

FAKULTET ZA EKONOMIJU I INŽENJERSKI MENADŽMENT U NOVOM SADU

Ekonomija

teorija i praksa

Economics
Theory and Practice



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UNIVERZITET PRIVREDNA AKADEMIJA U NOVOM SADU
FAKULTET ZA EKONOMIJU I INŽENJERSKI MENADŽMENT U NOVOM SADU
Cvečarska 2, 21000 Novi Sad
tel./faks: 021/400–484, 469–513
redakcija@fimek.edu.rs

Glavni urednik
Prof. dr Marko Carić

Zamenik glavnog urednika
Prof. dr Dragan Soleša

Sekretari redakcije
Marija Sudar
Katarina Soleša

Lektor i korektor za srpski jezik
Marija Sudar

Lektor i korektor za engleski jezik
Kristina Marić

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Izdavački savet:

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ORIGINALNI NAUČNI RADOVI

ANALYSIS OF GOOD PRACTICES AND PERCEPTIONS OF STAKEHOLDERS TO SUPPORT THE DEVELOPMENT OF DOMESTIC MARKETS

Prdić Nedeljko¹

Čavlin Miroslav²

Kaiaman Nasser Khalifa³

Abstract: *Intense competition and changes in the global market have also affected the markets, which are strategically being redirected to the sale of organic agricultural products and tourism using the traditional importance and position in the infrastructure of cities. The primary goal of the research is to create strategic guidelines for the development of markets in the Republic of Serbia, but based on the identification of globally competitive business examples and the views of management, sellers and buyers on the potential of domestic markets. The research methodology includes descriptive, quantitative and qualitative analysis that resulted in the presentation of effective business solutions on the global market and priorities for developing the potential of domestic markets. In addition, through a survey survey*

¹ JKP „Tržnica“ Novi Sad, Žike Popovića 4, 21 000 Novi Sad, e-mail: nedeljko.prdic021@gmail.com

² University Business Academy in Novi Sad, Faculty of Economics and Engineering Management in Novi Sad, Cvečarska 2, 21 000 Novi Sad, Serbia, e-mail: cmiros@gmail.com

³ University Business Academy in Novi Sad, Faculty of Economics and Engineering Management in Novi Sad, Cvečarska 2, 21 000 Novi Sad, e-mail: nasserkaiaman@gmail.com

of the attitudes of the management of relevant market organizations, the motives and needs of reference sellers and buyers in the markets, the perception of key actors on the state and prospects of the domestic market business was ascertained. market of organic food and tourism, as well as the necessity of creating a national framework for the development of domestic markets. Therefore, the results of the conducted research can especially benefit the creators of local and national economic policy as an instrument in improving the business environment, and domestic market organizations and actors a better insight into the possibilities of using and developing potential.

Keywords: *strategic analysis / markets / competitive / marketing / tourism.*

INTRODUCTION

Marketplaces are the oldest market institutions dating back to the Middle Ages. In addition to trade in traditional products, they also represent national culture, local culture and long-term tourist potential. In addition to the specific trade in local goods, they are interesting to tourists and are placed regularly in the tourist itineraries. With the development of productive forces, relations and traffic, over time, they became large organised trade spaces, ie closed and open spaces where sellers sell goods (Morales, 2011), and almost always in the city centre.

Namely, along with the growth of global tourism and a large increase in the number of tourists and international travel, there was a saturation of visits to standard cultural monuments, historic buildings, etc, so the central streets and town squares with marketplaces have become places where you can feel the spirit of local life and culture. Historically, the evolution of the marketplace has been linked to people's lives (Prdić, 2021). Satisfying the needs of tourists and developing the tourist offer of the city enables the realisation of appropriate economic effects that are a consequence of the development of the tourist function, and which are manifested not only in tourism organisations but also in a number of other economic and non-economic activities (Vujović et al., 2012). It should be borne in mind that marketplaces as business entities are exposed to various risks on a daily basis, from currency risk to risk of sales, procurement, loss of assets, etc., which determine their business, which

requires integrated management (Čavlin & Tepavac, 2020). Profitability and liquidity stand out as basic measures of sustainability and operational flexibility and represent the focus of the management orientation of modern companies (Čavlin & Vapa-Tankosić, 2021), and thus the marketplace. Marketplaces are market institutions that have a global significance in the world trade in agricultural products and universal significance for the presentation of the tourist potentials of individual countries. Marketplaces are an indicator of the socio-economic condition of the population, i.e., an indicator of the situation in agriculture and agriculture, and the overall economy (Kuzman et al., 2020), so it is advisable to create sustainable business models for marketplaces, and changes in the environment.

Therefore, the subject of research is the market, as a specialized market institution, which in developed societies has transformed into drivers of the development of not only tourism, but also the overall social potential of local communities. The goal of the work is to determine strategic guidelines for improving the strategic position of markets in the Republic of Serbia, starting from the solutions of good business practices on global markets and the attitudes, motives and needs of key local actors. In this regard, the initial hypothesis is that the creation and implementation of strategic guidelines for the development of domestic markets can bring multiple positive effects for tourism, the economy and the entire society. The paper is structured as follows. In the Research Methodology section, the applied methodological procedure is explained, followed by the Research Results and Discussion section, which includes the analysis of examples of good practice, the perceptions of key actors, and the perspective of market development in the Republic of Serbia. recommendations for further analysis.

Research methodology

In order to achieve the goal of the paper, with the analysis of the literature and a descriptive approach, special methods of cognition and research were used, and primarily comparison by inertia. Therefore, for the crystallization of the results of the research on the strategic position of the markets in the EU, the PEST method was used, which focuses on the analysis of the external environment of the markets. The survey of the attitudes of the management of the relevant marketplace organisations

was conducted in June 2020 through a telephone questionnaire, lasting about 10 minutes. The survey of the attitudes of sellers and consumers was conducted in June 2021, on weekends at the Zeleni Venac Marketplace in Belgrade, the Fish Market (Riblja Pijaca) in Novi Sad and the Fortress Market (Tvrđava) in Niš. Survey of the attitudes of the management of relevant marketplace organisations on the position of marketplaces in the Republic of Serbia was conducted through a telephone questionnaire on a sample of 17 (N=17) relevant market organizations (management) in the Republic of Serbia. The survey conducted on the motives and attitudes of sellers about potential markets was conducted in selected cities of the Republic of Serbia, and the interview was conducted through a questionnaire on the markets Zeleni Venac Marketplace in Belgrade, the Fish Market (Riblja Pijaca) in Novi Sad and the Fortress Market (Tvrđava) in Niš, on a total sample of 135 (N (135) sellers – 45 at each market. A survey of the motives and needs of customers was conducted at selected markets of the Republic of Serbia, and the interview was conducted through a questionnaire at the Zeleni Venac Marketplace in Belgrade, the Fish Market (Riblja Pijaca) in Novi Sad and the Fortress Market (Tvrđava) in Niš, on the total sample of 150 (N = 150) sellers - 50 on each market. The SWOT method was used for the strategic analysis of markets in the Republic of Serbia, that is, the identification of internal and external factors that affect their business, and the author's experience is a special aspect of the practical contribution. Data from secondary sources of information were also collected.

Research results and discussions

Strategic analysis of the position of marketplaces in the markets of the European Union using the PEST method

In most developed EU countries, marketplaces survive as a distribution channel between production and consumption. They operate on the principles of good hygienic maintenance and efficient management based on knowledge and modern technologies, since the efficient operation of markets directly affects the lower costs of product marketing. High marketing costs have the role of reducing costs for farmers and higher prices for customers, and an inefficient market increases the risk of poor hygiene as well as care for the environment and especially the production

of organic products. The existence of the "central marketplace" as well as city halls, churches and other buildings, is the basis and engine of urban growth, development and ensuring the sustainability of the economy (Janssens, 2013). Of special importance and role for the development of wholesale markets and markets is the World Union of Wholesale Markets (WUWM), which was founded in 1958 with the aim of: providing international promotion of wholesale marketplaces and wholesale markets, increasing the efficiency and effectiveness of wholesale markets and the marketplaces and increasing the role of wholesale markets and marketplaces within the food sector as a whole.

The role of the marketplace has changed to a special extent in this century, with the change of distribution and sales channels. The total volume of the product market is 26 million tonnes per year, which is approximately 40% of the supply of fruit and vegetables in Europe (24 million tonnes per year), 10% supply of fish and fish products in Europe (1 million tonnes per year), and 2% from meat and meat supply to products in Europe (1 million tons per year) (www.wuwm.org) The management of wholesale markets and marketplaces in the EU is based on the controlled development of the market. Assumptions of the functioning of markets in the EU based on the analysis of competition and marketing environment include certain aspects in the form of implementation of plans. As a suitable method for analysing the business environment of markets in the EU, we have chosen the "PEST" method.

Political factors, in terms of EU policies when it comes to marketplaces are implemented through the harmonisation of the principles of functioning of markets in the public and private sectors. This alignment is implemented through government strategies and policies through public marketplace interventions to:

- Ensure the supply of various organic products
- Establish criteria and guidelines for maintaining fair trade and competition between producers, distributors and sellers of organic products
- Provide quality standards and quality levels
- Precise criteria for classification of significance and historical role of marketplaces for tourism development

- Invest in marketplaces that represent historical, archaeological and urban assets
- Spur the urban development of the city or re-revitalisation of marketplaces for the purpose of tourist offer.

In addition to the above, the EU implements preferential legislation, tax policy, employment, government decisions through legislation, and especially legal frameworks that are specific to the development of marketplaces and marketplace tourism based on the specifics of individual countries and local climates. The most important laws are those on environmental protection and human health. The standards applied in the EU from the ISO 14000 series contain standards related to environmental aspects of application in organisations, and standards related to the product. Groups of standards related to environmental management refer to specific organisations (14001-14004), through the introduction, review and management of the environmental protection system. Standards (14031-32) refer to the evaluation of environmental performance, measuring the impact on the product during the entire production cycle.

Economic factors are primarily related to the legally defined roles that marketplace defines in the organic food trade sector and especially in the tourism industry. The strategy of the economic role of the marketplace is defined individually in all EU countries, depending on the national economy of the country and compliance with certain standards. State, regional and local authorities have the legal competence to apply the legislation and tourism rules it establishes the market of each country, respecting the adopted norms and rules of the EU. In some countries, the economic policy of the government enables and encourages the realisation of economic benefits for marketplace stockholders. This strategy is easier to achieve in developed economies. The exclusivity of the city's marketplace position gives the possibility of applying local tourism strategies. Today, marketplaces are global institutions of importance for national economies and, according to modern trends in tourism, represent a turn in interest at the beginning of this century. However, this is an issue that mainly concerns local authorities, unless marketplaces are national cultural assets and require decisions by national governments and protection as cultural and infrastructural assets.

Socio-cultural factors are particularly clearly defined, and the established socio-cultural rules of the marketplace through effective and managerial control. In our country, however, expenditures for primary social needs achieve an increasing share in the budget. (Mihajlović et al., 2022). Depending on the organisation of the authorities of certain EU countries, there may be certain conflicts over cultural goods at the national and local level due to the application of the rules of exclusivity for the economic benefit of marketplaces of historical significance. For the purpose of efficient economic use of marketplaces for tourist purposes, legislation is adjusted that is adapted to the country and tradition, especially through:

- By forming a national body that will coordinate the work and make decisions on how the marketplaces will be used for tourist purposes, taking into account the national culture. This primarily refers to the relationship between economic interest in the tourism industry and the old architecture of the marketplace.
- All bodies must be in accordance with certain EU standards that regulate this area from the point of view of tourism and national culture
- The financial autonomy of local authorities stems from the need for a sustainable system of using marketplaces for tourism purposes as a local good and local culture
- The financial sustainability of marketplaces on the market represents local trust and their use as part of the national treasure for tourism purposes.

Technological factors are of particular importance for the global market of EU countries. Marketplaces as public goods meet with well-organised competition, so the possibility of economic illiquidity is great. These risks in the global marketplace can be eliminated or minimised by carefully renewable marketplace architecture and trade rules rooted in national and local culture. Connecting marketplaces within the national tourism industry is of special importance, through the Internet it is possible to create a time-efficient information system that covers all tourism marketplaces. All marketplaces in the country and the EU can be special tourist attractions for tourists. With the application of information technology and modern technology, old marketplaces are becoming part of the global tourist offer for the purpose of developing local tourism.

Modern technological forecasting in the future when it comes to the tourist potential of traditional marketplaces in the EU will be simpler compared to other technological changes. That is why the connection between the traditional significance of the marketplace and the technological predictions that will be used in the future for tourist purposes is important.

Demonstration of the model of development of spanish marketplaces - an example of good practice

The year 1217 is recorded in documents as the time of the presence of the first local stalls on the Pla de la Boqueria, as part of the street marketplaces located on the Ramblas. These markets consisted of temporary open-air stalls where farmers from villages around Barcelona sold their goods. (www.boqueria.barcelona.es). They (marketplaces) contribute to many social benefits, increase income, social communication and interaction, development of social wealth, as well as a stronger degree of connection between consumers and the local community. (Bonanno et al., 2017). Modern consumers buy organic products whose consumption contributes to the environmental awareness of society, increasing health care and improving the quality of life. The result of such a strategy is the development of a unique social interest and communication, which has identity value, trust and security. With the creation of "MERCAS" in 1966 for reasons of national interest, the supply and distribution of fresh agricultural products and food was organised. The annual volume of total trade in fresh products is about 50% through the wholesale markets and marketplaces, 6,822,831 tons, on an area of 7,700,866 m², with about 77,000 daily customers with a transport share of 71,000 vehicles. (www.spainbusiness.com).

From the aforementioned data, as an indicator of success, a strategy for the development of Spanish marketplaces in the last decade emerged, based on the protection of old architectural values and splendour under state protection and adjusting the offer to organic and traditional local products. The strategic guidelines for the development of Spanish marketplaces in the last decade are reflected in:

- Development strategy in the form of diversity of individual regions - The modernity of the marketplace, assuming that food is the best medicine
- Competitiveness increased by selling organic products according to the highest EU standards
- Old marketplaces as cultural and historical monuments in global conditions have been turned into gastronomic meeting places for foreign tourists with regard to the central city position
- Development of the "Mercado de la Plata Madrid" marketplace as the largest gastro bar in Europe
- Development of tourist potential depending on the natural wealth of the region and the development of the tourist economy
- Regional, financial and urban incentives for the tourist potential of the marketplaces, especially in Madrid and Barcelona.

Systematisation of the results of strategic position analysis of the marketplaces in the European Union

Creating a model for the functioning of marketplaces as a universal solution in the EU is quite complex given the fact that each country has its own specifics and history of marketplaces. At the same time, the results of statistical modeling, in terms of their value for practical problem solving, are often close to the results of other methods. (Savić et al., 2022). As the laws governing the management of wholesale and retail marketplaces differ from country to country in the EU, it was not appropriate to present a detailed list of rules of operation and responsibility in this study. However, all countries have common business on common principles and responsibilities (Revised draft, 2009). Therefore, in that period, mapping of digitalisation of marketplaces at the institutional and personal level was carried out in the EU with the clear support of EU institutions. The good side of everything is the application of digitalisation in the organisation and work of marketplaces at the world level and the stimulation of digital sales. Accordingly, we can identify several common factors that determine the nature of the settings of the modern business model of marketplaces in the EU, namely:

- Laws within the EU that also apply to marketplace activities

- Delimitation of marketplaces as trade, communal and social institutions
- Individual national strategies for the development of marketplaces in individual countries
- Modelling the development of marketplace activity of individual regions and cities
- Development of marketplaces as market institutions in organic food trade
- Development of marketplaces as tourist potentials of individual countries
- Adapting the development model to the individual city as a local environment
- Determining national cultural interests through the development of local marketplaces
- Preservation of the cultural-historical and urban heritage of the marketplace
- Development of a local strategy for the use of marketplaces for tourist purposes
- Arrangement of local squares and marketplaces as a unique city tourist offer
- Arrangement of promenades and marketplace spaces with the architecture of coastal cities
- Socialisation of various social groups through the sale of local products to foreign tourists
- The connection between the historical and global significance of marketplaces as local tourist potentials, etc.

Analysis of the survey research of the marketplace perspective in the Republic of Serbia

The subject of the survey research is the knowledge of the attitudes of consumers, sellers and marketplace management about the prospects of

marketplaces with a focus on identifying the motives and needs of consumers in shopping and tourism. The research takes into account the fact that the competitive advantage of the marketplace in the modern business model is based on the purchase of fresh products from a well-known seller with many years of experience since we have been buying. Respondents in this study were marketplace vendors with many years of experience (more than 5 years), and top management representatives with at least three years of experience in the marketplace business, while customers were surveyed at marketplaces by random selection. The analysis of the attitudes of the management of relevant marketplace organisations on the position of marketplaces in the Republic of Serbia is based on the following answers to the questions asked:

1. How do you see the marketplace position of the market now in your opinion?
 - Marketplace development process 26%,
 - Process of undefined development status 54%,
 - The process of bad market position of the marketplace 20%.
2. How can the marketplace potential of your markets be increased?
 - Stimulating domestic production and production of organic products and sales on the marketplace 58%,
 - With infrastructure and technological equipment 26%
 - Better promotion of marketplaces and healthy products 16%.
3. If your views were taken into account, do you think you would have a higher annual income?
 - Yes 68%
 - Probably 28%
 - I'm not sure 4%.

