle to their investment. On the contrary, the relative geographical isolation of this region can be used as a comparative advantage in the development of tourism. Ivanjica, as a tourist destination, has very little (if at all) changed its environment and its peculiarities in the process of tourism development in the past. Therefore, this area is suitable for the

development of health tourism, whose development requires the existence of clean air, water and land. Emphasis should be placed not only on the development of tourism, but on the development of sustainable tourism as well. It is important to find the appropriate balance between the tourism development enforcement in order to increase the economic activities of the area on one hand and preserving the clean environment on the other.

The tourism development of this region is a reality and obvious future direction of the economic development of the municipality of Ivanjica. During the observed analyzed period, a decrease in accommodation capacities was noticed a few years ago. There was also an increase in overnight stays. The problem is more in poor accommodation capacity, than in its insufficiency, especially in private accommodation. Looking at the current situation and anticipating the future situation in the tourism of Ivanjica, one can notice that the problem lies not in the lack of potential, nor in the lack of a vision of future development, but in recognizing these potentials by the authorities.

If we look at the present situation and anticipate the future situation in the tourism of Ivanjica, it can be seen that the problem lies not in the lack of potentials, nor in the lack of a vision of future development, but in unrecognition of these potentials by the authorities in practice.

Further challenges to the management of tourism development in the municipality of Ivanjica are the maintenance of the existing infrastructure and construction of a new one, the establishment and respect of high standards of environmental protection, more intensive investment in the existing infrastructure and the construction of a new one along with the accommodation facilities, better utilization of existing capacities, shaping of the tourist destination identity and professional staff education.

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## OPEN INNOVATION IN SMALL AND MEDIUM-SIZED ENTERPRISES

### Abstract

*The subject of this paper is the so-called open innovation model and its importance for the development of small and medium-sized enterprises (in further paper SMEs). The importance of the open innovation model for the development of SMEs, as well as identifying the major obstacles that stand in the way of wider application of this model in SMEs, is the aim of this research. The study used a variety of methods, such as induction and deduction, analysis and synthesis, as well as the method of description. SMEs are the driving force of economic development of the state, since they employ the largest part of the working-age population, significantly influence the formation of gross domestic product, solve the unemployment problem, raise the standard of living and strengthen the country's international competitive position through export business. By facilitating the process of intensive exchange of knowledge, tools and technology among certain economic actors, the concept of open innovation has contributed to improving the innovation of the SMEs sector as a key driver of the growth of their competitiveness in the knowledge economy. Innovation is a powerful tool for new SMEs to successfully enter the market and change the existing situation, enabling existing companies to maintain or improve their position on the market by improving their innovation.*

**Key words:** innovations, small and medium enterprises, open innovation model.

**JEL classification:** O32

## ОТВОРЕНЕ ИНОВАЦИЈЕ У МАЛИМ И СРЕДЊИМ ПРЕДУЗЕЋИМА

### Апстракт

*Предмет истраживања овог рада је такозвани модел отворених иновација и његов значај за развој малих и средњих предузећа (у даљем тексту МСП). Значај модела отворених иновација за развој МСП, као и идентификовање најзначајнијих препрека које стоје на путу шире примене овог модела у МСП представљају циљ овог истраживачког рада. У истраживању су коришћени бројни методи, као што су: индукција и дедуција, анализа и синтеза, као и метод дескрипције. МСП представљају покретач економског развоја државе, јер запошљавају највећи део радно способног становништва,*

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*значајно утичу на формирање бруто домаћег производа, решавају проблем незапослености, подижу животни стандард и ојачавају међународну конкурентску позицију земље кроз извозне послове. Омогућавајући процес интензивне размене знања, средстава и технологије између појединих економских актера, концепт отворених иновација је допринео унапређењу иновативности сектора МСП као кључног покретача раста њихове конкурентности у економији знања. Иновације су моћно средство за нова МСП да успешно уђу на тржиште и промене постојеће стање, омогућавајући истовремено и постојећим предузећима да унапређењем иновативности одрже или побољшају свој положај на тржишту.*

**Кључне речи:** иновације, мала и средња предузећа, модел отворених иновација.

## Introduction

Rapid technological development and the flow of information, increase of uncertainty as well are just some of the characteristics of a modern market that set new challenges to business entities. The market is globalizing, while the success of each of its stakeholders depends on many factors such as competitiveness, innovation, flexibility and so on. Competitiveness is the ability of the entity to ensure the continued growth and development. The competitiveness of an economy represents the competitive ability of economic actors, but also the business environment that competitiveness is ready to provide them. Porter (1990) says that a nation's competitiveness depends on the ability of its economy to innovate and improve. Innovations are based on the knowledge and play a key role in the growth and survival of the company. Economies based on knowledge are those which characterized the creation, dissemination and usage of knowledge and innovation. Innovations play a key role because they significantly affect all aspects of the knowledge-based economy. In the knowledge economy, the only economy that has the ability to efficient transformation of knowledge into innovation can achieve full employment and favorable long-term growth rate of GDP per capita (Atkinson and Ezell, 2014).

Most widely used model of business operations by the end of the last century, meant the innovation activities that have been largely determined by their own knowledge and available technology (Sungjoo et al., 2010). Realistically speaking, in such an environment, companies have not been too interested in changing the existing business model. Technological and organizational knowledge that are disposed, as a rule, are guarded as a trade secret (Greenhalgh and Rogers, 2011). The increasing importance and application of information technology, information and communication equipment, the increasing mobility of the workforce, changes in behavior and requirements of consumers as well as other features contemporary hyper-globalization led to the fact that the previous business model has less success. For this reason, at the beginning of this century, the open innovation model has become increasingly important. This model implies the process of intensive exchange of ideas, knowledge, technology and assets between companies, as well as an open innovation model implies the necessity

of interconnecting business entities in order to reduce potential risks by definition of expensive research and innovation activities (Rahman and Ramos, 2011). Connecting becomes imperative of the growth and development of business entities in many high-tech industries (Enkel, Gassmann and Chesbrough, 2009).

Economically developed countries and developing countries in recent years have been increasingly directed to the improvement of innovation, competing globally in attracting the most capable personnel and an increase in market share. Information flows and networks are spreading across borders, in a way that could not even imagine in the years before the Internet appeared, mobile phones and communication networks of different purpose and level (OECD, 2010).

The innovation potential of SMEs is of great importance for improving the competitiveness of the sector in which they operate, as well as the economy as a whole. Innovative SMEs are increasingly prominent source of knowledge within the framework of technological, sectoral and even national innovation system. In this regard, the identification of conditions and methods that enable the implementation of open innovation model are an important factor in the productivity growth and competitiveness of these companies (Grimaldi, Quinto and Rippa, 2013).

### **Open innovation model**

Technological innovations which are connected and depend on each other over the past years have brought about major changes in some countries that are on the list of the most developed world economies. Innovation, as a materialized or commercialized idea, imposes the need for constant changes, especially changes in all areas of business (Jovičić and Jovičić, 2015). Countries not abundant in natural resources in today's conditions of globalization can possess exceptional economic potential, thanks to the ability to commercialize knowledge in innovation (Mroczkowski, 2012). Many experts in the field of innovation and entrepreneurship are considered to be the period from mid to the end of the last century changed five generations of innovation. The first four generations of innovation belong to the field of closed innovation since all companies in this period financed innovation from its own resources. Unlike them, the fifth generation, which is known as the generation of open innovation, companies provide financing funds for innovative activities from different sources, both their own, and others. The model of closed innovation was based on several basic principles (Chesbrough, 2006):

- 1) investing in their own research and development, the company provides good prospects for hiring the most capable personnel for the job,
- 2) in order to make a profit on the basis of research and development, the company must complete the entire process of reaching ideas to their commercialization in innovation,
- 3) companies need to control their own property and to prevent competitors from making profits on that basis,
- 4) enterprises with new ideas and products are winning in the competitive match.