Today, efficiency is one of the basic elements that determine the business success of the marketplace, marketplace potential and survival in the modern marketplace environment. The modern way of doing business has affected the environment and thus the markets. (Prdic et al., 2022). The modern economic system does not tolerate neglect of development. (Cavlin, 2022). The mentioned research shows that the management of the surveyed marketplaces in the new

technological and information age sees the business success of the marketplaces in the future rather skeptically, with special emphasis that 54% of them think that the marketplaces are in a rather undefined marketplace status. The answer to this question is a change in business strategy in marketplace access. This strategy can be realised by applying various marketing communication instruments and using new technologies in business. The mentioned opinion and attitudes of the marketplace management are quite similar, but they imply a certain marketplace and time period for considering the market position and taking measures. Through efficient planning of production and distribution of domestic organic products, marketplaces can maintain and improve their marketplace and social position. In the modern context, sales are organised in the form of clusters as urban marketplaces, are places for cultural events, the manifestation of social values, cultural values and symbols and social interactions (Marciniak, 2020). From the above, the recommendation is derived that the technological and infrastructural equipment of marketplaces and a greater offer of organic products is an indicator that should go into the future. This fact is confirmed by the attitude of the marketplace management, which with 68% believes that these changes would improve their business.

Based on the previous position and the positions of marketplace administrations, it can be noticed that marketplaces belong to social and market institutions. This market position gives them an advantage in the future because they have the ability to create a new urban economic market segment by combining local products, cultural content and social interactions.

The analysis of motives and attitudes of sellers about potential marketplaces in selected cities of the Republic of Serbia is based on the following answers to the questions:

1. The basic question asked in response is: What is their motive for selling in the marketplace?
 - I have my own production 31%
 - I earn the most revenue by selling at the market 27%
 - I have usual customers 21%

- My products are healthy and safe 16%
- Marketplaces will always work 5%

Based on the obtained data, we notice that the sellers have clear motives why they sell on the marketplace. It is clear that they know how to realise their interests by counting on having good products and reliable customers. The next question referred to the obstacles that stand in the way of achieving their interests.

2. To a specific question: What is the biggest problem affecting your sales? the results are as follows:

- Rent 54%
- Poor equipment and infrastructural arrangement of marketplaces 34%
- Insufficient promotion of marketplaces compared to the competition 12%

The analysis of the mentioned data shows that the price for the use of space is a problem for 54% of the surveyed, a very serious problem in the business of sellers. It is followed by the infrastructure arrangement with the 34% of the interviewed as the main problem, and the marketplace promotion with the 12% as the biggest problem for their business success. Except for the lease price of the space, the attitude of the sellers is approximately the same as the attitude of the manager about the prospects of sales and marketplace development in the future.

3. How would your sales and revenue increase?

- By maintaining the level of rents and modern equipment of markets 44%
- By organised sales of domestic and organic domestic products 34%
- Influence on customers to come to the marketplace 16%
- Additional services 6%,

Adjusting the interests of management and salespeople will lead to marketplace development and improved sales. Lease prices alone would be more acceptable if working conditions and marketplace infrastructure were improved. These data indicate that the offer of domestic and organic products, along with the promotion of marketplaces, is an instrument that

can compete with the competition. Additional services in the form of parking, etc., will allow a larger number of consumers to visit the marketplace.

4. To the question to the sellers: On what should the markets in the future adopt the model of development on the principles? the answers are as follows:

- Infrastructure equipment 31%
- Organising special parts of the marketplace for organic food trade through organic marketplaces 27%
- By investing in the infrastructure of city marketplaces and tourism development 23%
- Preservation of the specifics and traditions of the marketplace 12%
- By investing in additional services that will increase the market importance of the marketplace by 7%

In order to realise these attitudes of the sellers, it is necessary to strengthen all types of interesting associations and organisations. Especially around projects that have a perspective based on the integration of the attitudes of tenants, marketplaces and analysis of the competitive environment. One of the most important directions of development in the future is certainly the organised sale of organic food on the marketplace. Based on the experiences of EU countries and their own capabilities, it is necessary to create their own model and direction of marketplace development in the future. The creation of all production conditions, especially in the region of AP Vojvodina, which leans on the Danube River, points to the fact that production conditions and a healthy environment are the drivers of progress and development. (Prdić, 2020). Creating favourable production conditions and marketplace perspectives based on the views of tenants are realistic and objective. Therefore, at the same time, producers must follow technological development and increase their offer on the marketplace based on anticipation of new consumer needs. Such an ambience will create greater conditions for sale on the marketplace and will enable meeting, communication and tourist presentation of the old city marketplaces. The analysis of motives and needs of consumers in selected marketplaces of the Republic of Serbia, ie attitudes that would, in their opinion, improve the work and overall

potential of markets, in the form of motives for shopping, product quality and tourism development opportunities is based on the following answers:

1. To the specific question, what are your motives for your purchase on the market?
 - Appropriate prices 27%
 - Quality and freshness of products 25%,
 - Diversity of offer 21%,
 - Well-known seller 18%,
 - My local marketplace-meeting with acquaintances 9%.

This result gives priority to price and quality as priorities for shopping on the marketplace. Together with the variety of offers, they are the basic motives for shopping on the marketplace. The specific attitudes of the buyers have a reliable basis for drawing conclusions on which bases the sellers should adjust their offer. Although today the competition is very pronounced, the prices and the quality and variety of the offer give them an advantage. According to the sellers, the social role of the market is to socialise with the acquaintances.

2. To the question. What is the frequency of shopping at the marketplace by the number of daily purchases?
 - Three times a week 45%,
 - Twice a week 35%,
 - once a week / 20%.

According to the frequency of purchases, we see that the marketplaces are quite popular with the surveyed customers. Their arrival at the marketplace from the analysed sample was quite frequent. With the communication effort of sellers and marketplaces, it is certainly possible to attract a larger number of visitors and the frequency of purchases.

3. To the specific question: What is the most important thing for your market to have more visitors? The answers were as follows:
 - Organised sales and sales of domestic organic products 33%,
 - Better promotion of marketplaces and domestic producers 27%,

- Promotion of marketplaces as central urban urban areas 21%,
- Promotion of marketplaces through the city's tourism industry and the offer of local products 19%.

Respondents favour the sale of domestic and organic products, considering the supply and distribution on the marketplace as organised individual domestic production. These views are based on the principles of common interest. It is interesting that consumers notice the need for better promotion of marketplaces and the city centres as a form of better attendance. High consumer involvement in decision-making can increase the intensity of communication and higher marketplace attendance.

4. In your opinion, can your local marketplace attract domestic and foreign tourists who visit the city and the city centre?

- Yes, with the existing offer of 51%,
- Maybe if the product offer is improved by 31%,
- It can be if the authenticity is preserved and is rearranged 15%,
- No 3%.

As many as 51% of respondents have a perception that the local marketplace, without changes, can increase the number of domestic and foreign tourists, and the rest if it improves the offer or infrastructure, which is a good basis for improving the model of attracting tourists. If we know that consumer behaviour in tourism is a matter of choice, then according to that model, the offer of city tourist potentials, including marketplaces, should be defined. The dynamic needs and desires of modern consumers, combining different motives, the threshold of expectations in future purchases are key changes in the marketplace that must be taken into account. Consumers as tourists invest a huge effort in finding information in choosing a destination, so based on that it can be concluded that a visit to the city centre means a visit to the marketplace.

Strategic analysis of the position and guidelines for the development of market activity in the Republic of Serbia

Therefore, starting from the results of the analysis of attitudes of

consumers, sellers and marketplace management, in the SWOT analysis we decided to emphasise the "inside-out" approach to the environment (Malešević & Čavlin, 2020) focused on the concept of modern marketplaces, while relying on the experiential and practical competencies of the author for the marketplace activity, all with the aim of influencing the development of tourist and market potentials of local communities in the Republic of Serbia.

As there is no national strategy for marketplace development in the function of local tourism in the Republic of Serbia, it is necessary to influence political, economic, sociological, technological and other factors based on examples of good European practice, in order to create a basis for strategic action and development of marketplace organisations in Serbia. Having in mind the real fact that a significant number of foreign tourists visit our country, and the city centres themselves, and changes in consumer motives and needs, as well as operational knowledge based on SWOT analysis, there are chances and opportunities that can eliminate threats and weaknesses. Therefore, we expect that the greatest potential for the development of marketplaces in Serbia have the Venac Marketplace in Belgrade, the Fish Market (Riblja Pijaca) in Novi Sad and the Fortress Market (Tvrđava) in Niš, and that the need to innovate the existing strategic model of marketplaces in Serbia in accordance with good European practice.

Further direction of future marketplace development in the Republic of Serbia should be based on the following assumptions:

- enactment of laws that define the status and regulate specialised market institutions: fairs, wholesale markets and marketplaces,
- adoption of a national strategy and action plans for the development of marketplace activities,
- normative framework regulating the mutual functionality of wholesale markets and marketplaces,
- development of marketplaces as trade, communal and social institutions,
- development of trade through wholesale markets and marketplaces of certain regions,

- encouragement of the development of domestic agricultural production,
- stimulating the sale of regional products on the marketplace,
- stimulating the sale of the local climate,
- development of marketplaces as priority institutions of organic food trade,
- development of old marketplaces as tourist potentials,
- inclusion of marketplaces in the special tourist offer,
- special urban and construction arrangement of old city marketplaces,
- promotion of marketplaces as places of importance for local culture,
- organising special events of importance for the promotion of certain local marketplaces,
- internet presentation and promotion through integrated instruments, etc.

The future of marketplaces on the world market, on the basis of which the position on the direction of development of domestic marketplaces arises, is in stimulating the production and sale of organic food and improving the tourist potential of individual local marketplaces. This indicates that in the Republic of Serbia there is still no knowledge about the possibilities of marketplaces as a new type of selling organic food and tourist offer. Thus, marketplaces are one of the most important tourist potentials and sales of local products in the EU, and especially in Spain, which implies that our marketplaces also have a future. At the same time, in the future, it is necessary to strengthen the digital and information infrastructure by reducing the gap between EU countries, underdeveloped countries, rural and urban areas, and at the same time connecting producers and customers in the food supply chain.

Table 1: *SWOT analysis of the strategic position of markets in the Republic of Serbia*

External factors	
Opportunities	Threats
<ul style="list-style-type: none"> • empirical research of customers' interest in marketplaces • adoption of a strategy based on the attitudes of customers and consumers • creating better sales conditions through the use of information technology systems • investment in infrastructure based on marketplace traditions • application of marketing in promotion and skills in communication with users • cooperation with local state bodies for the improvement of the work and tourist potential of the marketplaces • defining and promoting a clear strategy in relation to competition • creating a brand of marketplaces through organising special events and tourist promotion 	<ul style="list-style-type: none"> • continuous increase of competition • growing customer needs • growth of the system and possibilities of payment on the marketplace • enriched offer, location and local production of competitors • non-harmonised legislation and the status of marketplaces as tourist potentials • undefined and threatening ownership status
Internal factors	
Strengths	Weaknesses
<ul style="list-style-type: none"> - stimulating and diversifying the sales of domestic producers - organic products and brands of domestic producers - application of experiences of regional countries and countries in the field of EU legislation - association with professional associations and chambers of commerce - increased level of services in cooperation with the local city community - exploitation of old city marketplaces for the sale of traditional products - increasing the scope and standardisation of services - the possibility of using old marketplaces for tourist purposes 	<ul style="list-style-type: none"> • lack of understanding of changes in the environment and moves of competition • infrastructural and technological equipment • low level of marketplace promotion • inefficient management system • negative influence of political factors • deterioration of the marketplace position by the actions of competitors

Source: Author's own work

CONCLUSION

Many consider markets to be the most significant institutions and phenomenon of global trade, because they have retained their traditional character and do not function like multinational companies. Apart from their traditional importance for trade in agricultural products, in modern conditions they are of unique importance for tourism potential.

The conducted research indicates that strengthening the competitiveness and vitality of markets is possible by focusing on the development of the following areas:

The first direction of market development is based on the distribution of organic products in the markets and the use of all the benefits of domestic, healthy and fresh products, that is, on the use of local traditions in food production.

The second direction of market development is based on the historical, urban, construction and central position of markets in populated areas and the offer of traditional cultural attractions and organic gastronomy as a unique tourist product.

In addition, the research proved that there is a perception of the need to strengthen the competitiveness of domestic markets, because the views of our key stakeholders on the perspective of development are largely similar to the Spanish model, who see the most important factors for the development of markets in the offer of domestic organic and local products, the urban arrangement of markets on the basis of history and tradition and the inclusion of old markets in the tourist offer.

At the end of the research work, we identified the strategic critical factors of market development in the Republic of Serbia, complementary to good European practice and the perception of key actors, and formulated strategic guidelines that should represent a platform for the creation of a national strategy for the development of markets in the function of tourism and for the transformation of the business strategy market in the Republic of Serbia.

Therefore, starting from the state and perspective of market development, we appeal to the authors to intensify the production of theoretical and practical research on the issue in question, whereby this research can be seen as a good starting point.

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ANALIZA DOBRE PRAKSE I PERCEPCIJE STEJKHOLDERA U CILJU PODRŠKE RAZVOJU DOMAĆIH PIJACA

Nedeljko Prdić

Miroslav Čavlin

Kaiaman Nasser Khalifa

Sažetak: *Intenzivna konkurencija i promene na globalnom tržištu zahvatile su i pijace, koje se strateški preusmeravaju na prodaju organskih poljoprivrednih proizvoda i turizam koristeći tradicionalni značaj i položaj u infrastrukturi gradova. Primarni cilj istraživanja je da se kreiraju strateške smernice za razvoj pijaca u Republici Srbiji, ali na osnovu identifikovanja globalno konkurentnih poslovnih primera te stavova menadžmenta, prodavaca i kupaca o potencijalima domaćih pijaca. Metodologija istraživanja uključuje deskriptivnu, kvantitativnu i kvalitativnu analizu koja je ishodovala predstavljanje efikasnih poslovnih rešenja na globalnom tržištu te prioriteta za razvoj potencijala domaćih pijaca. Pored toga, putem anketnog istraživanja stavova menadžmenta relevantnih pijačnih organizacija, motiva i potreba referentnih prodavaca te kupaca na pijacama spoznata percepcija ključnih aktera o stanju i perspektivama domaćeg pijačnog poslovanja. Rezultati istraživanja pokazuju neophodnost reafirmacije tradicionalnog poslovanja pijaca u Republici Srbiji u pravcu jačanja njene uloge na tržištu organske hrane i turizma kao i celishodnosti kreiranja nacionalnog okvira za razvoj domaćih pijaca. Stoga, rezultati sprovedenog istraživanja mogu naročito koristiti kreatorima lokalne i nacionalne ekonomske politike kao instrument u unapređenju poslovnog ambijenta, a domaćim pijačnim organizacijama i akterima bolji uvid u mogućnosti korišćenja i razvoja potencijala.*

Ključne reči: *strateška analiza / pijace / konkurentnost / marketing / turizam.*

THE IMPORTANCE OF TRAINING AND EMPLOYEE DEVELOPMENT FOR ORGANIZATIONAL EFFICIENCY

Matejić Ivica¹

Ćurčić Mihailo²

Abstract: *Given the growing importance and role of human resource management, it is necessary to underline the importance of training and continuous development of employees for organizational development. When it comes to the claim that the employee is the most important resource of a company, it is necessary to actively study the scientific spheres that with their ideas and discoveries can contribute to improving all aspects of the work process. Training is one of the steps in this process, and their successful mastering is a prerequisite for achieving the principle of efficiency. The scientific goal of this research is the scientific description and scientific explanation of the elements, functional factors, and steps necessary for the improvement of the employed staff, with a special emphasis on their training and development in a given social context. The social goal of this research is to present the role and importance of the development and training of employees, as well as the usefulness of the existence of these methods and instruments for human resource management and organizational development in general, on the example of the conducted research.*

Key words: *employee / training / development / organization / human resources management.*

¹ University of Kragujevac, Faculty of Economics, Liceja Kneževine Srbije 3, 34 000 Kragujevac, e-mail: ivica_matejic@yahoo.com

² School of Economics and Management Studies, Liceja Kneževine Srbije 3, 34 000 Kragujevac, e-mail: curcicmihailo@gmail.com

INTRODUCTION

The use of the term human resource management is considered to be relatively recent, and is mentioned in the literature in the late 1980s. However, the concepts of human resource management have been discussed before. In the 1960s, Likert advocated a transition from "human relations" to "human resources" and emphasized their importance to the organization. Maslow's contribution is also significant, which is reflected in the notion of "enlightened management", which emphasizes the value that people represent as a resource and their importance for achieving comparative advantage (Wilson, 1999).

From its inception, the notion and theory of human resource management (HRM) have met with much criticism and denial. While for some human capital is the main driving force of the organization, for others the introduction of the concept of managing it, the employee is reduced to the level of a machine (Stanković et al., 2018). Nevertheless, this concept is accepted by many theorists who deal with it, but also in practice in which a large number of companies use the principles of HRM in order to improve the results in market competition. It is considered that employees are the ones who can make a difference, especially if we take into account the existence of an increasing share of services in relation to the production of goods in market flows. Kotler (2000) speaks in favor of that, referring to the participation of services in the world market, while in the USA the ratio between the production of goods, on the one hand, and service activities, on the other hand, is as high as 30% : 70%. Every employee has an important role, regardless of the position he is in within the business hierarchy, and the ultimate goal of business and a prerequisite for making a profit is customer satisfaction.