Open innovation model is an integral part of the modern open business model of the company. This concept was first introduced Chesbrough (2006) when he suggested

that companies from different sectors, especially in the field of high technologies (eg, information technology, mobile phones, computers, medicine, biotechnology, nanotechnology, robotics engineering, etc.) have significantly changed the way of innovation by changing their innovation from a model of closed innovation to the so-called open innovation model. From the first moment this transition was announced from a closed to an open innovation model, attracted a great attention of researchers and practitioners in the field of innovation.

This model efficiently generates innovation since it combines multiple talents, creativity and more new ideas than would be possible even in a large corporation. Good ideas and inventions come from various unexpected places, from customers, suppliers, partners, joint ventures, and even the public (Smith, 2010). It can freely be said that the open innovation model has markedly changed the way innovations in companies in this century (Chesbrough, 2006). A number of scientists believe that this model represents something more than simply use other people's ideas and technology. According to them, this model represents a shift in the use, management, employment and the creation of intellectual property in the knowledge economy (West and Gallagher, 2006).

The fifth generation of innovation occurs in a globalized environment where knowledge through an alliance (primarily using the Internet) have become widely available and where individual companies (before all SMEs) do not have enough resources to independently implement the necessary research and development activities. The concept of open innovation implies that companies can use external ideas (knowledge and technology) in almost the same way as internal ideas in order to commercialize innovative ideas on the market. In this model, SMEs can continue to initiate and use innovations within the company, but at the same time they can rely on some other ways to bring the idea to the market, while at the same time have the benefits of external knowledge (Vanhaverbeke, 2006).

There were several factors that led to the development and application of the concept of open innovation. Technological intensity of production, which has increased in many areas has led to the fact that even a company with advanced research and development sector are not able or unwilling to rely on their own technological development (Gassmann, 2006). The innovation process is becoming increasingly complex while solving a large number of complex problems involves an interdisciplinary approach to research which usually leads to higher costs and more significant risks in the innovation process (Howells et al., 2003). For this reason, companies are often determined that some researches which are less important to them are entrusted to other organizations.

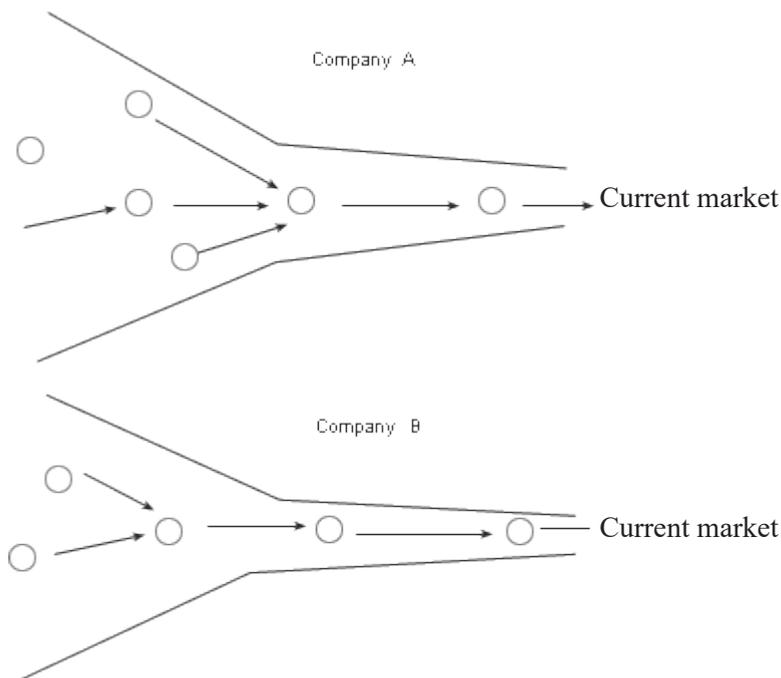
### **Open vs. closed innovation**

The basic characteristic of the business by the end of the twentieth century is a closed innovation process. Innovative activities of the company were carried out only within the company based on available knowledge and technologies, and intellectual property was a business secret. The companies were not ready to exchange their innovation results with other companies, so that the exchange of information and cooperation in the innovation transition was not seen as a potential tool for creating a competitive advantage on the market. The basic assumption a model of closed innovation is that successful innovation

requires control. It proceeded from the principles of self-sufficiency, that is, on reliance on one's own strengths. This internally orientated innovation method, Chesbrough, called the model of closed innovation. According to this approach, successful innovation arises as a result of innovative business ventures within the company itself, and for these reasons, firm control over these ventures is necessary in order to facilitate management. Business are expected to come up with ideas and develop their own research, turn them into specific products and services, sell, service, monitor and analyze them throughout the life cycle of the product.

Figure 1 presents model of closed innovation which we will explain in further paper.

**Figure 1:** Model of closed innovation



**Source:** Chesbrough, H., (2006), p. 31

Figure 1 shows this model of closed innovation for managing ID. The solid lines show the boundary of each firm, A and B. Ideas flow into each firm, on the left, and flow out to the market on the right. They are screened and filtered during the research process, and the surviving ones are transferred into development and then taken to market.

Figure 1 also shows the knowledge landscape that arose from the pattern of deep, vertically integrated ID organizations such as firm A and firm B, and the impoverished landscape that surrounded them. Although there were many ideas, few of them were available outside the walls of these firms.

Consumers are very important for the development of open innovation model. Many of them are innovatively oriented. By seeking to improve their consumer demands, they at the

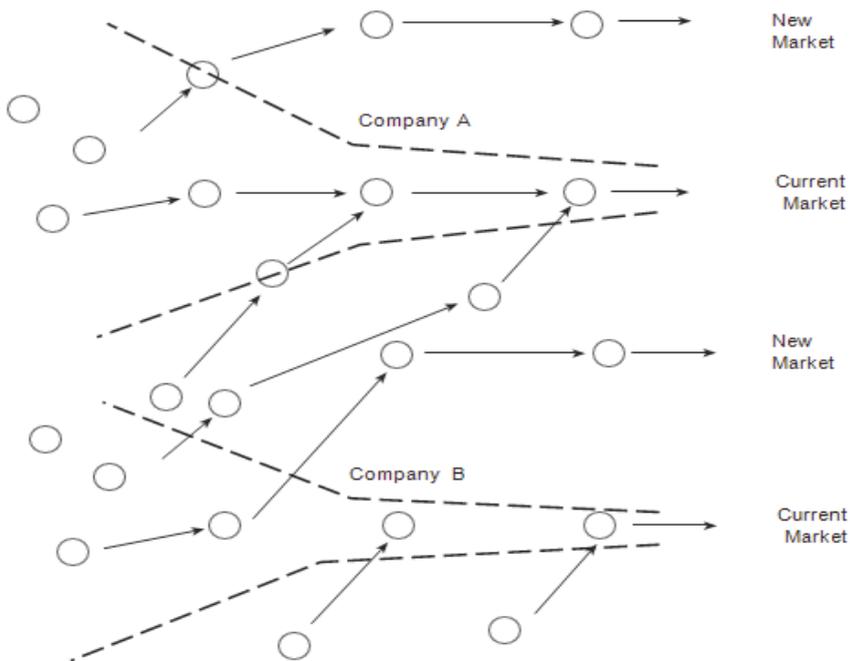
same time improve existing products and services, and so they become innovators (Bogers, Afuah and Bastian, 2010). The concept of open innovation is extremely suitable for use in new technology sectors where a large number of enterprises (a growing number of SMEs) also have products and services in their offer. By striving to maintain their position in an extremely complex and globalized market, companies create separate organizational units that monitor open innovation that focuses on innovation activities outside their business circle.