In order for an organization to implement its goals, it needs successful management. All decisions made regarding employees' decisions that affect the workforce concern human resource management. However, all segments that managers deal with are interconnected (Bernardin & Russell, 2007). Managers are the ones who are in charge of putting goals into practice. On the other side, they are the ones who have the function of "bringing the right people to the right places". By monitoring the way of work, evaluation, reward system, adequate training and, above all, selection of candidates, human resources management has an important role in keeping the business entity competitive (Jolović, 2019). Depending

on the size of the business entity, the hierarchy and management structure may vary - from a very complex and branched structure, where more people perform different activities, to small businesses in which these different activities are distributed, to only one or a few people.

If we start from the assumption that the company is a business entity established with the aim of achieving and maximizing profits, it further implies the implementation of a series of activities in the direction of achieving the set goal. Successful coordination of all subsystems and activities is necessary for one organization to function and last in the market competition. The concepts of efficiency, productivity, adaptation to change and participation in their creation are closely related to the term organizational development. Through this process, the organization needs to create effective responses to social change. It is certain that both organizational development and human resource management have the same goals, which in essence relate to the long-term well-being of the organization.

LITERATURE PREVIEW

Training and development belong to the domain of establishing and maintaining knowledge and skills based on organizational and employee needs (Bernardin & Russell, 2007). Apart from the fact that the employee needs to be trained and introduced into the work system, it is equally important to adapt him/her to the environment and the environment in the company. Each employee is a unique individual, with specific personal characteristics that distinguish him/her from others. Therefore, not every employee will go through the same path of adapting and developing their knowledge and skills (Anwar & Abdullah, 2021).

Boljanović-Đorđević (2018) stated that it is necessary to adapt training and development methods to different types of personalities, while preparing and adapting them all to the organization in order to apply knowledge in the most productive way in the shortest possible time. Accordingly, the training implies not only learning the methods and techniques by which employees will perform work tasks, but also the processes of socialization and orientation, i.e. the process of adequate and successful habituation of employees to the work environment and

organizational system as a whole (Al-Kassem, A. H., 2021). However, the question arises whether in the practice of multinational companies there is room to adapt all employees based on their personality types? In addition, the speed of change significantly affects the practices of individuals, as well as the processes and work procedures themselves (Hasan et al., 2020). In that sense, it is necessary to balance the findings of scientific studies and achievements with situations in practice, which may depend on the type of production / service activity, the size of the organization, its structure, etc. The human resources' strategy is an essential part of corporate strategy, since it has been contributing to the systematically managed organization development (Vrchota & Rehor, 2019).

Length of employment, i.e. the intention to change the working environment of the employed staff, concerns both some - employees and others - employers. Looking at things from the employer's perspective, the departure of an employee from the company creates additional costs for the organization and its budget. According to the results of about thirty case studies conducted between 1992 and 2007, it is assumed that turnover and replacement of employees increase business costs by an average of 21% of the employee's annual salary (Center for American Progress, 2012). In companies with a large number of employees that fluctuate, this represents a fairly large total cost. These costs are reflected in reduced productivity with the departure of the employee, the cost of hiring and training a new employee, and reduced productivity until the new employee fully masters the necessary skills (Nguyen and Duong, 2020).

It is equally important to prepare the new employee for work tasks, as well as for the environment, norms and values that prevail in the organization. New environment, way of working, mastering the means of work, complexity of work, associates, procedures etc. are all aspects of work that need to be adapted as soon as possible (Omar & Mahmood, 2020). Simultaneous adjustment of employees to the way of work and social context, i.e. organizational culture, is necessary in order to successfully overcome potential difficulties, feelings of anxiety and obstacles in the way of communication.

METHODOLOGY

A questionnaire, by definition, is a form of help when scientific explanations are sought in writing (Milić, 2014). Using this non-experimental method, notifications are obtained without the mediation of an interviewer. The advantages of surveying, i.e. the use of questionnaires, are diverse. First of all, the questionnaire is used when it is necessary to create original information for specific scientific needs and goals. It represents one of the most important means of active creation of original scientific data about people and society. In addition, the use of questionnaires has the task of facilitating increased systematicity in data collection. In this way, one can easily get data on past events, but also on expectations and plans, which greatly influence current events and which, must not be isolated in any way, because they are a significant indicator of social phenomena. The speed of data collection is also an important aspect to consider when conducting research, and this method enables relatively fast collection of necessary data. The written questionnaire also ensures the anonymity of the respondents as well as the discretion of the data.

When it comes to the shortcomings of this method, they are reflected in the sincerity and accuracy of giving answers, which can be questionable. The time dimension represents both an advantage and a disadvantage of this method. Although information regarding past and future events is important and relevant for the present, when it comes to the former, it can be forgotten, which directly affects the accuracy and truthfulness of the given statements, and the results. Another shortcoming is the physical absence of the interviewer, who could clarify the ambiguities regarding the questionnaire if needed.

Hypothesis

Given the advantages and disadvantages of this method, the written questionnaire proved to be suitable for examining the practices, experiences and attitudes related to the training of employees in the organization. The research was conducted on the basis of the established founding hypothesis (H0) as well as three auxiliary hypotheses (H1 – H3).

H0: A prerequisite for achieving continuous and successful development of a modern organization is investing in the training and development of its employees.

H1: The Human Resources Department actively participates in organizational development.

H2: The predominant method of employee training is on-the-job training.

H3: Feedback on employee performance is an important prerequisite for implementing adequate training methods.

The aim of this questionnaire is to confirm or refute the set hypotheses based on the answers of the respondents. The obtained data were first classified and then analyzed using the IBM SPSS® platform. The questionnaire is divided into two parts. The first relates to general data on respondents, the second to issues related to on-the-job training of respondents and their attitudes regarding training and development within the company. When answering, the respondents were able to comment on the grades on a scale from 1 to 5, where 1 indicates the lowest and 5 the highest grade.

Research sample

This section presents a sample of respondents by different types of classifications (gender, age, education and work experience), whose importance is reflected in the validity of data obtained by research, and later by giving scientific and social contribution. At the beginning of the discussion of the results obtained by this research, a review was made of the observations regarding the specifics of individual categories. First of all, it should be noted that the majority of respondents are male (65%), while 35% of respondents are female.

Table 1. *Number of respondents by gender*

Gender	Respondents	%
Male	34	65.4
Female	18	34.6
Sum	52	100

Source: Authors' research

The results obtained in the previously conducted research indicate the perspective structure of the age pyramid of employees. The largest number of respondents is in the age range of 20 to 30 years (32 respondents of both sexes). It is followed by employees older than 30 and younger than 41 years of age (10 respondents), then older than 40 and younger than 51 years of age (6 respondents), and finally only 4 respondents older than 51 years of age. This age pyramid of employees enables adequate transfer of experience and knowledge of older colleagues in the team, but also requires continuous and sustainable training of young people in accordance with modern principles of lifelong learning.

Table 2. *Distribution of respondents by age*

Age Distribution	Respondents	%
20 – 30	32	61.5
31 – 40	10	19.2
41 – 50	6	11.5
51 +	4	7.8

Source: Authors' research

According to the sample of respondents, the largest part is with secondary education (54%). This is followed by employees with completed undergraduate or vocational studies (31%). The least number of employees have completed master's academic studies (15%). The level of education is certainly not a key qualification, but, as it has already been pointed out, it is a good knowledge of foreign languages or working on a computer.

Table 3. *Distribution of respondents according to the level of education*

Completed Education	Respondents	%
High School	28	53.8
Bachelor Degree	16	30.8
Master or Ph.D. Degree	8	15.4

Source: Authors' research

When it comes to the work experience of the respondents, it can be said that in accordance with the previously presented age pyramid, most employees fall into the category with 2 to 5 years of work experience, both in the NCR Company and in total. The least employees are with 11 or more years of work experience.

Table 4. *Years of Service*

Years	Respondents (years of service in total)	Respondents (years of service in NCR)
0 – 1	8	20
2 – 5	26	28
6 – 10	14	2
11+	4	2

Source: Authors' research

It should also be noted that four respondents in this sample are employed in North America and these employees have worked in the NCR for more than 10 years, taking into account that this company has been operating on the Serbian market only since 2011.

The analysis of the results obtained in the research enabled the adoption of concrete conclusions regarding the theoretically covered topic of training and development, and thus providing scientific and social contribution to the development of the importance of the human resources sector within medium and large organizations.

The research was conducted using the questionnaire method, which was divided into a given sample at the end of the article. The sample consists of 52 employees within one of working teams at the NCR Company in Serbia, whose headquarters are in Belgrade. The research was conducted in July 2020. NCR started its business in Serbia in 2011, and today about 10% of the total number of NCR employees work in Belgrade, which speaks of a suitable strategic location for development, improvement and innovation in the field of providing technical support to clients around the world. In addition, this is the employer that recorded the largest increase in the number of employees in Serbia in previous years. The General Manager of NCR Serbia points out that today more than 100 teams deal with solving various technical challenges.

RESULTS AND DISCUSSION

Reliability Analysis

At first, our idea was to examine the reliability of the data, using the Cronbach's Alpha Reliability Analysis. The results show the reliability and consistency between variables (Table 5), which have grouped items according to auxiliary hypothesis: Organizational Development (H1), On the Job Training (H2), and Feedback (H3). The α values 0.810, 0.714, and 0.837 based on Standardized Items show high consistency and reliability. We have confirmed the previous results of Shaheen et al. (2013) who had obtained α values of more than 0.700.

Table 5. Reliability Analysis of Variables (Cronbach's Alpha)

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items
Organizational Development	0.795	0.810
On the Job Training	0.411	0.714
Feedback	0.840	0.837

Source: Authors' research

Organizational Development (H1)

All respondents answered affirmatively to the question "Does your company have a sector that deals with human resources?", and on a scale of 1 to 5, 61.5% of respondents rated the work of this service as completely satisfactory, while only 4% of respondents gave a negative assessment. The fact that this organization employs thousands of people was enough to assume the existence of the human resources sector at the very beginning, which was confirmed in this research. The need to coordinate different activities requires the existence of a fragmented management system. The satisfaction of the respondents with the work of this service is a good indicator of its activity and work, and in general its existence within an organization that employs such a large number of people in Serbia, indicates a movement towards following world trends in

this area.

Given the age structure of respondents, 23% of respondents participated in a particular training program once or twice (more precisely 15% once and 8% twice), which is an acceptable figure, given that this group of respondents spent up to one year, that is, between 2 and 5 years in this company. The other 40 respondents (73%) participated in a particular training program more than twice. The fact that most of the respondents participated in a training program several times may speak in favor of the existence of continuous training, improvement and adaptation to change. The company's leaders are aware of the importance of investing in learning and training programs, which can be seen from these data.

On the Job Training (H2)

In the section on formal and informal training methods, we highlighted the importance of the combined method, as the best way to overcome the shortcomings of both methods. In addition, the combined method in this case speaks in favor of the use of both traditional and technology-based methods, i.e. relying on the advantages of both types. The combined method was highlighted as the most commonly used training method for all respondents, with 29% of respondents emphasizing the formal method as predominantly applicable, while 71% of respondents spoke in favor of the predominance of the informal method during training.

An interesting, but also very important fact, is that all respondents pointed out that teaching is the most common method of training, followed by on-the-job training and e-learning. Audio-visual techniques are less represented, while case studies are the least represented in training programs. Judging by the answers of the respondents, the method of group building and simulation are training methods that are not yet represented in the training programs of this company. We can assume that the last two methods do not represent a suitable form of implementing knowledge in this area.

Almost a half of the respondents (48%) believe that the employer invests sufficient funds in techniques and methods of training and development of employees, 17% of respondents believe that this is not the case, while 35% of respondents do not have an opinion on this issue. This data can be viewed as a good indicator of the relationship between employees and the

human resources sector, and top management indirectly. We believe that this attitude is also useful when it comes to employee motivation, which affects overall efficiency and productivity. Also, 43 respondents (83%) rated the training programs in which they participated as completely satisfactory and their usefulness in a specific job. However, what may be somewhat worrying is the fact that 33% of respondents believe that these training programs are not conducted continuously in their workplace, and 21% of respondents do not have an opinion on this issue. While almost half of the respondents believe that the training programs are conducted sufficiently continuously, the fact that others do not have a position on this issue, or do not agree with it, can open directions for further research on this phenomenon. They can raise issues of shortcomings in the training and development programs themselves, as well as their frequency.

The question "What types of training are held other than the initial one" was answered by 24 respondents, i.e. all those who answered affirmatively to the previous question regarding the continuous implementation of on-the-job training. Their responses mainly related to training on data protection, safety at work and environmental protection, training on compliance with codes of ethics related to business. Part of this group (60%) pointed out that the so-called additional training, i.e. additional training for work in certain applications, if the team leader deems it necessary.

Feedback (H3)

As evaluation and feedback on employee performance are very important processes and information for the employer but also for the employee, part of the questionnaire also covered this area. Moreover, 77% of respondents, or 40 of them, answered affirmatively to the question "Has your performance in the workplace been evaluated by superiors?", and the rest answered that they have no opinion on this issue (23%), while no negative answers were recorded. It is necessary to point out that the respondents who did not have an opinion on this issue have been employed in this organization for less than a year, and that this can explain such an attitude. Given that a positive answer to this question is a precondition for answering the next two, the sample of respondents was immediately narrowed to 40, and 87.5% of respondents said that

according to their knowledge, the evaluation is conducted more than twice a year, and 12, 5% to be assessed once a year. This result indicates the essence, which is that relatively often the evaluation of the work of employees is conducted due to the importance of feedback, which is crucial in planning and organizing certain types of training or specific in-service training.

All respondents indicated that they receive feedback on the evaluation of their work and performance in the workplace, and 89% of them also answered positively that they were referred for additional training, in case their work was assessed as unsatisfactory. Feedback is an important parameter of satisfaction and success of adaptation, and it is necessary to be mutual. The importance for managers is reflected in the ability to adapt training programs, but also orientation and socialization. Feedback of employees also indicates the speed and direction of adaptation, and progress.

Finally, 73% of respondents believe that training providers are competent enough to conduct and organize professional training, 17% of them have a negative attitude on this issue, while 10% refrain from expressing their views. A positive attitude towards the performance of people who conduct trainings is a good indicator of complementarity between the training of employees and management, which must be simultaneously trained in the direction of new changes. The importance of conducting training at all levels has already been emphasized, which has largely proved to be accurate in this case.

Correlation Analysis

After a closer data review it has been confirmed a very strong correlation between the variables. Table 6 shows that the correlation is significant and positive, according to the scale values which were used by Schober et al. (2018). The correlation values among Organizational Development and On the Job Training, as well as among Feedback and On the Job Training are moderate (0.541 and 0.545 respectively). On the other hand, the correlation between Organizational Development and Feedback is very strong (0.992).

Table 6. *Correlation Analysis*

	OD	OJT	F
Organizational Development	1	0.541**	0.992**
On the Job Training	0.541**	1	0.545**
Feedback	0.992**	0.545**	1

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

Source: Authors' research

Linear Regression Analysis

The results presented in Table 7. show that the value of R value of R^2 implies that 20.6% variation in Organizational Development is caused by the OJT training method. The F-value (12.995) in this case, implies that the model possesses significant overall strength, which ensures the correctness model. β coefficient implies that OJT causes 45.4% positive variation in Organizational Development, that is t (3.605) as well as $p < 0.001$. On the other hand, the results are more significant: the value of R value of R^2 implies that 90.6% variation in Organizational Development is caused by Feedback ensured by the employer during the evaluation process. F-value is even stronger (480.769), which confirms the model's correctness. Furthermore, Feedback causes 95.2% positive variation in Organizational Development ($t=21.926$ and $p < 0.000$), which is shown at β coefficient.

Table 7. *Linear Regression Analysis*

Variables	R	R^2	F-value	β	t	Significance
On the Job Training → Organizational Development	0.454	0.206	12.995	0.454	3.605	0.001
Feedback → Organizational Development	0.952	0.906	480.769	0.952	21.926	0.000

Source: Authors' research

CONCLUSION

After elaborate research, an analysis of the obtained results was performed, on the basis of which conclusions can be reported, but also the accuracy of previously set hypotheses can be considered.

If we pay attention to the first, auxiliary hypothesis (H1), which refers to the active participation of the human resources sector in organizational development, it can be concluded that the obtained results fully confirm it. Analyzing the answers to questions 6, 7, 8, 9, 12, 13, 14, 15 and partly to question 10 (answers are relevant only in the part related to the formal way of training), it is concluded that the human resources sector has a very important role in the development and training of employees, i.e. that the methods and ways of conducting planned trainings enhance the performance of employees, which encourages organizational development, sustainable progress and continuous adaptation to current trends and labor market conditions. This confirms that the human resources sector in this organization not only has an administrative function, but also an operational role, which is reflected in the business success and progress of the organization itself. It also confirms the premise of the movement of organizations in Serbia in the direction of trends that are represented in Europe, and which concern HRM. It is a good indicator of the movement of transformation in the direction of proven methods of organizational development. Although placed in a specific context, this research opens opportunities for further research on this topic, in connection with the transformation of the market in Serbia.

The second, auxiliary hypothesis (H2), concerning on-the-job training (OJT) as the predominant training method, has not been confirmed. Based on the analysis of the answers to questions 9, 10 and 15, it is concluded that on-the-job training is a very common method of employee training, but that in terms of frequency, the teaching method prevails. The high prevalence of both methods indicates a combination of formal and informal methods, so we can conclude that in this case they are characterized by complementarity. Formal lectures are complemented by teamwork which can further enhance productivity and efficiency and indicate cohesion and collaboration within the team.