According to Chesbrough (2006), the concept of open innovation is based on the following principles:

- 1) the company does not have to employ top-level personnel, it is enough to cooperate with them only,
- 2) internal innovation activities are necessary to confirm some of the important values that can be created by external innovation efforts,
- 3) in an effort to win the competition, new business models are more important than the market itself,
- 4) in order to gain an advantage over competition, the company does not have to come up with the best ideas, but it is more important to use the best internal and external ideas.

Figure 2 depicts the knowledge landscape that results from the flow of internal and external ideas into and out of firms A and B within open innovation model.

**Figure 2:** Open innovation model



**Source:** Chesbrough, H., (2006), p. 44

Ideas abound in this environment, not only within each firm, but also outside the firms. These ideas are available to be used, and often the people who created them are similarly available for hire. The availability and quality of these external ideas change the logic that led to the formation of the centralized ID silos of the closed innovation model, which is presented in figure 2.

The concept of open and closed innovation, even though they were created on the same platform, are fundamentally different. Closed innovation refer to processes that are limited only to the use of internal ideas, knowledge and other innovation resources within the enterprise. In contrast, the concept of open innovation implies that companies need to use external ideas, knowledge and other innovation resources in the same way as internal ideas. De Jong (2008) points out that in the open innovation model, it is clearly seen how the input and downstream knowledge flows turn into economic value and how the accelerated product development creates ideas leading to the development of the value chain.

### **The significance of open innovation model in the development of SMEs**

In today's globalized world, the key to the success of a company, including SMEs, depends not only on having the latest knowledge. The core of success is in the right combination of existing knowledge with available external knowledge and their valorization in innovation. In order for modern companies to use the knowledge and information that comes from their environment, they must constantly improve their own knowledge, and therefore their own innovations. External knowledge does not have a value for the enterprise unless they do not connect with internal knowledge. The quality of the acquired network of internal and external knowledge determines the quality and efficiency of the innovation potential of the company (Cvijić, Borocki and Lalić, 2012). The ability of companies to reach external sources of knowledge depends on the ability of the supplier, ie on the level of development and quality of the external base of innovative knowledge.

Due to mobility in the labor market, employees can leave the company in which they work and choose one of two options, to switch to another company or to create their own. If they have opted for another option, funding may be a form of joint venture or self-financing. In this case, there is a great possibility that the employee, who left the enterprise, bring with him the innovation potential of the previous company. This would mean that the new enterprise would gain new knowledge or new innovation potential (West and Gallagher, 2006).

The increasing presence of private funding creates a number of risks for companies that heavily rely on internal innovation because the growing opportunities for joint ventures increase the inclination of individual employees to establish their own or join existing start-ups enterprises (Rigby and Zook, 2002). The main reason for this would be because employees believe that newly start-ups companies offer a more favorable relationship in terms of risk and earnings.

Innovative-active enterprises are enterprises with innovative activities in the current period of extension including ongoing and abandoned innovation activity. Potentially innovative companies are a kind of innovative active enterprises, which have

made innovative efforts, but have not achieve innovative results (OECD, Eurostat, 2005).

There are other ways of defining and dividing innovative companies depending on the needs of the research. The division of an enterprise towards innovation can be used to determine the percentage of enterprises (by size, sector, country or in some other way) that represents each of the four types of innovation, or the percentage of enterprises that have implemented combined innovations, such as product innovation and innovation in marketing or process innovation and organizational innovation. The division into an innovative status may also contain other data, such as information on innovators. The company may have innovation activities in the observed period, but it does not actually realize the innovation. In the observed period, innovation activities may be:

- successful and result in the emergence of innovation,
- current and to include all innovative ongoing activities that have not yet led to the implementation of innovation,
- deserted or abandoned innovative activities before applying innovation.

SMEs represent a very diverse group of companies in terms of innovative capacities, innovative activities and innovation results. According to this, all the SMEs can be classified into one of the following four groups:

- Innovation leaders
- Leading users of information
- Potential innovators
- Non-innovative SMEs

**Table 1:** Distribution of SMEs depending on available innovation capacity

Innovation leaders	Leading innovation users
Potential innovators	Non-innovative SMEs

**Source:** OECD, 2000, p. 20.

Innovation leaders are SMEs that are focused on innovation and based their development and business on new superior products and services.

The second group of innovative SMEs consists of enterprises that are the first beneficiaries of innovation (OECD, 2000). Although companies from this group do not have the ability to be innovative leaders, their survival is based on the rapid application of the latest knowledge and technologies. Enterprises from this group can be divided into two main subgroups: SMEs with sufficient ID capacity for self-innovation and SMEs that rely more on other ID capacities.

The third group consists of potential innovators. These are companies that are not too innovative, they have been in existence for a number of years, actively following the most significant innovations and most often doing business in traditional activities where technological changes are not too fast.

The fourth group consists of SMEs that have no ambitions and possibilities to innovate. These are non-innovative enterprises that are old, but well-positioned and most often those are enterprises that operate in the field of low-tech manufacturing.

Figure 3 depicts impact of different size enterprises to growth in value added and employment in European Union.

**Figure 3:** Contribution of different size class enterprises to growth in value added and employment in the EU-28 non-financial business sector in 2017

**Source:** Eurostat, National Statistical Offices, DIW Econ

Within the SME sector, micro EU SMEs made an exceptionally large contribution in 2017. They accounted for 29% of the increase in the value added generated in the EU non-financial business sector, while their share of total value added in the sector was only 21% (Figure 3). In contrast, SMEs made proportionately lower contributions to the growth in value added in the EU non-financial business sector in 2017.

A successful open source innovation strategy for SMEs should find creative ways to use internal innovation and available external innovations that contribute to enterprise development. Competent research suggests that the concept of open innovation improves the innovative performance of SMEs (Hossain, 2015). These companies have certain advantages in the innovation process that makes them a suitable networking partner, as they are usually less bureaucratic and, generally speaking, have a higher motivation to be more successful than large companies (Pullen et al., 2008). Benefits of networking SMEs include: innovative chances, lower transaction costs, cost sharing, and higher productivity.

## Restrictions on the application of open innovation in SMEs

SMEs sector acts as an integrator of the entire innovation system (Cvetanović and Sredojević, 2012). Since in the knowledge economy, SMEs operate in a global environment, it is necessary to establish cooperation with larger enterprises in order to create better opportunities and greater utilization of their capacities, as well as with other SMEs from the same or different activities, as well as with research centers, institutes, laboratories, independent researchers, universities and all other entities that can contribute to their innovative development. Increasing global competition and rising costs of research and development activities are forcing SMEs to cooperate with external partners in order to present new products and services on the market ahead of their competitors. At the same time, innovation will be more accepted if users of products and services, whether it is about other businesses or individual consumers, are increasingly becoming involved in the innovation process (De Backer, 2008).

A successful open innovation strategy for SMEs should find creative ways to use internal innovation and available external innovations that contribute to enterprise development. Michael and Palandian emphasize that SMEs have certain advantages in the innovation process that makes them a suitable linking partner, as they are usually less bureaucratic and, in general, often have a higher motivation to be more successful than large companies. On the other hand, there are problems and constraints that make it difficult to apply the open innovation model to SMEs.

SMEs have a shortage of resources, so that their planning period relates most in the medium term. The inability of real long-term planning significantly reduces the possibility of accessing small enterprises with external research results. SMEs are not always easy to enter a sustainable value chain in the market because they focus only on short-term market promotions. Very often small businesses do not even have well-developed medium-term demand planning due to limited resources and shortcomings of the necessary network of contacts. The problem may also be the time-mismatch of the framework of the research of external partners (e.g., universities) with the real needs of SMEs that small enterprises often do not allow aggressive market presence at the right time and with the right product.

**Table 2:** Obstacles with open innovation for SMEs

External obstacles			Internal obstacles		
Supply	Request	Environment	Resources	Culture	System
Technological information	Consumers needs	Legal regulation	Lack of internal funds	Attitude top management related to risk	Out of date accounting system
Raw materials	Consumer perception of the risk of innovation	Athenian policy	Technical expertise	Employee Resistance to Change (Innovation)	
Financing	Limitations on the domestic market	Measures for implementing the policy	Time management		
	Limitations on the international market				

**Source:** Rahman and Ramos (2011), p. 480.

Hanna and Welsh (2002) point out that in relation to large enterprises, SMEs have

a number of typical problems related to their process of innovation, especially from the stage of development to the stage of commercialization. SMEs have a greater problem with: financing of the research process, lack of qualified staff and fewer opportunities for replacing the relevant products on the market, limited product placement, etc. In addition to these, there is a number of other internal and external barriers that reduce and impede the successful implementation of the open innovation model in SMEs. However, these factors do not diminish the importance and necessity of applying the open innovation model for successful innovative development of modern SMEs.

## Conclusion

Open innovation model has been developing since the end of the twentieth century. It reflects the endeavor to exploit the available resources of knowledge and creativity. The open innovation model prefers the growing mobility of labor, especially highly creative. It accepts the spread of business risks and start-ups of entrepreneurial ventures, which is particularly suited to the development of the SMEs sector. The main advantages of the open innovation model are the wider possibilities of applying innovations, both of their own and those coming from the environment. This suggests a business model that is based on the determination that cooperation is better than the competition. The open innovation model offers great opportunities to all actors including SMEs, but at the same time they also carry great risks of their market survival. There are limitations that make it difficult to apply the open innovation model to SMEs. These companies have a shortage of resources, so their planning period relates most in the medium term.

The previously explored generation of innovations in any case can't be treated as final. On the contrary, with a great deal of confidence, it can be said that creativity and innovation will be the most valuable, both personal and group legitimacy and the most reliable “ticket for the future” for every future citizen of this single country. Therefore, some future analysts of these subjects will talk about the sixth, seventh, eighth and who knows to which generation of innovation.

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## CAUSES, MANIFESTATIONS AND REPRESENTATION OF THE SHADOW ECONOMY WITH REFERENCE TO SERBIA

### Abstract

*Shadow economy is a collection of economic activities which do not contribute to one country's GDP, which the state does not have control over and which are beyond the limits of legality. In this paper, we will show the causes, manifestations, consequences and representation of the shadow economy in Serbia. Likewise, we shall talk about the problem of assessing the shadow economy, about the factors causing it and about the systematization of its advantages and disadvantages. The shadow economy is still a big problem for the domestic economy even though Serbia has decided to fight it with different measures.*

**Key words:** shadow economy, tax evasion, economic system regulation, tax policy, the fight against the shadow economy

**JEL classification:** H26, O17

## УЗРОЦИ, ПОЈАВНИ ОБЛИЦИ И ЗАСТУПЉЕНОСТ СИВЕ ЕКОНОМИЈЕ СА ОСВРТОМ НА СРБИЈУ

### Апстракт

*Сива економија представља скуп економских послова који не доприносе БДП-у земље, над којима држава нема контролу и који излазе из оквира законитог пословања. У раду ће бити речи о узроцима, појавним облицима, последицама и заступљености сиве економије у Србији. Такође, ће раду бити изложен проблем мерења сиве економије, биће приказани фактори који је изазивају и извршиће се систематизација њених предности и недостатака. Сива економија и даље представља велики проблем домаће привреде, иако је Србија овом проблему сиве економије одлучила да се супротстави различитим мерама.*

**Кључне речи:** сива економија, пореска евазија, регулација привредног система, пореска политика, борба против сиве економије

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## Introduction

The fight against the shadow economy is an ordeal of every country in the world since this phenomenon is present around the globe. The European Commission states that the notion of the shadow economy implies illegitimate (illegal) activities performed in the aim of conducting economic transactions. Surely, participants in economic transactions are trying to do business on the margins of the economic system when they can benefit from it, but that means that the country's budget is left without its incomes on the basis of taxes and contributions which then leads to problems in financing social non-profit activities directly financed from the budget. Illegitimate or semi-legitimate shadow economy mechanisms are manifested in not paying fiscal obligations, such as taxes and contributions, not respecting and/or avoiding to do business in accordance with the regulations which then leads to the emergence of market disturbances and structural changes.

According to OECD, the grey or shadow economy is described as that segment of economy which covers illegal, illegitimate, hidden, informal and other non-registered production activities which cannot be covered by the statistical system of one country (OECD, 2002, pp. 11-15). Adam Smith defined the shadow economy as “a market-based production or provision of services, legal or illegal, performed in such a way to avoid detection in the official estimates of the country's GDP” (Smith, 1994). The shadow economy is most commonly defined as a collection of all non-registered economic activities not contributing to the GDP of one country (Schneider, 2011, pp. 2-3).

From the aspect of legality, the notion of shadow economy refers to all phenomena beyond legal regulative (the so-called informal economy) and contrary to the laws (the so-called illegal economy).

From the aspect of participants acting on their own, within groups or organizations, and who do not declare themselves, who are not registered anywhere and do not pay taxes, we differentiate between three types of economy – undeclared economy, unregistered economy and evasion. Hence, the shadow economy can be observed as a non-regular economy and black economy and in both cases it signifies the striving of market participants to obtain illegal benefits. The presence of the shadow economy causes the existence and expansion of black economy as an illegal form of business activities.

A wide range of the shadow economy always causes disturbances in the allocation of GDP, at both macro and micro levels. At the macro level, the shadow economy causes disturbances in the global allocation of incomes between the economy and the country which reduces budgetary incomes and the level of tax burden placed on the total economy. In trying to place money in the budget, tax authorities will, due to the rise of the shadow economy, compensate tax losses by increasing tax rates. That, on the other hand, burdens the tax-paying population, thus increasing their expenses and reducing competitiveness. Illegal financial transactions can be performed by a narrower circle of citizens having bigger incomes which consequently leads to an income increase at the expense of those with lower incomes. At the micro level, the shadow economy creates great inequalities in the burdening of tax payers by questioning the principle of tax burdening towards the economic power of taxpayers. In that way, shadow economy disables the realization of an adequate tax policy.