The next, third auxiliary hypothesis (H3) refers to feedback and evaluation of employee performance, as an essential prerequisite for the implementation of adequate training methods. Considering the answers

to questions 7, 8, 12, 13, 16, 17, 18 and 19, it is concluded that in numerically large organizations, the feedback has an essential role in planning and applying certain methods and ways of training, all depending on the business goals and type of business of the organization itself. The advantages and disadvantages of training, but also the adaptation of the employee can be discovered through evaluation and, accordingly, work can be done to improve the identified shortcomings. The percentage majority answers of the respondents confirm the assumed statements.

Based on all the above, the results of the research and analysis of the accuracy of the developed auxiliary hypotheses, it is concluded that the founding hypothesis (H0) has been confirmed. The assumption that the precondition for achieving continuous and successful development of a modern organization is investing in the training and development of its employees has been proven to be completely correct. If we take into account the life of the NCR company lasting over 100 years, as well as the promising labor market in the Republic of Serbia with about 4,000 employees, each type of systematic and planned investment in employee training, allows sustainable development of the organization, while monitoring current trends.

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ZNAČAJ OBUKE I RAZVOJA ZAPOSLENIH ZA ORGANIZACIONU EFIKASNOST

Ivica Matejić

Mihailo Ćurčić

Sažetak: *S obzirom na sve veći značaj i ulogu upravljanja ljudskim resursima, neophodno je istaći značaj obuke i kontinuiranog razvoja zaposlenih za organizacioni razvoj. Kada je reč o tvrdnji da je zaposleni najvažniji resurs kompanije, potrebno je aktivno proučavati naučne sfere koje svojim idejama i otkrićima mogu doprineti unapređenju svih aspekata procesa rada. Obuka je jedan od koraka u ovom procesu, a njihovo uspešno savladavanje je preduslov za postizanje principa efikasnosti. Naučni cilj ovog istraživanja je naučni opis i naučno objašnjenje elemenata, funkcionalnih faktora i koraka neophodnih za usavršavanje zaposlenih kadrova, sa posebnim akcentom na njihovu obuku i razvoj u datom društvenom kontekstu. Društveni cilj ovog istraživanja je da na primeru sprovedenog razvoja prikaže ulogu i značaj razvoja i obuke zaposlenih, kao i korisnost postojanja ovih metoda i instrumenata za upravljanje ljudskim resursima i organizacioni razvoj uopšte.*

Ključne reči: *zaposleni / obuka / razvoj / organizacija / upravljanje ljudskim resursima.*

Appendix A. The Questionnaire

The Importance of Training and Employee Development on Organizational Efficiency		
No	Question	Answer
1	Gender	❖ Male ❖ Female
2	Age	❖ 20 - 30 yrs ❖ 31 - 40 yrs ❖ 41 - 50 yrs ❖ 51 + yrs
3	Completed Education	❖ High School ❖ Bachelor Degree ❖ Master or Ph.D. Degree
4	Years of Service (In Total)	❖ 0 - 1 yrs ❖ 2 - 5 yrs ❖ 6 - 10 yrs ❖ 11 + yrs
5	Years of Service (In NCR)	❖ 0 - 1 yrs ❖ 2 - 5 yrs ❖ 6 - 10 yrs ❖ 11 + yrs
6	Is there a human resources sector in your company?	❖ Yes ❖ No
7 ³	Evaluate your satisfaction with the work of the human resources department in the company?	❖ 1 2 3 4 5
8	How many times have you participated in a particular training program?	❖ None ❖ Once ❖ Twice ❖ More than twice
9 ⁴	The type of training you attended?	❖ Formal ❖ Informal ❖ Combined

³ Answer this question by giving a grade on the offered scale (1 - complete dissatisfaction to 5 - complete satisfaction).

⁴ Formal training means programs and events organized and developed by the company. Informal

10	If the training is conducted by a combined method, which method of training is predominantly represented, formal or informal? (Write the answer)	<ul style="list-style-type: none"> ❖ Formal ❖ Informal
11	Circle the training methods represented in the position you are employed in.	<ul style="list-style-type: none"> ❖ Lecturing ❖ Audio-Visual Techniques ❖ On the Job Training ❖ Case Study ❖ Group building method ❖ E-learning ❖ Simulations
12	Do you think that your employer invests enough funds in techniques and methods of training and development of employees?	<ul style="list-style-type: none"> ❖ Yes ❖ No ❖ I have no opinion
13 ⁵	To what extent are you satisfied with the usefulness of the realized training for successful performance of activities in a specific workplace?	<ul style="list-style-type: none"> ❖ 1 2 3 4 5
14	Is there continuous employee training for this position?	<ul style="list-style-type: none"> ❖ Yes ❖ No ❖ I have no opinion
15 ⁶	What types of training are held besides the initial one? Write the answer.	<ul style="list-style-type: none"> ❖ Lecturing ❖ Audio-Visual Techniques ❖ On the Job Training ❖ Case Study ❖ Group building method ❖ E-learning ❖ Simulations
16	Has your performance in the workplace been evaluated by superiors?	<ul style="list-style-type: none"> ❖ Yes ❖ No ❖ I have no opinion

ways imply learning through interaction with others, i.e. learning within the work environment.

⁵ Answer this question by giving a grade on the offered scale (1 - complete dissatisfaction to 5 - complete satisfaction).

⁶ Answer this question if the answer to the previous question is yes.

17 ⁷	How many times a year is your work evaluated by a superior?	<ul style="list-style-type: none"> ❖ Once ❖ Twice ❖ More than twice
18	Do you get feedback regarding your performance appraisal?	<ul style="list-style-type: none"> ❖ Yes ❖ No
19	If your performance is assessed as unsatisfactory, are you referred for additional training?	<ul style="list-style-type: none"> ❖ Yes ❖ No
20	Do you think that training providers are competent enough to conduct and organize professional trainings?	<ul style="list-style-type: none"> ❖ Yes ❖ No ❖ I have no opinion

⁷ Answer questions 17, 18 and 19, if the answer to question 16 is yes.

INTELLECTUAL CAPITAL AND BUSINESS PERFORMANCE IN ICT COMPANIES

Lekić Nemanja¹

Vapa Tankosić Jelena²

Mandić Slavica³

Vapa Bojan⁴

Lekić Snežana⁵

Abstract: *The requirements of the modern business environment have initiated the emergence of a new paradigm, which finds its starting point in the fact that intellectual property is a crucial success variable of every company, which has stimulated numerous researches in this area. Rapid and extensive changes in all domains of business require companies to be flexible and ready to respond to given changes in accordance with the specificity of the concrete situation. In such*

¹ Belgrade Business and Arts Academy of Applied Studies, Kraljice Marije 73, 11050 Belgrade, Serbia, e-mail: nemanja.lekic@bpa.edu.rs

² Faculty of Economics and Engineering Management in Novi Sad, University Business Academy in Novi Sad, Cvećarska 2, 21107 Novi Sad, Serbia, e-mail: jvapa@fimek.edu.rs

³ Belgrade Business and Arts Academy of Applied Studies, Kraljice Marije 73, 11050 Belgrade, Serbia, e-mail: slavica.mandic@bpa.edu.rs

⁴ Faculty of Economy and Finances, University „Union - Nikola Tesla”, Cara Dušana 62-64, 11158 Belgrade, Serbia, e-mail: bvapa@unionnikolatesla.edu.rs

⁵ Belgrade Business and Arts Academy of Applied Studies, Kraljice Marije 73, 11050 Belgrade, Serbia, e-mail: snezana.lekic@bpa.edu.rs

conditions, companies must create their own knowledge base and have valuable and competent employees who should be properly managed. Human resources who possess adequate knowledge, who have mastered specific skills and competencies, who are dedicated to teamwork, innovation and permanent improvement form the base of intellectual capital. The aim of the paper is to enrich the previous research model in order to analyse the interconnection of intellectual capital components and business performance of Serbian companies in the ICT sector.

Key words: *intellectual capital / business performance / ICT sector.*

INTRODUCTION

The success of companies should be viewed not only through financial, but also through operational (intangible) aspects. Financial performance is measured by indicators such as sales growth, earnings per share and profitability reflected in return on initial investment, return on sales and return on invested capital (Čavlin, Vapa-Tankosić, Miletić & Ivaniš, 2021; Syriopoulos, Tsatsaronis & Gorila, 2022; Tudose, Rusu & Avasilcai, 2022; Čavlin, Vapa-Tankosić, & Mirković, 2022). Operational (non-financial) performance highlights factors such as product quality and productivity, market share and marketing effectiveness (Demirbag, Tatoglu, Tekinkus & Zaim, 2006; Farida & Setiawan, 2022). Power belongs to those companies whose knowledge contributes to the creation of additional value and which have a high contribution of intellectual capital (Stewart, 1994, 1997; Brooking, 1997; Bontis, 1998; Teece, 2000; Namasivayam & Basak Denizci, 2006; N. Lekić, Vukosavljević, Vapa-Tankosić, S. Lekić & Mandić, 2021; Petrović, Radosavac, & Karabašević, 2021; Abeysekera, 2021).

Due to its increasingly significant role in modern business, intellectual capital has been the subject of previous research studies (N. Lekić, Vapa-Tankosić, Rajaković-Mijailović, & S. Lekić, S., 2020; N. Lekić, Vapa-Tankosić, Mandić, S. Lekić, 2022). The largest number of conducted research examines the basic components of intellectual capital of the first level. Bontis calls the investigated model simplistic and concludes that it does not analyze interconnections. This leads to a new structural model, which Bontis (1998) calls Diamond. As the Diamond structural model in earlier research (Bontis, 1998) proved to be optimal in the continuation of

the research, the authors have performed the continuation of the research of their Simplistic model (Lekić et al., 2022a). Therefore, the aim of this paper is to examine interconnection of intellectual capital components and business performance factors in the ICT sector of the Republic of Serbia.

LITERATURE REVIEW

A lot of researchers (Bontis, Chua Chong Keow & Richardson, 2000; Seleim, Ashour & Bontis, 2004, 2007; Ali, Hussin, Haddad, Al-Araj & Abed 2021; Muhammad & Salma, 2021; Do, Tam & Kim-Du, 2022) have conducted studies with an aim to provide guidelines for building a strong knowledge base for future intellectual capital development. Bontis (1998) had included in his research twenty Canadian companies (7 from financial services, 4 from the chemical industry, 4 from insurance, 3 from the ICT sector, 2 from courier services) to determine the parameters of intellectual capital. Wang & Chang (2005) revealed the cause-and-effect relationships between core components and sub-components for creating a model for managing intellectual capital in ICT industry companies. Structural capital represents infrastructural support for company employees (Mitić, 2014). Relational capital includes resources based on the company's relationships with various external stakeholders from the wider social community (Hormiga, Batista-Canino & Sánchez-Medina, 2011; Janošević, 2019; Torelli, 2022). In business organizations, value is created „by converting one form of capital into another“ (Kolaković, 2003, p. 925).

Moslehi, Mohaghar, Badie & Lucas (2006) recommend that managers evaluate intellectual capital in this industry by identifying, measuring, and analysing each component. In this way, it will ensure more efficient management of business processes and relations with external stakeholders. Intellectual capital is the primary determinant of business performance (Subramaniam & Youndt, 2005; Pew Tan, Plowman & Hancock, 2007; Tovstiga & Tulugurova, 2007; Do Rosário Cabrita & Bontis, 2008; Jawad & Bontis, 2010; Daat, Sanggenafa, & Larasati, 2021). Suraj & Bontis (2012) in their study investigated how telecommunications companies in Nigeria use intellectual capital. The mutual influence of human, structural and consumer capital and their impact on business

performance is analysed. The results showed that managers of Nigerian telecommunications companies emphasize the role of consumer capital, which confirms their view that their business performance is most influenced by market research and consumer relations. In the study conducted in Serbia (Komnenić & Pokrajčić, 2012) applying the VAIC methodology to generate independent variables reflecting intellectual capital, the authors created regression models. This study was followed by more intensive research in domestic business practice (Janošević and Dženopoljac; 2015; Dženopoljac, Janošević & Bontis, 2016).

MATERIALS AND METHODS

Based on the literature dealing with intellectual capital research (Bontis, 1998; Subramaniam & Youndt, 2005; Do Rosário Cabrita & Bontis, 2008; Sharabati, Jawad & Bontis, 2010; Kianto, Sáenz & Aramburu, 2017) a questionnaire was created. An anonymous survey was sent to Serbian ICT companies in 2020. The research sample included 611 employees from ICT companies, so the sample was considered as acceptable. ICT sector is considered as a sector with priority direction of development in the Republic of Serbia (Ivanov, Jevtić, Stanujkić & Karabasević, 2018).

The first part of the questionnaire was composed of 90 input variables, 30 for each construct. The second part of the questionnaire included 11 selected input variables of business performance. A five-level Likert scale was used: 1 - strongly disagree to 5 - strongly agree. The third part of the questionnaire contains questions that more closely define the ICT company and the position of the respondent: total number of employees; function of the respondent in the ICT company (top manager, middle level manager and line manager) and place of business of the company. The used methods included descriptive statistics, Kolmogorov-Smirnov test, Shapiro-Wilk test, Jarque-Bera test and Cronbach's alpha (Barclay, Higgins & Thompson, 1995; Komšić, 2018; Nunnally, 1978; Churchill, 1979; Hair, Risher, Sarstedt & Ringle, 2019).

Factor analysis has also been used in the research (Velicer & Jackson, 1990; Worthington & Whittaker, 2006; Kahn, 2006; Steger, 2006; Pallant, 2009; Subotić, 2013). Exploratory factor analysis (EFA) was applied in the research, and within principal axis factoring method (PAF), and afterwards Partial Least Squares (Hair, Hollingsworth, Randolph & Chong, 2017; Komšić, 2018; Grieder & Steiner, 2022). In the EFA method the data

were processed in the statistical package SPSS for Windows, version 20. PLS-SEM is a linear regression method used for modelling very complex sets of data, when it is not possible to apply the usual regression analysis (Hair et al., 2017; Sarstedt, Ringle & Hair, 2017; Hair et al., 2019; Dash & Paul, 2021), and the data were processed in the Smart PLS v.3.2.7 software.

RESULTS

Small and medium businesses are most represented in the sample (63.5%). The majority of respondents are managers on lower positions (71.7%) and middle-level managers (23.1%). If it is known that companies have significantly fewer top managers, compared to all other managers, then the participation of 5.2% can be considered significant.

Table 1. *Structure of the sample in relation to the total number of employees and the function of the respondents*

Variables	Frequency	Percentage share (%)
Number of employees		
Micro enterprises (<10)	150	24.5
Small businesses (<50)	195	31.9
Medium enterprises (<250)	193	31.6
Large Enterprises (>250)	73	11.9
Top managers	32	5.2
Middle level managers	141	23.1
Lower level managers	438	71.7

Source: Author's elaboration of the data

Table 2 shows the registered place of business of the ICT companies and the majority of businesses are based in Belgrade (57.12%).

Table 2. *Companies in the sample*

Variables	Frequency	Percentage share (%)
Belgrade	349	57.12
Niš	71	11.62
Novi Sad	54	8.84
Kragujevac	39	6.38
Kraljevo	19	3.11
Subotica	13	2.13
Užice	10	1.64
Šabac	10	1.64
Čačak	7	1.15
Leskovac	7	1.15
Vranje	5	0.82
Sombor	4	0.65
Valjevo	3	0.49
Zrenjanin	3	0.49
Smederevo	3	0.49
Novi Pazar	3	0.49
Pančevo	2	0.33
Babušnica	2	0.33
Kruševac	2	0.33
Šid	2	0.33
Nova Varoš	1	0.16
Nova Pazova	1	0.16
Zaječar	1	0.16
Total	611	100.00

Source: Author's elaboration of the data

Descriptive analysis and factor analysis by EFA method has been conducted (Conway & Huffcutt's; 2003; Onyekachi & Olanrewaju, 2020) as shown in the simplistic model by Lekić et al. (2022a).

Table 3. *Results of the reflective measurement model*

	Variable	Factor loadings (Path coefficients)	Cronbach α	CR (composite reliability)	AVE (convergent validity)
Human Capital (HC)	HC1	0.840	0.794	0.878	0.707
	HC2	0.869			
	HC3	0.812			
Structural Capital (SC)	SC1	0.748	0.747	0.854	0.662
	SC2	0.816			
	SC3	0.872			
Relational Capital (RC)	RC1	0.705	0.790	0.875	0.703
	RC2	0.902			
	RC3	0.893			

Source: Author's calculation

In Table 3, the values of Cronbach alpha coefficients CR values obtained are satisfactory. In the assessment of the reflective measurement convergent validity, the convergent validity is satisfactory for all latent constructs. Table 4 shows the values of cross-standardized factor loadings (outer loadings) of the reflective measurement model.

Table 4. *Values of cross-standardized factor loadings of the reflective measurement model*

		HC	RC	SC	HC	RC	SC
		Fornell-Larcker			Cross loadings		
HC	HC1	0.841			0.840	0.593	0.603
	HC2				0.869	0.525	0.599
	HC3				0.812	0.350	0.528
SC	RC1	0.595	0.838		0.336	0.705	0.388
	RC2				0.560	0.902	0.690
	RC3				0.559	0.893	0.692
RC	SC1	0.689	0.729	0.814	0.405	0.468	0.748
	SC2				0.654	0.492	0.816
	SC3				0.589	0.786	0.872

Source: Author's calculation

Discriminant validity values in Table 5 obtained are satisfactory.