According to the volume of the shadow economy, Serbia unfortunately takes an infamous place and is on the top of the list of European countries. Visible manifestations of the shadow economy in Serbia are tax evasion, market distortion, disloyal competition and

inefficient allocation of resources. Difficult conditions in Serbian economy, such as inflation and sanctions, have led to people opting for the shadow zone out of sheer necessity while simply trying to survive.

### **Causes, forms and consequences of the shadow economy**

The main factors leading to the existence and expansion of the shadow economy are: doing business in uncertain conditions (war, natural disasters), economic conditions followed by long-term developmental crises, high reduction of production and aggregate offer, decrease in the standard of living followed by an increase in the number of unemployed people, general uncertainty regarding the legal and economic systems, lack of trust in the financial system and fear from inflation due to past experiences, lack of will and a systematic approach in making regulations against the shadow economy, as well as a tolerant attitude of the government, especially in the field of foreign trade. The causes of the shadow economy can be systemized in different ways, and according to how they occurred, they can be observed as: economic (inflation, high tax rates, mild penalties, high profit), psychological (lack of trust in the country, disagreeing with state measures, personal attitude to risk) and opportunity-based (education, work experience). According to Novaković (2015), the primary cause of the growth of the shadow economy in Serbia are neoliberal models of transition, privatization, the degradation of the social country and the erasing of achieved social and economic rights of the employees, dependency on the international community and institutions, low activity and employment rate, i.e. high unemployment rate of the working-age population, low rate of work productivity, weak legal state and the lack or inefficiency of institutions relevant for the functioning of the market economy, restrictive work and social legislations safeguarding employers instead of employees, tax system weaknesses, high level of population poverty, unstable business and people's ethics, i.e. the existence of bribery and corruption.

The participants in the shadow economy can make a decision to perform a certain illegal activity in its shadow forms for the following reasons (Schneider, 2006, p. 5):

1. Avoiding to pay value added taxes, income taxes or other forms of taxes;
2. Avoiding to pay contributions for the social insurance categories;
3. Avoiding to apply the prescribed work standards referring to, for example, the amount of minimum wage, max work hours, work safety standards, etc.
4. Avoiding to harmonize one's business with the prescribed administrative procedures such as, for example, avoiding to deliver or show financial business reports.

The shadow economy appears in different forms and in all areas. The manifestation forms of the shadow economy are reflected in: an illegal import and export; unregistered entry and export of foreign currency; the withdrawal and retention of cash outside the payment channel, the smuggling of goods into the domestic market, the keeping of goods outside of circulation; selling of goods on the black market; tax evasion, the use of work hours for private purposes, unregistered provision of various services, incomplete revenue coverage; illegal construction, unlawful appropriation of common premises in residential buildings, misuse of official, business and public position, usurpation of public goods, etc.

Table 1: Shadow economy forms in the field of legal and illegal activities

Activity type	Monetary transactions		Non-monetary transactions	
Illegal activities	Trade of stolen goods, production and circulation of drugs, gambling, trafficking, smuggling, frauds, etc.		Exchanging (bartering) drugs, stolen and smuggled goods, production of drugs for personal use, theft for personal use.	
Legal activities	Tax evasion	Tax avoidance	Tax evasion	Tax avoidance
	Unregistered incomes made by self-employment activities; wages; incomes; fees; incomes made in unregistered business activities related to legal services and product circulation.	Employee discounts; benefits which enable participation in tax avoidances, etc.	Trading legal goods and services.	Business activities based on the “do it yourself” principle and jobs performed with the help from friends.

Source: Schneider & Buehn, 2018

Societies characterized by a high shadow economy rate, justify the lack of power to repress it by stating that people are by nature prone to performing shadow economy activities (Tomaš, 2010, p. 45). The shadow economy is much less present in democratically organized societies, while its presence grows with an irrational use of budgetary resources and inadequate supply of goods and services. The shadow economy is usually observed through its negative sides because it primarily implies the lack of public incomes that would be present in the normal realization of economic activities. According to Tomaš (2010, p. 46), the wide range of the shadow economy points out to the lack of elementary functions of the modern country, meaningless of the existence of state institutions, as well as to the disturbances of the value system that crosses the borders of the achieved civilizational level of the modern society. Hence, the presence of the shadow economy is more related to poor state efficacy on the matter of solving social and economic issues than to the unawareness of citizens. However, its occurrence can bring certain advantages to a certain society. According to Uzunoglu, Yuruk, & Atakisi (2002), the shadow economy can contribute to an increase in competitiveness and dynamics of the economy, affect the employment growth and ensure economic resources, make impact on the multiplication effect, etc.

The shadow economy has a negative impact on the economic efficacy for several reasons: it increases transactional costs; consumers are getting products of poor quality or without guarantee; consumers and the environment are exposed to an increased risk because companies in the shadow economy are avoiding safety and ecological standards; it has a negative influence on poverty and inequality because employees in the shadow economy often do not have social and health insurance; the state does not get all the tax and permit incomes that would exist in legal conditions which can further cause a series of negative consequences. The last reason is especially important for states facing fiscal consolidation challenges – like the Republic of Serbia (Golubović & Džunić, 2015).

The shadow economy indirectly affects the growth of tax burden of all entities doing business in the formal sector, the decrease of the standard of living, the negative perception about the state authorities, the degradation of the legal order, as well as the public’s lack of trust in state institutions. It leads to the occurrence of unreliable statistical data relevant for

establishing economic characteristics and social distribution which then makes us question the decisions and effects of the realization of economic policies. Likewise, it has a negative impact on market competitiveness because market participants doing business in the shadow economy do not pay taxes or do so in a significantly lower range than legal companies and in that way gain disloyal competitive advantage on the market. However, companies from the shadow zone do not have access to developmental programs or loans and the support of the official institutions, so these companies can become inefficient and can contribute to a slower development and the application of modern technologies and knowledge.

GDP per capita and the shadow economy are co-dependent, i.e. when GDP per capita decreases, the shadow economy increases. In essence, this means that if GDP is decreasing, the pressure on the shadow economy is increasing because economic entities of reduced business possibilities in the formal sector will try to compensate losses by being engaged in the shadow zone. For these reasons, and in the direction of formalizing the shadow economy, it is important to maintain macroeconomic stability and create conditions for economic growth.

The survival of the shadow economy owes plenty to corrupt governmental structures, so the participants in the shadow economy are often financiers from corrupt social layers. The phenomena of corruption and tax evasion are constantly present and directly determine the structure and dynamics of the shadow economy in every country (Dreher & Schneider, 2006; Buehn & Schneider, 2012). According to Mulgan (2012, p. 25), the negative connotation and harmfulness of corruption, which is often reflected in the form of nepotism, cronyism and bribery, comes from an apparent abuse of power.

Corruption in Serbia is very much present and is often defined as one of the most important problems in the country. On the scale from zero to one hundred, zero signifying high corruption rate and one hundred signifying no corruption at all, in 2018 on the matter of corruption in the public sector, Serbia scored 39 points and took the 87th place out of 180 analysed countries, whereas countries with a higher ranking have a higher level of corruption (Transparency International, 2017). A research carried out on the sample of 343 respondents proved that corruption in Serbia is very much present. Namely, 35.3% of all respondents stated that their friends, family or they personally had at least once in their lives bribed somebody (Đekić, Čukanović-Karavidić, & Filipović, 2017). Also, research in our country show that corruption stands out as one of the biggest problems of citizens, just behind poverty, unemployment and crime, as well as that it is present within the system, so it seems the citizens have accepted corruption and that kind of behaviour as socially acceptable (Tanjević, 2016).

### **Methods of assessing the shadow economy**

Scientific research activities should be focused on developing internationally comparable methodology of assessing the shadow economy in order to avoid possible misunderstandings and poor estimates of the shadow economy, corruption and fiscal frauds (Zaman & Goschin, 2016). The shadow economy can be assessed, i.e. its participation in GDP can be estimated regardless of the fact it appears to be something beyond the state control reach and the fact it is not covered by the official statistics. According to Andrei (2011), the share of the shadow economy in GDP is an indicator determining the size, intensity and negative impact of the shadow economy. Quantifying is possible thanks to the

traces the shadow economy leaves behind, hence the system of forensic revision enables more precise assessments. Forensic accounting should overlook and assess such actions, provide independent and unbiased opinion and give evidence for an illegal action. Previously explained forensic accounting is of curative type, but there is also one that is preventive and whose task is to prevent the occurrence of illegal economic and financial actions (Đekić, Filipović, & Gavrilović, 2016).

Most commonly used methods for quantifying the shadow economy are (Bešlić & Bešlić, 2009):

1. Discrepancy between expenditures and incomes – An individual or an organized privileged group can avoid reporting their incomes or they can report them but only partially. However, the largest portion of incomes is, at one point, expressed as an expense when making new investments. There are numerous reasons for not reporting one's incomes, hence the estimates of GDP are considered biased. There are many reasons for the existence of the discrepancy between the initial estimate of reported incomes and final incomes. This hypothesis has been proven in practice.
2. Labour market method – The size of the shadow economy is indicated by low participation rates compared to the previous period or to rates measured in different countries where the phenomenon of the shadow economy is not that much present. The discrepancy between the official and the usual rate determines the size of the labour force participating in the shadow economy. If we add incomes to this number, we get an estimate of the size of the shadow-economic activities in an absolute amount of money. Surveys about the use of work hours are used as a method of calculating the shadow economy. They point out to how certain categories (e.g. employees on side jobs, retirees) use their available time which indirectly tells us what categories are involved in the shadow economy activities. When a research is carried out on a representative sample, the results can be extrapolated and in that way we can get the quantity of the shadow economy for the economy as a whole.
3. Tax revision method – it refers to the active engagement of tax structures in identifying shadow incomes. It is achieved via tax revision that emphasizes information about, for example, what groups and professions most commonly do not report or partially report their incomes. Various methods are used when choosing the population sample. Random sample is the most common one, but discriminatory procedures are sometimes used in order to develop an algorithm for selecting tax payers most suitable for the calculation.
4. Monetary method – it is based on the assumption that individuals hiding their activities also change the pattern of money use. One of the basic methods is based on the assumption that cash transactions are less visible and more difficult to be noticed than non-cash transactions. Therefore, participants in the shadow economy prefer cash, and changes in structure and the amount of cash are indicators that can help in estimating the shadow economy. A more complex method implies the analysis of the relation between cash and sight deposits in banks.

How much shadow economy is present is estimated based on the following three methods:

1. MIMIC method is based on modelling and it covers the widest range of economic anomalies since it covers all the institutional sectors and all forms of the shadow economy (profit tax, property tax, fees, etc.);
2. Household Tax Compliance Method – covers those forms of the shadow economy which can be estimated based on the data about the incomes and consumption at the level of households;
3. Surveys about how companies and entrepreneurs do business.

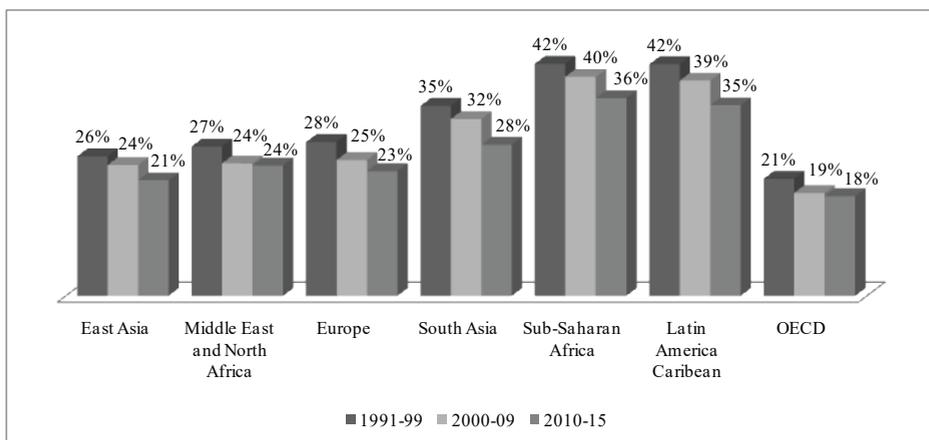
Estimates obtained by the MIMIC method give a bit higher level of the shadow economy than those obtained by the direct method since MIMIC covers the shadow economy of unregistered business entities.

### The range of the shadow economy in selected countries and in Serbia

The shadow economy is a highly complex research field demanding comparisons at the national level which can impact the decisions about the domestic and international business environment, estimates about state governance, private and public sector, direct foreign investments, etc. (Buehn, Lessmann, & Markwardt, 2013; Charles, 2011). In the aim of reviewing the problems and representation of the shadow economy in Serbia, it is necessary to consider the level of this phenomenon in other countries. Surely, when analysing movements of the shadow economy through time intervals and comparing different countries, it is necessary to consider the method that was used to assess the shadow economy in a certain country in the given time frame.

The following Graph shows the share of the shadow economy in GDP at different regions and observed within three time intervals covering the period starting from 1999, ending with 2015. The authors Medina & Schneider (2017) analysed 158 countries and established that, for the period from 1996 to 2015, the average height of the shadow economy was 32.5% of the GDP, whereas in 1991 it was 34.82% and in 2014 it fell down to 30.66% of the GDP.

*Graph 1: The shadow economy by regions – average amounts as % in the GDP*

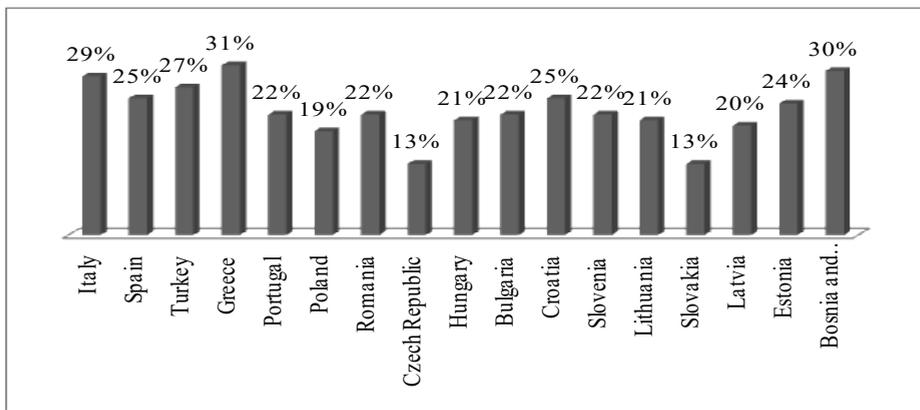


*Source: Medina & Schneider, 2017*

From the previous Graph, we can see that the lowest share of the shadow economy in GDP is present in OECD countries, then in the European countries, countries of Eastern Asia, Middle East countries and North Africa, and the highest share is in the sub-Saharan Africa and Latin America.