Table 5. *Values of the co-linearity coefficient of variance inflation (VIF)*

Variable	VIF	Variable	VIF
Leadership in the ICT sector (BP-1)	1.836	New Product Launch Success Rate (BP-4)	1.913
Market position of the company (BP-10)	1.755	Overall Business Performance and Success (BP-5)	1.898
The share of export income in the total income of the company (BP-11)	1.578	Employee productivity (BP-6)	1.652
Future business prospects (BP-2)	1.688	Process Productivity (Transaction) (BP-7)	1.814
Willingness to react quickly to the moves of the competition (BP-3)	2.161	Sales growth (BP-8)	1.782
		Profit growth (BP-9)	1.809

Source: Author's calculation

The presented results in Table 6 indicate that the variables BP-1 - Leadership in the ICT sector and BP-3 - Willingness to react quickly to the moves of the competition are not statistically significant.

Table 6. *Results of statistical analysis of formative measurement variables*

Variable	Outer weights	Std. Dev.	t-value	p-value
BP-1	-0.034	0.049	0.694	0.487
BP-10	0.180	0.043	4.156	0.000
BP-11	0.095	0.046	2.071	0.038
BP-2	0.325	0.046	7.020	0.000
BP-3	0.081	0.050	1.629	0.103
BP-4	0.101	0.048	2.131	0.033
BP-5	0.115	0.044	2.635	0.008
BP-6	0.223	0.044	5.072	0.000
BP-7	0.110	0.045	2.457	0.014
BP-8	0.100	0.043	2.332	0.020
BP-9	0.248	0.045	5.480	0.000

Source: Author's calculation

The reliability, relevance and quality of the model, the ability to predict the movement of the endogenous variable, Business performance of companies in the ICT sector, was assessed. In the process of testing the structural model, collinearity between sets of predictor variables was first examined.

Table 7. *Inner VIF Values of the model*

	BP
HC	
RC	2.131
SC	2.131

Source: Author's elaboration of the data

The results of the investigation of collinearity between latent constructs (VIF) are 2.131 (Table 7), that is, the obtained values are less than 3 (Hair et al., 2017; Hair et al., 2019; Dash & Paul, 2021). The obtained values confirm the fact that there is no collinearity problem in the model.

Table 8. *Values of path coefficients in the model*

	Direct path	Total indirect effect	Specific indirect effects
HC → RC	0.595		
HC → SC	0.689		
RC → BP	0.473		
SC → BP	0.348		
HC → BP		0.522	
HC → RC → BP			0.281
HC → SC → BP			0.240

Source: Author's calculation

Human capital (Table 8) confirms the fact that it significantly, but indirectly affects the Business performance of the company, which is in line with its direct impact on Business performance in the Simplistic model (Lekić et al., 2022a).

The R^2 adjusted of 0.583 indicates that 58.3% of business performance is explained by the predictor variables Structural Capital and Relational Capital. In addition, the predictor variable Human Capital explains Relational Capital with 35.5% and Structural Capital with 47.5%.

The value of cross-validated redundancy was calculated using the Stone-Geisser Q^2 indicator (Tenenhaus, Esposito Vinzi, Chatelin & Lauro, 2005; Henseler, Ringle & Sinkovics, 2009; Chin, 2010; Akbari, Bahrami, Dehghani Bidgoli, Karamali, & Hosseini, 2023), with a satisfactory level of predictive significance of the model. The value of Q^2 is shown in Table 9.

Table 9. Values of the Stone-Geisser indicator of cross-validated redundancy – Q^2

	SSO	SSE	$Q^2 = (1 - SSE/SSO)$
BP	6,721.000	5,282.518	0.214
HC	1,833.000	1,833.000	
RC	1,833.000	1,390.405	0.241
SC	1,833.000	1,275.161	0.304

Source: Author's calculation

The results (Table 10) show that the obtained values indicate a small influence of exogenous latent constructs on Business Performance.

Table 10. Values of the influence size coefficients – f^2

	BP	HC	RC	SC
HC			0.549	0.906
RC	0.252			
SC	0.137			

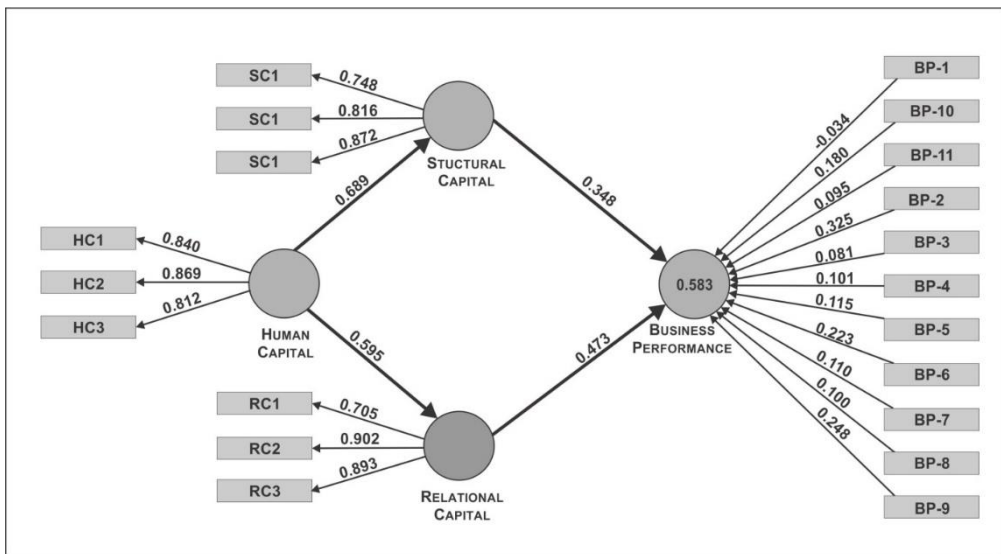
Source: Author's calculation

The results of hypothesis testing using the PLS-SEM technique are shown in the Table 11 and all the hypotheses were confirmed.

Table 11. Results of hypothesis testing using the PLS-SEM technique

	β Original Sample (O)	Standard Deviation (STDEV)	t Statistics ($ O /STDEV$)	P Values	Confidence interval 2,5-97,5%		Confirmatio
H1: HC → RC	0.595	0.028	21.593	0.000	0.541	0.648	✓
H2: HC → SC	0.689	0.022	31.650	0.000	0.645	0.730	✓
H3: RC → BP	0.473	0.052	9.061	0.000	0.370	0.574	✓
H4: SC → BP	0.348	0.053	6.626	0.000	0.245	0.452	✓

Source: Author's calculation

**Chart 1.** Graphical presentation of the results of hypothesis testing using the PLS-SEM technique (Diamond model)

Source: Author's calculation

CONCLUSION

The review of previous empirical researches has shown that there are important unexplored questions that should be looked at in more detail,

as well as investigated and examined in a comprehensive study, while respecting the conclusions of modern theoretical and methodological knowledge to which studies conducted in the Republic of Serbia have arrived. This created an opportunity for the research that is the subject of this paper, because there is a theoretical and practical need for the proposed research. The aim of the paper was to broaden the existing research model related to the determination of the interconnection of intellectual capital components and business performance of Serbian companies in the ICT sector by the Diamond model, in which all the hypotheses have been confirmed. The findings should be taken cautiously, since there are certain shortcomings when conducting the empirical part of the study. First of all, the study covers a relatively small number of companies from the ICT sector. The perceptions can differ significantly because each respondent perceives a certain indicator in a different way. Future research should focus on a larger number of companies and expand the coverage to other sectors.

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INTELEKTUALNI KAPITAL I POSLOVNE PERFORMANSE U IKT KOMPANIJAMA

Nemanja Lekić

Jelena Vapa Tankosić

Slavica Mandić

Bojan Vapa

Snežana Lekić

Sažetak: *Zahtevi savremenog poslovnog okruženja inicirali su pojavu nove paradigme koja svoje polazište nalazi u tome da je intelektualna imovina ključna varijabla uspeha svake kompanije, što je podstaklo brojna istraživanja u ovoj oblasti. Brze i ekstenzivne promene u svim domenima poslovanja zahtevaju od kompanija da budu fleksibilne i spremne da na date promene odgovore u skladu sa specifičnošću konkretne situacije. U takvim uslovima kompanije moraju kreirati svoju bazu znanja i imati vredne i kompetentne zaposlene kojima treba na pravi način upravljati. Ljudski resursi koji poseduju adekvatno znanje, koji su ovladali specifičnim veštinama i kompetencijama, koji su posvećeni timskom radu, inovacijama i permanentnom usavršavanju čine bazu intelektualnog kapitala. Cilj rada je da se nadogradi postojeći model istraživanja da bi se analizirala međupovezanost komponenti intelektualnog kapitala i poslovnih performansi srpskih kompanija IKT sektora.*

Ključne reči: *intelektualni kapital / poslovne performanse / IKT sektor.*

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ORIGINALNI NAUČNI RAD

DETERMINANTE PROFITABILNOSTI MIKROPOLJOPRIVREDNIH PREDUZEĆA IZ REPUBLIKE SRBIJE

Tekić Dragana¹

Mutavdžić Beba²

Milić Dragan³

Zekić Vladislav⁴

Novaković Tihomir⁵

Popov Milana⁶

Sažetak: U radu su analizirane determinante profitabilnosti mikro poljoprivrednih preduzeća koja su poslovala u Republici Srbiji, analiza

¹ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: dragana.tekic@polj.uns.ac.rs

² Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: bebam@polj.uns.ac.rs

³ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: mdragan@polj.uns.ac.rs

⁴ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: zekic@polj.uns.ac.rs

⁵ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: tihomir.novakovic@polj.uns.ac.rs

⁶ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, 21000 Novi Sad, e-mail: milana.popov@polj.uns.ac.rs

je sprovedena za period od 2010. do 2019. godine. Primenom panel regresione analize ispitivan je uticaj različitih mikroekonomskih i makroekonomskih determinanti na profitabilnost, merenu stopom prinosa imovine. Kao mikroekonomske determinante profitabilnosti posmatrani su sledeći pokazatelji: likvidnost, finansijski leveridž, zaduženost, pokazatelj strukture imovine, racio obrta ukupne poslovne imovine, racio obrta fiksne imovine, racio obrta obrtne imovine, racio obrta zaliha, racio obrta potraživanja od kupaca i stopa prodaje. Kao makroekonomske determinante profitabilnosti posmatrani su pokazatelji stopa rasta bruto domaćeg proizvoda i inflacija. Na osnovu rezultata panel regresione analize utvrđeno je da pozitivan i statistički značajan uticaj na profitabilnost posmatranih preduzeća imaju racio obrta ukupne poslovne imovine, racio obrta obrtne imovine i stopa rasta bruto domaćeg proizvoda. Negativan i statistički značajan uticaj na profitabilnost posmatranih preduzeća imaju zaduženost, pokazatelj strukture imovine i racio obrta fiksne imovine. Očekuje se da dobijeni rezultati budu od koristi svim zainteresovanim stranama u agrobiznisu, pre svega u kontekstu analize faktora za koje je utvrđeno da imaju negativan uticaj na profitabilnost posmatranih preduzeća.

Ključne reči: profitabilnost / poljoprivredna preduzeća / Republika Srbija / panel regresija.

UVOD

Osnovni cilj svakog preduzeća jeste ostvarivanje dugoročnog poslovnog uspeha. Poslovni uspeh preduzeća obično se meri profitabilnošću, tj. profitabilnost preduzeća predstavlja jedan od bazičnih pokazatelja uspešnosti celokupnog poslovanja jednog privrednog subjekta. Nema sumnje da profitabilnost direktno utiče na akcionare, potencijalne investitore, zaposlene i druge zainteresovane strane (Deng i sar., 2017). Preduzeća se danas takmiče na globalnom nivou, što predstavlja veliki izazov naročito privredama u razvoju, te nije dovoljno oceniti samo profitabilnost preduzeća, već je potrebno utvrditi i determinante ostvarene profitabilnosti, kao i način njihovog delovanja (Pervan i sar. 2019). Razumevanje determinanti profitabilnosti je veoma važno pitanje, pre svega zato što na profitabilnost preduzeća iz različitih sektora utiču i različite determinante. Determinante profitabilnosti najčešće se dele na dve osnovne grupe, na mikroekonomske (interne) i makroekonomske (eksterne). Kvalitet menadžmenta jednog preduzeća ogleda se upravo u

sposobnosti identifikovanja ovih mikroekonomskih i makroekonomskih determinanti čijim bi se efikasnijim upravljanjem, tj. praćenjem povećale ekonomske performanse preduzeća. Adekvatnu analizu profitabilnosti neophodno je sprovoditi ne samo na nivou pojedinačnog preduzeća, već i na nivou sektora. Značaj poljoprivredne i prehrambene industrije ogleda se i u visokom učešću ovih delatnosti u ukupnom BDP-u, kao i u velikom broju zaposlenih u ovim preduzećima. U periodu od 2011. do 2020. godine poljoprivredna proizvodnja učestvovala je u ukupnom BDP-u Srbije sa 7,03% (RZS, 2012-2021). Shodno značaju ove privredne grane, predmet istraživanja su mikropoljoprivredna preduzeća, kao najbrojnija od svih kategorija poljoprivrednih preduzeća, koja su poslovala na teritoriji Republike Srbije, u periodu 2010-2019. godine. U Republici Srbiji, na kraju 2019. godine poslovalo je 3.707 poljoprivrednih preduzeća, od čega su 3.133 (84,52%) mikropreduzeća (Agencija za privredne registre Republike Srbije). Prema Zakonu o računovodstvu u mikro pravna lica ubrajaju se ona koja ne prelaze dva od sledeća tri kriterijuma: prosečan broj zaposlenih 10, poslovni prihod od 700.000 evra i prosečna vrednost poslovne imovine 350.000 evra. Cilj istraživanja jeste da se oceni profitabilnost mikropoljoprivrednih preduzeća, kao i da se sagleda uticaj mikroekonomskih i makroekonomskih determinanti koji utiču na profitabilnost posmatranih preduzeća primenom panel regresionih modela.

PREGLED LITERATURE

Mnogobrojni autori u svetu istraživali su determinante profitabilnosti poljoprivrednih preduzeća. Jedno od prvih istraživanja iz ove oblasti je istraživanje koje su sproveli Goddard i sar. (2005) ispitivali su uticaj internih determinanti na profitabilnost preduzeća proizvodnog i uslužnog sektora u Belgiji, Francuskoj, Italiji i Velikoj Britaniji. Za analizu su upotrebljeni finansijski izveštaji 12.508 preduzeća u periodu od 1993. do 2001. godine. Na osnovu rezultata panel modela utvrđeno je da postoji negativan uticaj veličine na profitabilnost, odnosno da je formiranje jedinstvenog evropskog tržišta uticalo negativno na profitabilnost. Rezultati su pokazali da postoji negativan uticaj finansijskog leveridža na profitabilnost i pozitivan uticaj likvidnosti na profitabilnost u svim posmatranim zemljama. Uticaj strukture kapitala na Finansijske

performanse poljoprivrednih preduzeća u Indoneziji ispitivali su Suardi i Noor (2015). Uzorak ovog istraživanja sastojao se od 16 poljoprivrednih preduzeća, koja su poslovala u Indoneziji u periodu od 2010. do 2014. godine. Primenom višestruke regresije autori su ispitivali uticaj finansijskog leveridža i racia zaduženosti na profitabilnost i došli su do zaključka da pokazatelji strukture kapitala imaju statistički značajan uticaj na profitabilnost posmatranih preduzeća jedino u slučaju kada se ona iskazuje stopom povrata kapitala, pritom oba pokazatelja imaju negativan uticaj na profitabilnost. Jacob i Collins (2016) u svojoj studiji, analizirali su faktore profitabilnosti poljoprivrednih preduzeća u Keniji. Analizirano je 7 poljoprivrednih preduzeća u periodu od 2006. do 2014. godine, statistička analiza izvršena je primenom višestruke regresije. Rezultati ovog istraživanja pokazali su da na profitabilnost poljoprivrednih preduzeća u Keniji statistički značajan i pozitivan uticaj imaju likvidnost i veličina preduzeća, dok pokazatelj strukture imovine ima statistički značajan negativan uticaj na profitabilnost posmatranih preduzeća. Faktore od uticaja na finansijske performanse zamljoradničkih zadruga iz Malezije analizirali su u svom istraživanju, u periodu od 2010. do 2014. godine, Shamsuddin i sar. (2017). Rezultati su potvrdili da su na stopu prinosa na imovinu statistički značajan uticaj imali racio obrta fiksne imovine, dividende i veličina preduzeća, a na stopu prinosa na kapital likvidnost, racio obrta stalne imovine i investicije. Singh i saradnici (2019) izveli su analizu faktora finansijskih performansi poljoprivrednih zadruga iz Sjedinjenih Američkih Država za period od 2009. do 2017. godine. Uzorkom je obuhvaćeno 37 poljoprivrednih zadruga. Rezultati ove studije pokazali su da na profitabilnost poljoprivrednih zadruga pozitivan i statistički značajan uticaj ima samo rast prihoda, dok indeks neizvesnosti, veličina i inetenzivnost kapitala imaju negativan statistički značajan uticaj na profitabilnost posmatranih zadruga. Analizu uticaja strukture kapitala na profitabilnost poljoprivrednih preduzeća iz Kine sprovedi su Xu i saradnici (2021). Analizirano je 39 preduzeća, za period od 2013. do 2019. godine. Primenom panel regresione analize, autori su došli do zaključka da na profitabilnost posmatranih preduzeća negativan i statistički značajan uticaj imaju finansijski leveridž, odnos kratkoročnih obaveza i ukupne imovine, a od svih posmatranih pokazatelja pozitivan i statistički značajan uticaj na profitabilnost imaju samo veličina preduzeća i stopa prodaje. U našoj zemlji ne postoji veliki broj istraživanja na temu uticaja determinanti na profitabilnost preduzeća iz poljoprivredne industrije. Jedno od prvih istraživanja na ovu temu, u našoj zemlji, sprovedi su Jakšić