According to Schneider, Raczkowski, & Mróz (2015), the average level of the shadow economy in the European Union was 22.6% of GDP in 2003 and it decreased to 18.6% in 2014. According to one research that included 158 countries and the period between 1991 and 2015, the average share of the shadow economy in GDP was 31.9% (Medina & Schneider, 2018, p. 23). The following Graph shows the share of the shadow economy in GDP of South and East European countries for 2015.

*Graph 2: The shadow economy in the countries of South and East Europe for the year 2015 (in % of the GDP)*



*Source: Krstić & Radulović, 2018*

It must be mentioned that the institutionalization of the shadow economy in developed countries is much higher than in the East European countries which means that the share of the shadow economy in GDP of those countries is at a much lower level – a consequence of a long and difficult struggle of the developing countries with the shadow economy.

Talking about our country, we can say that the shadow economy got more prominence in the war and post-war period because illegal activities going on during the war continued to exist afterwards. The transition period in our country is characterized by speculation in the purchase of social housing and in the process of privatization of state and social enterprises, often followed by organized crime. The country that was in the economic crisis was not ready enough to direct economic flows and fully control the market in the process of transforming the economic system. When dealing with organized crime, in addition to the presence of corruption, smuggling and illicit trafficking, there are various forms of falsification, “money laundering”, abuse of authority and official position, especially in Serbia. Nevertheless, the most significant form affecting the entire population of one country is precisely the tax evasion, or the avoidance of tax payments or the conscious violation of regulations by which every country regulates their tax system. Tanjević, Galjak, & Opačić (2012) argue that financial misbehaviour in Serbia is most often manifested in the form of avoidance of

customs duties, various types of taxes, excise duties and services, as well as other taxes and fiscal obligations that represent an important source of public revenue. Likewise, according to Raonić & Vasić (2014), phantom companies in Serbia serve the purpose of VAT evasion, which, due to the concept of credit reimbursement, enables a specific type of abuse.

In Serbia, the shadow economy is not only a consequence, but also the cause of the reduced GDP. According to Schneider (2016), the shadow economy in Serbia has an exceptionally high level when observed in comparison with GDP. The same source states that when using different methodological approaches for 2010, the following results were obtained: the estimated value of the shadow economy according to the MIMIC method was 30.1% of GDP; According to HTC (Household Tax Compliance) method this value was 23.6%. Using the survey method, it was concluded that the value of the shadow economy in Serbia in 2012 was 21.2%. According to Krstić & Schneider (2015, p. 49), by using the MIMIC method, the value of the shadow economy was as high as 33.2% in the previous decade or in 2001. The following table shows the extent of the estimated shadow economy in Serbia, shown in % of GDP, measured by various methods.

*Table 2: The range of shadow economy in Serbia for the period between 2010 and 2017 (% of GDP) – different methods*

Estimation methods	Year	Shadow economy in % of GDP
HTC method	2010.	23,6%
MIMIC method	2010.	30,1%
Direct survey method	2012.	21,2%
Direct survey method	2017.	15,4%

*Source: Krstić & Radulović, 2018*

According to estimates by the 2012 Survey Method, the shadow economy in enterprises and at entrepreneurs was about 21% of GDP. These data were obtained by observing the two most important forms of the shadow economy - product turnover and partially or completely illegal work (Krstić, et al., 2013, p. 4). Systematized data from the above-mentioned survey showed that the shadow economy in Serbia is 15% higher than the average of Central and Eastern European countries, which suggests that the tax gap in Serbia is so much higher than in the mentioned countries.

Using the 2012 survey method in 2017 on the sample of economic entities that participated in the aforementioned earlier research, it can be concluded that the volume of the shadow economy in the area of turnover and earnings has been reduced. Also, according to Krstić & Radulović (2018), salaries of employees in the shadow economy accounted for as much as 61.3%, while the rest comes from unreported profits.

Based on the data presented in the table, it can be concluded that the estimated amount of the shadow economy on the basis of the Survey is the lowest: companies achieve shadow economy in other tax forms, such as income tax, property tax, fees, etc. However, there is a part of the shadow economy achieved outside of the company (handymen, private classes, etc.). By comparing these results with estimates obtained by the MIMIC method, it can be said that 2/3 of the total shadow economy is scooped in companies and at entrepreneurs' in the form of an illegal turnover and employee payments without paying all tax liabilities.

According to Krstić, et al. (2013), the reduction of the shadow economy in the medium term (up to three years) could increase public revenues by about 0.8-1.1% of GDP, while in the long term (from five to seven years) it may be expected to increase public revenues to around 2% of GDP. Such effects would be possible if adequate measures to reduce the shadow economy were being implemented through an organized, continuous and systematic approach. The taxation of the shadow economy should contribute to the reduction of the fiscal deficit as well as to offset the fall in tax revenues due to the expected restitution of the economy towards less taxable activities - exports and investments.

In January 2018, the Minister of Serbia announced the reform of the tax administration, which is one of the most important steps in the recent battle against the shadow economy. The plan envisages the establishment of thirty-five offices across the country, investment in a new IT platform, and the discretion of tax inspectors to waive the collection of corporate tax, provided that the economic subject invests this money into production (Culkin& Simmons, 2018, p. 21).

## Conclusion

The shadow economy can be explained and defined in various ways, though the essence of the term remains the same. Irrespective of the preferred definition, it refers to all economic flows, actions and related income that are not subject to taxation, as well as to any valid regulation. More precisely, the extensive definition of the term shadow economy includes all illegal activities, ranging from unrecorded revenue from goods and services turnover, through financial transactions and barter arrangements, to business activities in a self-directed manner. The shadow economy implies the production and trafficking of illegal or legal products and services that cannot be detected by official methods of GDP estimation. On the other hand, it can be said that the shadow economy also includes market-based production of licensed products and services that are clearly concealed and excluded from the range of control bodies of public administration. In other words, the shadow economy is a market-verified part of the legal economy that takes place in an illegal manner. The spread of shadow economy also encourages the spread of the black market and the black economy as a forbidden form of business activity. The development of the shadow economy is favoured by insufficient power or insufficient interest in the legislative and government structures to fight against the shadow economy, its manifestations, and all the negative economic misconduct.

Shadow economy is a significant obstacle to the development of strong private sector enterprises and an efficient market system. The shadow economy faced by the Serbian economy is one of the biggest challenges and its consequences are visible in the area of tax evasion, market distortion, unfair competition and inefficient allocation of resources. Although the shadow economy is still important for many individuals, the negative consequences for the employed, the economy and society as a whole far outweigh all its benefits. The share of shadow economy in Serbia's GDP, measured by various methods of assessment, is at a high level, and new reforms and measures should influence the reduction of the level of this negative phenomenon. Serbia has prepared a set of measures and an action plan to combat shadow economy, and the most important place in this struggle against the shadow economy belongs to the tax system of the country. The main goal in reducing the shadow economy and the tax gap in Serbia is their reduction to the level of Central and Eastern European

countries in mid-term, while in the long term this goal could be to approach the levels of Western Europe. This is important due to the increase in tax revenues, the development of a market-driven economy and European integrations.