i sar. (2016) analizirali su profitabilnost poljoprivrednih preduzeća u zemljama Jugoistočne Evrope u periodu od 2012. do 2014. godine na uzorku od 3022 preduzeća. Primenom t-testa istraženo je da li postoje razlike u nivou profitabilnosti između zemalja koje su članice Evropske unije u odnosu na ostale posmatrane zemlje, a analizom varijanse istraženo je da li se profitabilnost poljoprivrednih preduzeća razlikuje između pojedinih zemalja obuhvaćenih uzorkom. Rezultati istraživanja pokazali su da je profitabilnost preduzeća zemalja koje su članice EU značajno veća u odnosu na ostale posmatrane zemlje i da postoje značajne razlike u profitabilnosti poljoprivrednih preduzeća između posmatranih zemalja. Andrašić i sar. (2018) analizirali su faktore od uticaja na profitabilnost srednjih i velikih poljoprivrednih preduzeća u AP Vojvodini u periodu od 2006. do 2015. godine. Uzorak je sadržao 420 preduzeća. Na osnovu formirana tri regresiona modela došlo se do zaključka da svi posmatrani faktori imaju statistički značajan uticaj na profitabilnost posmatranih preduzeća. Na profitabilnost negativno utiču veličina preduzeća i finansijski leveridž, dok svi ostali faktori imaju pozitivan uticaj na profitabilnost. Značaj ovog istraživanja jeste uključivanje faktora osiguranja i izvoza i analiza njihovog uticaja na profitabilnost. Milašinović i Mitrović (2020) analizirali su interne determinate profitabilnosti poljoprivrednih preduzeća u Republici Srbiji. Uzorak je obuhvatio 15 preduzeća koja su poslovala u periodu od 2016. do 2018. godine. Primenom panel regresione analize utvrđeno je da na profitabilnost posmatranih preduzeća od svih posmatranih faktora, statistički značajan uticaj imaju samo efikasnost ukupne imovine i stopa kapitalizacije. Pri čemu, efikasnost ukupne imovine ima pozitivan uticaj na profitabilnost, dok stopa kapitalizacije negativno utiče na profitabilnost.

MATERIJAL, UZORAK I METOD ISTRAŽIVANJA

Istraživanje je bazirano na podacima iz finansijskih izveštaja preduzeća. Na osnovu podataka preuzetih od Agencije za privredne registre, na kraju 2019. godine u Republici Srbiji poslovalo je 3.707 poljoprivrednih preduzeća, od kojih su 3.133 bila mikropreduzeća. Iz osnovnog skupa najpre su isključena preduzeća koja nisu poslovala u periodu koji je određen za potrebe ovog istraživanja. Takođe, isključena su ona preduzeća koja nisu redovno podnosila finansijske izveštaje i ona koja su

u stečajnom postupku ili likvidaciji. U skladu sa prethodno navedenim, od broja preostalih preduzeća izabran je proporcionalni uzorak naspram njihovog učešća u osnovnom skupu, a nakon toga su iz uzorka isključena preduzeća sa ekstremnim vrednostima pokazatelja profitabilnosti. U uzorku je ostalo 167 preduzeća.

Kao mikroekonomske determinante profitabilnosti korišćeni su različiti finansijski pokazatelji uspešnosti poslovanja preduzeća, koji su izračunati na osnovu podataka iz finansijskih izveštaja posmatranih poljoprivrednih i prehrambenih preduzeća. Kao makroekonomske determinante profitabilnosti posmatrani su stopa rasta bruto domaćeg proizvoda i inflacija. Spisak promenljivih korišćenih za formiranje panel regresionih modela prikazan je u Tabeli 1.

Tabela 1. *Lista promenljivih*

Promenljiva	Oznaka	Izračunavanje	Predviđen uticaj
Stopa prinosa imovine	ROA	Neto prihod/Prosečna aktiva	/
Likvidnost	LIK	Obrtna imovina-Zalihe/ Kratkoročne obaveze	+/-
Finansijski leveridž	LEV	Ukupne obaveze/Kapital	+/-
Racio zaduženosti	ZAD	Ukupne obaveze/Ukupna aktiva	+/-
Stopa kapitalizacije	TANG	Fiksna imovina/Ukupna imovina	+/-
Racio obrta ukupne poslovne imovine	ROPI	Prihodi od prodaje/ Prosečna poslovna imovina	+/-
Racio obrta fiksne imovine	ROFI	Prihodi od prodaje/ Prosečna fiksna imovina	+/-
Racio obrta obrtne imovine	ROOI	Prihodi od prodaje/ Prosečna obrtna imovina	+/-
Racio obrta zaliha	ROZ	Prihodi od prodaje/Prosečne zalihe	+/-
Racio obrta potraživanja od kupaca	ROPK	Prihodi od prodaje/ Prosečno potraživanje od kupaca	+/-
Stopa rasta prodaje	SP	Prihodi od prodaje tekuće godine- Prihodi od prodaje prethodne godine/ Prihodi od prodaje prethodne godine	+/-
Stopa rasta bruto domaćeg proizvoda	GDP	Stopa rasta bruto domaćeg proizvoda	+/-
Inflacija	INF	Stopa rasta CPI	+/-

Izvor: Prikaz autora

U svrhu ocene uticaja mikroekonomskih i makroekonomskih determinanti na profitabilnost mikropoljoprivrednih preduzeća koja su poslovala na teritoriji Republike Srbije u periodu od 2010. do 2019. godine primenjen je metod panel regresione analize.

Panel podaci, longitudinalni podaci ili kombinovani podaci vremenskih serija i uporednih podataka, u ekonometriji i statistici označavaju skupove podataka koji sadrže ponovljena zapažanja o izboru opservacija iz skupa jedinica posmatranja čime se pokriva i vremenska i prostorna dimenzija.

Od ispunjenosti određenih pretpostavki o heterogenosti između jedinica posmatranja, odnosno o stepenu varijabiliteta regresionih parametara zavisi i koji će model biti primenjen u analizi. Izbor odgovarajućeg modela zavisi i od prirode podataka i vrste problema koji se želi obuhvatiti analizom. Razlikuje se veliki broj modela panel podataka, u najširem smislu, prema stepenu varijabiliteta regresionih parametara, javljaju se sledeći slučajevi: 1) Svi regresioni parametri su konstantni. 2) Slobodni članovi razlikuju se po jedinicama posmatranja, a regresioni parametri uz nezavisne promenljive su konstantni. 3) Regresioni parametri uz nezavisne promenljive su varijabilni i po jedinicama posmatranja i po vremenskim periodima.

Prilikom izbora adekvatnog panel modela neophodno je utvrditi postojanje individualnih i vremenskih efekata u fiksnoj, odnosno stohastičkoj specifikaciji. Testiranjem hipoteza ispituje se prisustvo neobuhvaćene heterogenosti u panel regresionom modelu, ako postoji heterogenost utvrđuje se da li je ona fiksna ili slučajna. U svrhu utvrđivanja da li je prikladan model fiksnih efekata ili OLS model primenjuje se F-test, dok se za poređenje OLS modela i modela stohastičkih efekata koriste testovi Lagrange multiplikatora (LM). Ukoliko se ni u jednom testu ne odbaci polazna hipoteza primenjuje se OLS model. Hausmanov test specifikacije se najčešće primenjuje za poređenje modela sa fiksnim ili stohastičkim efektima, kod ovog testa polazi se od pretpostavke da individualni efekti nisu u koralciji sa regresorima. U slučaju odbacivanja nulte hipoteze primenjuje se model fiksnih efekata (Das, 2019).

Za sve formirane modele najpre su proverene osnovne pretpostavke za primenu panel podataka, tj. testirano je postojanje multikolinernosti, heteroskedastičnosti, autokorelacije i zavisnosti uporednih podataka, kako bi se odabrala konačna specifikacija modela.

Za ispitivanje uticaja mikroekonomskih i makroekonomskih determinanti profitabilnosti mikropoljoprivrednih preduzeća formiran je regresioni model koji ima sledeći oblik:

$$\begin{aligned} ROA_{it} = & \beta_{it} + \beta_1 LIK + \beta_2 LEV + \beta_3 ZAD + \beta_4 TANG + \beta_5 ROPI + \beta_6 ROFI \\ & + \beta_7 ROOI \\ & + \beta_8 ROZ + \beta_9 ROPK + \beta_{10} SP + \beta_{11} GDP + \beta_{12} INF + u_{it} \end{aligned}$$

Gde je i oznaka za svako preduzeće ($i= 1,2,3\dots,n$), a t oznaka za svaku godinu ($t= 1,2,3\dots,10$).

Za statističku obradu podataka korišćen je softver R 4.1.2.

REZULTATI ISTRAŽIVANJA SA DISKUSIJOM

U tabeli 2. prikazana je deskriptivna statistika zavisne i nezavisno promenljivih.

Tabela 2. Deskriptivna statistika za indikatore poslovanja mikropoljoprivrednih preduzeća za period 2010–2019. godine

Indikator	Medijana	Minimum	Maksimum	Standardna devijacija	Q1	Q3
ROA	1,229	-1.391,750	192,537	49,238	0,142	4,706
LIK	0,713	0,000	2.002,933	58,612	0,334	1,348
LEV	0,779	0,000	746,484	30,422	0,098	2,653
ZAD	0,629	0,000	99,794	2,779	0,318	0,912
TANG	0,192	0,000	1,000	0,318	0,028	0,573
ROPI	0,994	0,000	57,833	3,334	0,220	2,416
ROFI	2,264	0,000	192.736,000	5.305,574	0,055	14,623
ROOI	1,577	0,000	60,842	4,193	0,508	3,292
ROZ	3,421	0,000	31.272,400	1.037,651	0,564	9,473
ROPK	3,998	0,000	10.024,000	291,129	0,991	10,621
SP	0,001	-1,000	375,250	11,929	-0,212	0,251
GDP	2,068	-1,590	4,495	1,887	0,731	3,339
INF	2,606	1,122	11,137	3,274	1,849	7,330

Izvor: Obračun autora

Medijalna vrednost pokazatelja ROA, u posmatranom periodu, iznosila je 1,23%, a na osnovu vrednosti prvog kvartila može se uočiti da 25% od posmatranog broja preduzeća ima profitabilnost ispod 0,14%, dok na osnovu vrednosti trećeg kvartila može da se uoči da 25% od posmatranog broja preduzeća ima profitabilnost veću od 4,71%. Medijalna vrednost LEV iznosi 0,78, što ukazuje na dominantno učešće kapitala u pasivi. Pokazatelj zaduženosti ZAD ima medijalnu vrednost 0,63. Visoka vrednost koeficijenta zaduženosti ukazuje na to da je najveći deo imovine preduzeća (63%) finansiran iz dugovanja, što svakako narušava finansijsku strukturu. Medijalna vrednost pokazatelja strukture imovine TANG iznosi 0,19, odnosno 19% vrednosti ukupne imovine čini fiksna imovina. Ovaj pokazatelj pokazuje najmanje oscilacije, tj. ima najmanju vrednost standardne devijacije. Medijalna vrednost ROPI iznosi 0,99, što znači da se ukupna imovina obrne samo jednom godišnje kroz prihode od prodaje. ROFI ima medijalnu vrednost 2,26, što ukazuje na to da na svaki dinar uloženog kapitala u fiksnu imovinu preduzeće ostvaruje prihod od 2,26 dinara. Najveći varijabilitet među svim posmatranim nezavisno promenljivima uočen je upravo kod promenljive racio obrta fiksne imovine, što pokazuje velike razlike između posmatranih preduzeća u pogledu ostvarenog prihoda na osnovu ulaganja u fiksnu imovinu. Na osnovu medijalne vrednosti ROOI može se uočiti da je na svaki dinar uložen u obrtnu imovinu preduzeće ostvarilo prihod od 1,58 dinara. Medijalna vrednost ROZ iznosi 3,42, odnosno ukupne zalihe su se 3,42 puta vratile u početni novčani oblik. Medijalna vrednost ROPK iznosi 3,99, odnosno preduzeća naplaćuju svoja potraživanja 4 puta u toku godine. SP ima medijalnu vrednost 0,001 što ukazuje na to da su posmatrana preduzeća neznatno povećala svoje prihode od prodaje tokom godina. Bruto domaći proizvod i inflacija se obično tumače na godišnjem nivou, ali ne i po pojedinim preduzećima, te je svakom preduzeću u pojedinoj godini dodeljena ista vrednost ovih pokazatelja. Medijalna vrednost bruto domaćeg proizvoda u posmatranom periodu iznosila je 2,07%, a prosečna vrednost inflacije 2,61%. Najniža vrednost stope bruto domaćeg proizvoda zabeležena je 2014. godine, kada je ona iznosila -1,59%, a najveća vrednost 2018. godine od 4,49%. Najniža vrednost inflacije zabeležena je 2016. godine (1,12%), a najviša vrednost 2011. godine (11,11%).

U svrhu ocene uticaja različitih determinanti na profitabilnost mikropoljoprivrednih preduzeća formiran je panel model, u kome je kao zavisno promenljiva figurirala stopa povrata imovine (ROA).

Za promenljive koje figuriraju u modelu najpre je izvedena provera multikolinearnost nezavisno promenljivih (Tabela 3.), a zatim su ocenjeni modeli sa konstantnim regresionim parametrima, fiksnim i stohastičkim efektima.

Tabela 3. Testiranje multikolinearnosti nezavisno promenljivih

Promenljiva	VIF	1/VIF
ROPI	4,480	0,223
ROOI	4,190	0,239
TANG	1,260	0,794
INF	1,080	0,925
GDP	1,060	0,939
LEV	1,020	0,982
ZAD	1,020	0,983
SP	1,010	0,986
ROPK	1,010	0,987
ROFI	1,010	0,994
ROZ	1,010	0,994
LIK	1,000	0,997

Izvor: Obračun autora

Na osnovu dobijenih rezultata uočava se da u modelu ne postoji multikolinearnost ($VIF < 5$).

Prilikom izbora konačne specifikacije modela izvedeno je testiranje postojanja individualnih i vremenskih efekata. Postojanje individualnih i vremenskih efekata testirano je pomoću F-testa za fiksnu specifikaciju, a za stohastičku specifikaciju testirano je pomoću Breusch Pagan-ovog LM testa (Tabela 4).

Tabela 4. Testovi za utvrđivanje postojanja individualnih i vremenskih efekata

Test	Vrednost test statistike	p-vrednost
	F-test (individualni efekti)	1,571
F-test (vremenski efekti)	0,389	0,909
Breusch-Pagan LM test (individualni efekti)	18,309	0,000
Breusch-Pagan LM test (vremenski efekti)	2,469	0,104

Izvor: Obračun autora

Na osnovu rezultata F-testa i Breusch Pagan-ovog LM testa individualnih efekata može se potvrditi postojanje individualnih efekata na pragu značajnosti 1% ($p < 0,01$). Na osnovu rezultata F-testa i Breusch Pagan-ovog LM testa vremenskih efekata, prihvata se nulta hipoteza i zaključuje se da ne postoje značajni vremenski efekti ($p > 0,1$). Na osnovu rezultata ovih testova utvrđena je neadekvatnost modela sa konstantnim regresionim parametrima i utvrđeno je da je potrebno koristiti model sa individualnim efektima. Nakon utvrđivanja relevantnosti modela sa individualnim efektima, neophodno je utvrditi prirodu individualnih efekata, tj. ispitati da li su ovi efekti fiksni ili stohastički. Za izbor specifikacije modela koristi se Hausmanov test. S obzirom na to da je klasični Hausmanov test pristrasan u slučajevima kada su narušene osnovne pretpostavke modela, u narednom koraku testirano je prisustvo heteroskedastičnosti, autokorelacije i zavisnosti uporednih podataka.

Rezultati testova heteroskedastičnosti, autokorelacije i zavisnosti uporednih podataka prikazani su u sledećoj tabeli (Tabela 5).

Tabela 5. Testovi heteroskedastičnosti, autokorelacije i zavisnosti uporednih podataka

Test	Vrednost test statistike	p-vrednost
	Wald test	8,119
Wooldrige test	95,105	0,000
CD Pesaran test	27,354	0,000

Izvor: Obračun autora

Za testiranje postojanja heteroskedastičnosti primenjen je modifikovani Wald test i na osnovu rezultata ovog testa može se uočiti da se na pragu značajnosti 1% ($p < 0,01$) odbacuje nulta hipoteza o homoskedastičnosti i prihvata alternativna o postojanju heteroskedastičnosti. Prisustvo autokorelacije testirano je primenom Wooldrige testa i potvrđeno je prisustvo autokorelacije, na pragu značajnosti 1% ($p < 0,01$). Rezultati Pesaranovog CD testa pokazuju da postoji statistički značajna zavisnost uporednih podataka ($p < 0,01$), odnosno postojanje zajedničkih faktora koji imaju uticaj na zavisno promenljivu. S obzirom na to da je testovima vremenskih efekata utvrđeno da oni nisu značajni, može se pretpostaviti da je ovakav rezultat posledica značajnog uticaja makroekonomskih faktora.