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## IN MEMORIAM

### **Dragoljub Simonovic (1935-2019)**

Writing and creating for economy is serious business, similar to creating in the other sciences, and it is done with great responsibility. I was introduced to Professor Dragoljub Simonovic by his colleague and friend Zivorad Zlatkovic fifty years ago at the Faculty of Economics in Nis. The introduction was short, for we soon began a conversation about the economy, especially the economy of our agriculture, about which Professor Dragoljub had already written extensively, paying great attention to it. I immediately noticed that he was different from many creators in economics because he possessed universal knowledge.

Simonovic obtained his university education at the University of Skopje, and had further advanced training in: France, Belgium, Switzerland, Italy, Germany, Austria, Hungary, Romania, Bulgaria, Czech Republic, Slovakia, Russia, Ukraine and Greece. About the work of D. Simonovic, there have been published several news vouchers and over 300 distinguished articles.

He has been translated into world languages, and his textbook *The Economics of Agriculture* (the first post-war textbook of its kind) has been translated into Chinese (Beijing, 1982) and Italian (Lugano, 1992).

He was listed in the publication of the American Bibliographic Institute and was selected as *The Personality of the year* in 2000. (*The International Directory of Distinguished Leadership*, North Carolina, U.S.A, 1998). He was listed because of *Who's Who in Serbia* in 1995; *WHO IS WHO IN YUGOSLAVIA* 1970; and *ENCYCLOPEDIA OF THE SERBIAN PEOPLE* 2008

At the very beginning of his profession, Simonovic had already participated in turbulent events at the Faculty, where he spent his entire working life from assistant to full-time professor and emeritus professor (from 1962 until his retirement). During his work of many years, he always tried to be independent, thinking with his own head, but naturally, he knew that nobody was perfect. He had in mind everything that other creators thought about economics, but he remained original in his views and fought for them. The old professor, who combined economics and professional experience, was in fact a kind of enriched creator in the pedagogy of economics. He adhered to a logical-analytical commitment in immersing himself in the professorship and a role of a professor. He lectured to many generations of students at the Faculty of Economics in Nis, Belgrade, Novi Sad and Lugano. He cultivated respect for everything progressive in agrarian economics, equally in the views of scholars of different ideological orientations. Because of this trait, there were always many young people (students and scholars) around him who enjoyed his lectures and discussions, anthological memories of his colleagues in economics, especially those who tangled with the problems of farmers. .

This way Dragoljub, enthralled with his *Agrarian Economy*, continued to multiply texts about his research. He would always, he used to say, recall the reforms in our agriculture by blaming the responsible ones, but of course he was pleased when other connoisseurs of our opportunities in the agrarian community recognized and supported his views and attitudes.

With excitement, Professor Simonovic told me that he was editing the international journal for economic theory and practice and social issues "Economics" in Niš with a lot

of problems. And it was not easy for him, during his editing, the most eminent people from our country and abroad were publishing their scientific papers, and all scientific responsibility had to be submitted stoically. Professor Dragoljub was involved in all the external and content forms of the journal, which in difficult economic conditions (along with it) continued to be shaped by his son Professor Zoran. He said that he felt his son as a younger colleague who resisted all the temptations of working in a magazine, and his associates, especially from the Faculty of Economics in Nis, as very altruistic and important.

Professor Simonovic collaborated with the greatest thinkers in the field of agriculture from the country and abroad. He was respected by his colleagues from the Faculty, which is why he was often elected to many positions in the city, Serbia and the former SFRY - of which he was deputy.

Each encounter with Professor Simonovic was a literal economic experience - endless stories in which economic science constantly lived. He would often refer to his former colleagues who were no longer alive, and who had all been forgotten, that they were the best interpreters of science in this part of Serbia. He was able to understand others, which is why he cited many in his textbook.

He prepared and edited the ENCYCLOPEDIA OF NIS (four volumes, 1995 - 1996), and the monograph of the Faculty of Economics in Nis (1960 - 2000).

He was a member of the Scientific Society of Economists of Yugoslavia, the Association of Serbian Writers, President of the Association of Scientists and Artists of Nis, and was professor at the invitation of the Interuniversity Center in Lugano (Switzerland) since 1992.

He received the October Award of the City of Niš, the Order of Work with the Gold Wreath, numerous charters and plaques, thank-you notes and other awards.

Dragoljub Simonovic published over 1000 papers in various publications in the country and abroad. He was the manager of over 30 scientific projects funded by the Ministry of Science and other contracting authorities.

Total work of prof. D. Simonovic can be divided into Scientific (13 monographs, 17 textbooks, 4 encyclopedias, 4 ethno-anthropology and history, writing down folk songs, stories, proverbs and more, publishing) and Literary (4 collections of poems, 3 Vidianstva in Serbs trilogies, 3 other collections, 6 anthologies of folk songs and poetic records).

The emergence of a comprehensive and comprehensive study of the economics of agrarians in Professor Simonovic's Serbian economic public was an event worthy of attention. When an author publishes an economic study of an agrarian, which belongs to the central areas of his field of expertise, then it is certainly an event worth noting. In this study, Simonovic pointed to many problems in our agriculture, offering solutions.

He was a mentor for several master's theses and doctoral dissertations or a member of the defense committees.

Ph.D. Borivoje B Prokopovic

## IN MEMORIAM

### **Dragoljub Simonovic, (1935-2019)**

Dragoljub Simonovic, professor, writer, encyclopedist and anthologist, has died. Born in Vilandrica (Zaplanje) in 1935. He published a brilliant monograph on the Capture of the 80s (950 pages) that aroused great interest from the then scientific public. Studying folk art related to the Kosovo legend, he sought an opportunity to understand the pre-Kosovo culture-paganism. He spent his inexhaustible gift on exploring the very essence of folk art and the reflections that only the dedicated and talented reach. In his books, often unusual for the scientific public, Simonovic linked paganism to the Serbian name and named it Vidijanstvo in Serbs. Since then, many controversies follow his work, which is not subject to conventional views. I remember Antoni Isakovic and his words: "your professor Dragoljub Simonovic's book Nikola Vratkovic The Emperor of Kosovo and God deeply upset me, after reading it for a long time, I couldn't sleep." This book was provocative to the scientific public because it offered an interesting answer to the question who is Milos Obilic? Dragoljub Simonovic has written over 5000 songs, published over 600. As for the proverbs, folk tales, sayings collected by Professor Simonovic, he needs institute work to fully study his legacy. Simonovic was also an accomplished anthologist. He has published six anthologies of folk songs. His rich opus includes over 1000 works published in publications at home and abroad. He was the manager of over 30 scientific projects funded by the Ministry of Science and other contracting authorities. Dragoljub Simonovic was a member of the Yugoslav Parliament and at that time a well-known socio-political worker. He was selected by the American Biographical Institute in 1990 and left with a curated and unpublished collection of 1,200 folk songs. Simonovic's work has yet to be valorized, as significant researchers and artists who have lived and lived outside Belgrade are often unjustly neglected.

Nis would have to award one for the scientific contribution to Dragoljub Simonovic along the streets for 27 actors. Gadjin Han too. He deserved it.

Ph.D. Vukasin Kostic



Respected reviewers,  
I would like thank on selfless contribution you gave in the process of quality improvement of papers published in journal EKONOMIKA.

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