Tabela 6. Ocenjeni model fiksnih individualnih efekata za profitabilnost mikropoljoprivrednih preduzeća

ROA	Koeficijenti	Standardna greška	t-količnik	p-vrednost
Konstanta	6,762	1,716	3,939***	0,000
LIK	-0,002	0,011	-0,205	0,838
LEV	0,037	0,044	0,829	0,408
ZAD	-11,268	0,436	-25,840***	0,000
TANG	-9,863	4,597	-2,146**	0,033
ROPI	1,086	0,342	3,179***	0,001
ROFI	-4,235	0,001	-2,103**	0,037
ROOI	0,501	0,149	3,345***	0,001
ROZ	-0,001	0,001	-0,605	0,546
ROPK	0,001	0,002	0,257	0,797
SP	0,074	0,319	0,234	0,815
GDP	0,729	0,262	2,787**	0,005
INF	-0,203	0,144	-1,406	0,162
n	167			
t	10			
N	1670			
R ²	0,377			
F test	69,888			
p-value (F)	0,000			

***, **, * prag značajnosti 1%, 5% i 10

Izvor: Obračun autora

Rezultati Hausmanovog testa statistike modela od 22,088 ($p=0,036$) ukazuju na to da je na pragu značajnosti od 5% odbačena nulta i prihvaćena alternativna hipoteza, na osnovu čega je izabran model fiksnih efekata. Zbog narušenosti pretpostavki panel modela, tj. zbog utvrđenog prisustva heteroskedastičnosti, autokorelacije i zavisnosti uporednih podataka, primenjena je alternativna specifikacija modela fiksnih efekata koja predstavlja model sa korigovanim standardnim greškama (PCSE-linear regression with panel-corrected standard errors). Rezultati ovog modela predstavljeni su u Tabeli 6.

Panel regresioni model formiran je na osnovu podatka za 167 preduzeća i period od 10 godina, te je ukupna broj opservacija bio 1670. Na osnovu rezultata F-testa može se zaključiti da je formirani model visoko statistički značajan ($p<0,01$), a na osnovu vrednosti koeficijenta determinacije može se uočiti da je varijabilitet stope povrata imovine sa 37,7% objašnjena uticajem ispitivanih faktora. Na pragu značajnosti 1% kao značajni faktori od uticaja na stopu povrata imovine izdvojili su se zaduženost, racio obrta ukupne poslovne imovine i racio obrta obrtne imovine. Na pragu značajnosti 5% kao značajni faktori izdvojili su se pokazatelj strukture imovine, racio obrta fiksne imovine i stopa rasta bruto domaćeg proizvoda. Pri čemu racio obrta ukupne poslovne imovine, racio obrta obrtne imovine i stopa rasta bruto domaćeg proizvoda imaju pozitivan i statistički značajan uticaj na profitabilnost. Pozitivan uticaj racia obrta ukupne poslovne imovine potvrdio je rezultate do kojih su došli Shamsuddin i sar. (2017), kao i Milašinović i Mitrović (2020). Negativan i statistički značajan uticaj na profitabilnost imaju zaduženost, pokazatelj strukture imovine i racio obrta fiksne imovine. Statistički značajan i negativan uticaj zaduženosti na profitabilnost poljoprivrednih preduzeća utvrdili su i Suardi i Noor (2015), Xu i sar. (2021), a u našoj državi Andrašić i sar. (2018) prilikom analize faktora profitabilnosti srednjih i velikih preduzeća iz AP Vojvodine. Ovim istraživanjem potvrđeni su rezultati do kojih su došli Milašinović i Mitrović (2020), u pogledu negativnog uticaja pokazatelja strukture imovine na profitabilnost poljoprivrednih preduzeća iz Republike Srbije. Negativan uticaj racia obrta fiksne imovine na profitabilnost utvrdili su i Shamsuddin i sar. (2017). Na osnovu rezultata panel regresione analize, a na osnovu parametra regresije može se očekivati da sa povećanjem racia zaduženosti za 1 dođe do smanjenja profitabilnosti za 11,27%. Takođe, na osnovu vrednosti regresionog

koeficijenta može se očekivati da sa povećanjem pokazatelja strukture imovine za 1 dođe do smanjenja profitabilnosti za 9,86%. Rezultati regresionog koeficijenta ukazuju na to da se sa povećanjem racia obrta ukupne poslovne imovine za 1 može očekivati povećanje profitabilnosti za 1,09%. Na osnovu regresionog koeficijenta racia obrta fiksne imovine može se uočiti da se sa povećanjem racia obrta fiksne imovine za 1 očekuje smanjenje profitabilnosti za 4,24%. Koeficijent regresije racia obrta obrtne imovine pokazuje da se sa povećanjem ovog pokazatelja za 1 može očekivati povećanje profitabilnosti od 0,50%. Na osnovu vrednosti regresionog koeficijenta stope rasta bruto domaćeg proizvoda može se uočiti da se sa povećanjem ovog pokazatelja za 1% očekuje povećanje profitabilnosti za 0,73%.

ZAKLJUČAK

Analiza finansijskih izveštaja mikropoljoprivrednih preduzeća, sprovedena na 167 subjekata, pokazala je da prosečna profitabilnost poljoprivrednih preduzeća u Srbiji iznosi 1,23%, što je daleko ispod proseka od 5% za profitabilna preduzeća. Na osnovu rezultata panel regresione analize utvrđeno je da na preduzeća najveći uticaj imaju zaduženost, racio obrta ukupne poslovne imovine i racio obrta obrtne imovine, a zatim struktura imovine, racio obrta fiksne imovine i stopa rasta bruto domaćeg proizvoda.

Na osnovu predznaka regresionih koeficijenata može se utvrditi da se sa povećanjem zaduženosti, pokazatelja strukture imovine, racia obrta fiksne imovine i racia obrta obrtne imovine može očekivati smanjenje profitabilnosti. Suprotno tome, sa povećanjem racia obrta ukupne poslovne imovine i stope rasta bruto domaćeg proizvoda može se očekivati da dođe do povećanja profitabilnosti.

Rezultati istraživanja doprinose kvalitetnom sagledavanju stanja i mogućnostima daljeg razvoja poslovanja mikropoljoprivrednih i prehrambenih preduzeća u Republici Srbiji, pre svega, u kontekstu analize onih faktora koji su negativno uticali na profitabilnost. Dobijeni rezultati mogu biti od koristi i svim zainteresovanim stranama u agrobiznisu, počev od menadžera preduzeća, pa do kreatora agrarne politike, a sve u cilju unapređenja poslovanja posmatranih preduzeća.

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ZAHVALNICA

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DETERMINANTS OF PROFITABILITY OF MICRO-AGRICULTURAL ENTERPRISES FROM THE REPUBLIC OF SERBIA

Dragana Tekić

Beba Mutavdžić

Dragan Milić

Vladislav Zekić

Tihomir Novaković

Milana Popov

Abstract: *The paper analyzes the determinants of profitability of micro-agricultural enterprises that operated in the Republic of Serbia, the analysis was carried out for the period from 2010 to 2019. Using panel regression analysis, the influence of various microeconomic and macroeconomic determinants on profitability, measured by the rate of return on assets, was examined. The following indicators were observed as microeconomic determinants of profitability: liquidity, financial leverage, indebtedness, asset structure indicator, total business asset turnover ratio, fixed asset turnover ratio, current asset turnover ratio, inventory turnover ratio, trade receivables turnover ratio and sales rate. Indicators of the growth rate of the gross domestic product and inflation were observed as macroeconomic determinants of profitability. Based on the results of the panel regression analysis, it was determined that the turnover ratio of total business assets, the turnover ratio of current assets and the growth rate of the gross domestic product have a positive and statistically significant influence on the profitability of the observed companies. Indebtedness, an indicator of asset structure and the turnover ratio of fixed assets have a negative and statistically significant impact on the profitability of the observed companies. It is expected that the obtained results will be useful to all interested parties in agribusiness, primarily in the context of the analysis of factors that have been determined to have a negative impact on the profitability of the observed companies.*

Keywords: *profitability / agricultural enterprises / Republic of Serbia / Panel regression.*

PREGLEDNI RADOVI

DOPRINOS POLJOPRIVREDE REALIZACIJI KONCEPTA ODRŽIVOG RAZVOJA

Đurić Katarina¹

Tomaš Simin Mirela²

Lukač Bulatović Mirjana³

Marković Todor⁴

Glavaš Trbić Danica⁵

Sažetak: *Koncept održivog razvoja predstavlja globalno prihvaćen razvojni model u svim segmentima privrede i društva, pa tako i u poljoprivredi. Cilj rada je da se, sistematizacijom dosadašnjih iskustava, prikaže doprinos koji poljoprivreda ostvaruje u domenu realizacije koncepta održivog razvoja, sa posebnim akcentom na prehrambenu sigurnost u zemljama u razvoju. U radu je posebno analiziran uticaj poljoprivrede na ekološku, ekonomsku i socijalnu dimenziju održivog razvoja. Osnovni doprinos poljoprivrede u domenu ekološke održivosti je minimiziranje štetnog uticaja na prirodne resurse*

¹ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, Novi Sad, e-mail: katarina.djuric@polj.uns.ac.rs

² Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, Novi Sad, e-mail: mirelat@polj.uns.ac.rs

³ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, Novi Sad, e-mail: mirjana.lukac@polj.uns.ac.rs

⁴ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, Novi Sad, e-mail: todor.markovic@polj.uns.ac.rs

⁵ Univerzitet u Novom Sadu, Poljoprivredni fakultet, Trg Dositeja Obradovića 8, Novi Sad, e-mail: danicagt@polj.uns.ac.rs

i obezbeđenje proizvodnje dovoljne količine zdravstveno bezbedne hrane. Jedan od faktora koji doprinosi ekonomskoj održivosti poljoprivrednih gazdinstava, a samim tim i ruralnih područja je diverzifikacija privrednih aktivnosti ruralne populacije uz adekvatne mere finansijske podrške poljoprivredi. Obezbeđenje ekonomske motivisanosti ruralnog stanovništva za privređivanjem i životom u ruralnim sredinama, uz poštovanje ljudskih prava predstavljaju osnov za postizanje dugoročne socijalne, odnosno demografske održivosti.

Ključne reči: poljoprivreda / održivi razvoj / ruralni razvoj / milenijumski ciljevi / Agenda 2030 / prehrambena sigurnost.

UVOD

Koncept održivog razvoja počeo je da se postepeno uvodi u globalnu razvojnu agendu sedamdesetih godina XX veka. Uočavajući negativne efekte intenzivnog privrednog rasta, članovi Rimskog kluba su 1972. godine u publikaciji „Granice rasta” ukazali na značaj odgovornog odnosa prema prirodnim resursima. Svetska komisija za životnu sredinu i razvoj definisala je politički prihvatljiv koncept održivog razvoja, koji je prezentovan na konferenciji Ujedinjenih nacija u dokumentu „Naša zajednička budućnost” 1987. godine. Pri tome, ova komisija je održivi razvoj definisala kao „razvoj koji zadovoljava potrebe sadašnjice, ne dovodeći u pitanje sposobnost budućih generacija da zadovolje vlastite potrebe” (Blowfield & Murray, 2011). Naredni korak u definisanju smernica ka održivom razvoju bila je sednica Ujedinjenih nacija koja je održana 1992. godine u Rio de Žaneiru. Na ovoj sednici razmatrana su pitanja zaštite životne sredine, ali je naglašena i potreba da se upravljanje globalnim razvojem planira tako da se, pored zaštite životne sredine, paralelno rešavaju i druga pitanja, kao što su siromaštvo i nezaposlenost (United Nations, 1993).

Uvođenjem u razvojnu agendu novih prioriteta, pored ekološke dimenzije, održivi razvoj dobija još dve dimenzije: ekonomsku i socijalnu, odnosno društvenu (Munitlak Ivanović, 2018). Dok se ekološka dimenzija održivog razvoja odnosi na aktivnosti usmerene ka očuvanju i zaštiti biodiverziteta i prirodnih resursa, ekonomska dimenzija podrazumeva težnju ka kontinuiranoj proizvodnji i ravnomernijoj raspodeli bogatstva i ekonomske moći (Labović, Vujović i Dašić, 2021). Socijalna ili društvena dimenzija održivog razvoja usmerena je na ostvarivanje blagostanja

stanovništva i unapređenje socio-ekonomskih uslova života. Ovako opisane dimenzije nazvane su „tri stuba” održivog razvoja (Giddings, Hopwood & O’Brien, 2002).

Sa ciljem da se razvoj ljudskog društva u što većoj meri približi konceptu održivosti, pod okriljem Ujedinjenih nacija usvojen je 2000. godine dokument pod nazivom „Milenijumska deklaracija”. Pored iskorenjivanja ekstremnog siromaštva i gladi u svetu, postavljeno je još sedam tzv. Milenijumskih ciljeva: (1) obezbeđenje osnovnog obrazovanja, (2) promovisanje rodne ravnopravnosti, (3) smanjenje smrtnosti dece, (4) unapređenje zdravlja žena, (5) borba protiv side, (6) obezbeđenje ekološke održivosti i održivosti životne sredine i (7) stvaranje globalnog partnerstva za razvoj (United Nations, 2002).

Ostvarivanje Milenijumskih ciljeva planirano je do 2015. godine. Izvesni pomaci su ostvareni, ali su pojedini problemi i dalje ostali prisutni na globalnom planu. Zbog toga, Ujedinjene nacije u avgustu 2015. godine donose novi razvojni plan pod nazivom „Agenda 2030”. U ovom dokumentu definisan je plan globalnog održivog razvoja za period od 2015. do 2030. godine. Milenijumske ciljeve zamenjuju Ciljevi održivog razvoja (United Nations, 2015).

U dokumentu „Agenda 2030” definisano je sedamnaest ciljeva održivog razvoja. Među njima nalaze se i ciljevi u čijem ostvarivanju poljoprivreda ima izuzetno važnu ulogu. To su:

- eliminisanje svih pojavnih oblika siromaštva;
- eliminisanje gladi, podizanje bezbednosti hrane, obezbeđenje kvalitetne ishrane i promovisanje održive poljoprivrede;
- realizacija održive proizvodnje i potrošnje;
- očuvanje i održivo korišćenje vodnih resursa;
- očuvanje i održivo upravljanje šumskim površinama, zaustavljanje degradacije zemljišta i smanjenja biodiverziteta.

Na ostvarivanje navedenih ciljeva poljoprivreda ostvaruje direktan uticaj. Eliminisanje gladi, ostvarivanje prehrambene sigurnosti i poboljšanje kvaliteta hrane predstavljaju prioritete Ciljeva održivog razvoja UN (Beltran-Pena, Rosa & D’Odorico, 2020). Razvoj održivih poljoprivrednih

sistema u zemljama u razvoju značajno bi doprineo smanjenju gladi i ekstremnog siromaštva u ruralnim oblastima. Sa druge strane, odgovorno upravljanje prirodnim resursima, koji predstavljaju primarne faktore poljoprivredne proizvodnje ostvarilo bi pozitivan uticaj na njihovo očuvanje i sprečilo dalju degradaciju zemljišta, šuma i voda. Upravo u toj povezanosti ogleđa se uloga i značaj poljoprivrede u ostvarivanju održivog razvoja.

CILJ I METODE ISTRAŽIVANJA

Cilj rada je utvrđivanje uloge i značaja poljoprivrede kao faktora održivog razvoja. Takođe, cilj istraživanja je da se prikažu načini na koji poljoprivreda utiče na ostvarivanje tri dimenzije održivog razvoja: ekološku, ekonomsku i socijalnu.

Shodno postavljenom cilju, u istraživanju su korišćeni metodi svojstveni društvenim naučnim disciplinama. Pre svega, korišćen je metod analize i sinteze, zatim metod indukcije i dedukcije, kao i deskriptivni naučni metod.

ULOGA POLJOPRIVREDE U OSTVARIVANJU ODRŽIVOG RAZVOJA – MEĐUNARODNA ISKUSTVA

Ciljevi održivog razvoja, definisani u dokumentu „Agenda 2030” međusobno su povezani i uslovljeni. Ta povezanost može biti horizontalna i realizuje se tako što ostvarivanje jednog cilja deluje na ostvarivanje drugog, ali i vertikalna, kada potciljevi deluju na ostvarivanje ciljeva.

Pored glavnih sedamnaest ciljeva održivog razvoja, „Agenda 2030” sadrži i 169 tzv. potciljeva, koji su integrisani u glavne ciljeve i bliže ih određuju. Ključni cilj čije ostvarivanje obezbeđuje prehrambenu sigurnost stanovništva je eliminisanje gladi i siromaštva. Ovaj cilj „Agende 2030” raščlanjen je na pet potciljeva (United Nations, 2015):

1. eliminisanje gladi i siromaštva,
2. eliminisanje svih oblika neuhranjenosti,

3. povećanje produktivnosti u poljoprivredi i povećanje prihoda malih poljoprivrednih gazdinstava,
4. povećanje produkcije hrane i
5. održavanje genetske raznovrsnosti u poljoprivredi.

Ostvarivanje navedenih potciljeva održive poljoprivredne proizvodnje vodi ka produkciji zdravstveno-bezbedne i kvalitetne hrane čija je cena prihvatljiva za potrošače. Na taj način, poljoprivreda doprinosi održivom razvoju u više aspekata. Pre svega, ona se zasniva na sistemu proizvodnje koji ne narušava biodiverzitet i ne ugrožava kvalitet prirodnih resursa. Takođe, rastom produktivnosti omogućava se i niskodohodovnim zemljama da obezbede prehrambenu samodovoljnost i oslobode se uvozne zavisnosti kada je hrana u pitanju. Unapređenjem sistema proizvodnje pruža se mogućnost malim poljoprivrednim gazdinstvima da obezbede veći dohodak, a samim tim i da budu ekonomski održiva. Kada su ekonomski motivisani, poljoprivrednici ne napuštaju ruralna područja, pa se na indirektan način ostvaruje i uticaj na socijalnu, odnosno demografsku održivost.

Iako poljoprivredna delatnost ima važnu ulogu u ostvarivanju ciljeva održivog razvoja, ona nije u stanju da samostalno, bez odgovarajuće institucionalne podrške ostvari taj pozitivan uticaj (Omilola & Robele, 2017). Sveobuhvatne sektorske politike usmerene na hranu i prirodnu sredinu kroz sistem inoviranih zakona i propisa mogu doprineti promenama u ponašanju svih subjekata koji su učesnici u prehrambenom lancu, od proizvođača do potrošača. Takođe, koherentnost u formulisanju i implementaciji politika između poljoprivredno-prehrambenih, zdravstvenih, socijalnih i ekoloških sistema od suštinskog je značaja za izgradnju sinergije ka efikasnijim i efektivnijim rešenjima sistema za ishranu. Sve navedno značajno bi dopinelo obezbeđivanju zdravstveno bezbedne hrane po pristupačnoj ceni za potrošače (FAO, 2021).

Kada se govori o Ciljevima održivog razvoja, pre svega se misli na eliminisanje gladi i siromaštva. Međutim, pored ovog primarnog cilja, postoje i drugi, isto tako važni, izazovi u čijem prevazilaženju poljoprivredni sektor ima odgovarajuću ulogu, kao što su: pothranjenost stanovništva, očuvanje životne sredine, prirodnih resursa i biodiverziteta, ekonomska inkluzija i socijalna održivost (United Nations, 2015a).

Jedan od najvećih izazova sa kojima se poljoprivreda suočava je obezbeđenje dovoljne količine hrane za rastuću svetsku populaciju. Projekcije Ujedinjenih nacija ukazuju da će do 2050. godine biti potrebno da se obezbedi hrana za najmanje 9 milijardi ljudi na planeti, što će prouzrokovati povećanje tražnje za hranom za 70%. Takve tendencije uslovljavaju promene u sistemima poljoprivredne proizvodnje koji moraju biti u potpunosti usklađeni sa principima održivog razvoja (King et al., 2017). Uzimajući u obzir navedene projekcije, ističe se da bi svetska produkcija hrane trebalo da raste po stopi od 2% na godišnjem nivou, da bi zadovoljila potrebe ukupne populacije (Praća, Paspalj i Paspalj, 2017). Istovremeno, Organizacija za hranu i poljoprivredu ističe da se na globalnom nivou proizvede dovoljno hrane koja bi mogla da podmiri 120% energetske potrebe svakog stanovnika planete (Momčilović, 2019). Uprkos tome, broj stanovnika kojima je hrana nedostupna još uvek je nedopustivo visok (Tabela 1).

Tabela 1. *Kretanje broja pothranjenog stanovništva u zemljama u razvoju*

Godina	Udeo pothranjenog stanovništva u ukupnom stanovništvu u ZUR (u %)
2000.	18,30
2005.	17,90
2010.	14,50
2015.	12,90

Izvor: <http://ourworldindata.org>

Najveći deo svetske populacije koji se suočava sa oskudicom hrane naseljava ruralna područja Subsaharske Afrika, zatim Južne i Istočne Azije i Južne Amerike (Tabela 2). Prema podacima Organizacije za hranu i poljoprivredu, 2020. godine u svetu je 768 miliona ljudi bilo suočeno sa glađu, a 40% dece uzrasta do pet godina imalo je zaostatke u mentalnom i fizičkom razvoju kao posledice nedovoljnog unosa hrane (FAO, 2020).

Tabela 2. *Udeo pothranjene populacije 2020. godine*

Region	% udeo pothranjenog stanovništva
Subsaharska Afrika	20,3
Južna Azija	14,5
Latinska Amerika i Karibi	7,7
Istočna Azija i Pacifik	4,3
Ukupno - SVET	8,9

Izvor: FAO, 2020

Navedene regione karakteriše ekstenzivna poljoprivreda, odsustvo agrotehničkih mera, a samim tim niski prinosi i česti gubici roda usled nepovoljnih agroekoloških uslova. Dok se, sa jedne strane, intenzifikacija proizvodnje koristi kao sinonim za povećanje produkcije hrane, sa druge strane pojedini autori ističu da intenzifikacija poljoprivrede neminovno vodi ka negativnim efektima po životnu sredinu (Hazell & Wood, 2008; Cui & Shoemaker, 2018). U izveštaju Ujedinjenih nacija navodi se da visok stepen intenzifikacije poljoprivrede može da dovede do ekoloških katastrofa, kako na lokalnom, tako i na globalnom nivou (Nellemann et al., 2019).

Jedan od načina da se prehrambeni problem zemalja u razvoju reši je mehanizam koji se zove „održiva intenzifikacija”. Naime, reč je o takvom sistemu poljoprivrede u kome se, dugoročno posmatrano, primenom inovacija proizvodi više hrane uz racionalan pristup inputima, da bi se smanjio štetan uticaj na prirodnu sredinu (Juma, Tabo, Wilson & Conway, 2013). Drugim rečima, održiva intenzifikacija predstavlja traganje za načinom da se poveća proizvodnja uz istovremeno što manje negativne uticaje na biodiverzitet (Garnett, Appleby, Balmford & Bateman, 2013). Kao najznačajnija karakteristika održive intenzifikacije je ostvarivanje stabilnih prinosa. Strategija sprovođenja održivog intenziviranja poljoprivrede može se pripisati efikasnom korišćenju inputa i usvajanju održivih praksi i tehnologija (Xie, Huang, Chen, Zhang & Wu, 2019). Međunarodna iskustva (Pretty, Toulman & Williams, 2011; Adenle, Weding & Azadi, 2019; Zhang et al., 2011) pokazuju da produktivnija i resursno efikasnija poljoprivreda može povećati dostupnost hrane i doprineti svetskoj prehrambenoj sigurnosti, uz istovremeno očuvanje prirodnih resursa i biodiverziteta. Pri tome, održivu intenzifikaciju, kao relativno nov koncept ne treba posmatrati kao jedini, već samo kao jedan od bitnih koraka koje je potrebno sprovesti u cilju unapređenja globalnog prehrambenog sistema, uz istovremeno obezbeđenje održivog razvoja i prehrambene sigurnosti (Đurić, Ivanišević, Jahić i Prodanović, 2021).

DOPRINOS POLJOPRIVREDE OSTVARIVANJU EKOLOŠKE ODRŽIVOSTI RURALNIH PODRUČJA

Intenzivna poljoprivredna proizvodnja, posebno ukoliko je bazirana na neracionalnom pristupu prirodnim resursima, po pravilu dovodi do degradacije zemljišta. Neodgovorna primena poljoprivredne mehanizacije i agrohemikalija vode ka gubitku proizvodnih sposobnosti zemljišta, pa se

iz tog razloga ne može smatrati dugoročno održivim sistemom. Intenzivna dugogodišnja poljoprivredna proizvodnja za sobom ostavlja niz problema, koji nastaju kao posledica degradacije obradivog zemljišta, intenzivne upotrebe pesticida i insekticida, kao i monokulturne proizvodnje (Oljača i Dolijanović, 2010).

Pored zemljišta, drugi primarni faktor poljoprivredne proizvodnje su vodni resursi. Poljoprivredna proizvodnja je jedan od najvećih potrošača, ali i zagađivača vode. Neracionalna upotreba hemijskih sredstava i ispuštanje otpadnih voda iz stočarske proizvodnje značajno doprinose narušavanju kvaliteta vodnih resursa (Pawlak & Kolodziejczak, 2020).

Kako bi se ovi negativni efekti sveli na najmanju moguću meru, a poljoprivreda doprinela ostvarivanju ekološki održivog razvoja, potrebno je pridržavati se sledećih principa (Greeson, Quaranta, Salvia & Brandt, 2015):

- minimiziranje štetnog uticaja na zemljište;
- konstantna pokrivenost zemljišta usevima ili njihovim ostacima, i
- rotacija useva.

Minimizacija štetnog uticaja na zemljište podrazumeva takvo upravljanje ovim prirodnim resursom koje obezbeđuje da se hranjivi sastojci ne gube, a struktura ostaje očuvana. Konstantnom pokrivenošću zemljišta usevima ili njihovim ostacima sprečava se erozija i rast korova. Rotacija useva podrazumeva sadnju različitih useva na istom zemljištu tokom uzastopnih ciklusa rasta, odnosno setve (Arriaga, Guzman & Lowery, 2017). Rotacija ili smenjivanje useva je princip čija primena pojavu bolesti svodi na minimum, uz istovremeno optimalno korišćenje hranjivih sastojaka iz zemljišta. Plodored, kao faktor ekološke održivosti, pozitivno utiče na kvalitet zemljišta, ograničavanje pojave bolesti i korova, što povoljno utiče na visinu prinosa i ekonomske efekte poljoprivredne proizvodnje (Bowles et al., 2020).

Takođe, posebna pažnja trebalo bi da bude usmerena na proizvodnju zdravstveno-bezbedne hrane, koja u isto vreme omogućava i očuvanje prirodnih resursa i životne sredine. Zbog toga bi uspostavljanje održivog sistema poljoprivredne proizvodnje trebalo da predstavlja jedan od prioriteta, kako na nacionalnom, tako i na globalnom nivou. Naime, uspostavljanje poljoprivrednog sistema po principima održivosti

podrazumeva, pre svega, proizvodnju dovoljne količine hrane koja je: raznovrsna, kvalitetna, pristupačna i bezbedna po zdravlje (Damjanović, Živanović i Vasilkov, 2022). Takođe, politika bezbednosti hrane može dati očekivan doprinos ostvarivanju koncepta održivog ruralnog razvoja ukoliko je, kao što je to slučaj u zemljama Evropske unije, zasnovana na integralnom pristupu, koji, pored ostalog, uključuje principe odgovornosti i transparentnosti (Vapa Tankosić, Puvača, Giannenas, Tufarelli & Ignjatović, 2022).

DOPRINOS POLJOPRIVREDE OSTVARIVANJU EKONOMSKE ODRŽIVOSTI RURALNIH PODRUČJA

Za početne faze privrednog razvoja karakteristično je da primarni sektor, odnosno poljoprivreda predstavlja dominantnu privrednu delatnost (Đurić & Njegovan, 2016). Naime, ekonomska teorija i praksa pokazuju da ekonomski razvoj počinje razvojem poljoprivrede. U ranim fazama razvoja poljoprivreda ima značajan udeo u vrednosti ostvarenog bruto domaćeg proizvoda, kao i u zaposlenosti. Industrijalizacija smanjuje broj ljudi koji su radno angažovani u poljoprivrednom sektoru, a istovremeno dolazi do grupisanja poljoprivrednog zemljišta i intenziviranja proizvodnje. Ovakav vid poljoprivredne proizvodnje, iako realizovan u određenom broju razvijenih zemalja, pokazao se kao efikasan način u borbi protiv gladi i globalnog siromaštva.

Danas, međutim, intenzivna poljoprivredna proizvodnja u razvijenim zemljama ne predstavlja više efikasan način borbe protiv siromaštva u svetu. Naime, dok razvijene zemlje ostvaruju sve veće prihode proizvodnjom i distribucijom poljoprivrednih i prehrambenih proizvoda, nerazvijeni deo sveta i dalje se suočava sa visokim stopama ruralnog siromaštva (United Nations, 2021).

U većini zemalja u razvoju poljoprivreda predstavlja primarnu delatnost privređivanja. Uz adekvatne mere ekonomske i agrarne politike, kao i politike ruralnog razvoja bazirane na finansijskoj podršci, poljoprivredna proizvodnja bi imala mogućnost da se osnaži i postane pokretač ukupnog ekonomskog napretka (Omilola & Rabele, 2017). Pored toga, finansijski podržan agrarni sektor postao bi ključni faktor napretka ruralnih područja, što bi uslovalo bolje uslove za zapošljavanje ruralne populacije i mogućnosti stabilnijeg dohotka i kvalitetnijeg života.

Jedan od mehanizama za redukciju siromaštva i ekonomski napredak ruralnih područja je diverzifikacija privrednih aktivnosti. Kao sastavni deo politike ruralnog razvoja, ova mera podrazumeva stvaranje povoljnih uslova u kojima bi se ruralna populacija, osim primarne poljoprivredne proizvodnje, bavila još nekom ekonomskom delatnošću (Salvioni, Henke & Vanni, 2020). Po pravilu, reč je o delatnostima koje se nadovezuju na primarnu poljoprivrednu proizvodnju i/ili oslanjaju na nju, kao što su prerada primarnih proizvoda ili delatnosti uslužnog sektora. Na taj način, zaokružuje se proseč primarne proizvodnje, prerade i proizvodnje prehrambenih proizvoda i njihovog plasmana u okviru tercijarnog sektora. Monofunkcionalnost poljoprivrede i orijentisanost ruralnih područja isključivo na primarnu poljoprivrednu proizvodnju predstavljaju faktor koji dovodi do smanjenja nivoa životnog standarda ruralnog stanovništva, što je jedan od osnovnih razloga migracija i narušavanja demografske slike sela (Merenikova, Agibalov & Lubkov, 2019). Diverzifikovanjem svojih ekonomskih aktivnosti ruralna domaćinstva ostvaruju veće i stabilnije prihode, pa je i njihova motivacija za život u ruralnim područjima veća. Dakle, kroz diverzifikaciju ruralne ekonomije utiče se, ne samo na ekonomsku, već i na socijalnu, odnosno demografsku održivost ruralnih područja (Đurić, Vukoje i Miljatović, 2021a).

Održivi razvoj ruralnih područja moguće je ostvariti samo ukoliko je razvojni proces baziran na uspostavljanju ravnoteže ekonomskih, socijalnih, političkih i pravnih faktora, uz istovremeno poštovanje principa zaštite životne sredine (Vorobyov & Bugai, 2019). Pri tome, za ostvarivanje ekonomske održivosti ovi autori navode neophodnost organizovanja efikasne proizvodnje, razvijenu infrastrukturu, kao i ekonomsku integraciju privrednih subjekata.

DOPRINOS POLJOPRIVREDE OSTVARIVANJU SOCIJALNE ODRŽIVOSTI RURALNIH PODRUČJA

Sve tri dimenzije održivog ruralnog razvoja međusobno su povezane i uslovljene. Ukoliko su ostvareni uslovi za ekološku i ekonomsku održivost, to deluje stimulatивно na ruralno stanovništvo da ne napušta ruralna područja, što je jedan od preduslova socijalne održivosti. Naime, decenijama se ruralna područja suočavaju sa procesom deagrarizacije i

depopulacije, što narušava, ne samo starosnu i obrazovnu strukturu stanovništva, već dovodi u pitanje i budućnost poljoprivrede.

Jedan od osnovnih uticaja koji poljoprivreda ostvaruje u domenu socijalne održivosti je redukcija ekstremnog siromaštva i gladi, koji su tradicionalno prisutni u zemljama u razvoju. Adekvatna ishrana je od suštinskog značaja za postizanje većeg broja ciljeva održivog razvoja. Zadovoljavanje potreba za hranom jedan je od primarnih faktora koji utiču na zdravlje ljudi, njihovu sposobnost za rad i privređivanje, kao i njihovu produktivnost (Omilola & Robele, 2017). Ograničenja koja se javljaju zbog neadekvatne ishrane stanovništva su brojna, a o dimenzijama ovog globalnog problema govore i podaci UN, prema kojima je u 2019. godini čak svako treće dete na globalnom nivou bilo pothranjeno (UNICEF, 2019). Kao rešenje problema nameće se ideja o tehnološkom napretku i razvoju modela poljoprivrede koji će omogućiti siromašnim ruralnim domaćinstvima proizvodnju dovoljne količine zdravstveno bezbedne hrane za sopstvene potrebe. Naime, jedino kroz unapređenje sopstvenih kapaciteta ova kategorija ruralnih domaćinstava ima mogućnost za ostvarivanje dugoročno održivog opstanka i razvoja.

Pored ostalog, postizanje socijalne održivosti ruralnog razvoja uslovljeno je i poštovanjem rodne ravnopravnosti, odnosno eliminisanjem različitih formi diskriminacije. Naime, iako se u prethodnih nekoliko godina intenzivno zagovara, rodna ravnopravnost još uvek nije ostvarila dubok otisak u ekonomskoj i privrednoj održivosti (Benson-Walhen, 2017). Kao najčešći oblici rodne diskriminacije u ruralnim područjima javljaju se: pravo svojine nad zemljištem, neplaćeni rad, ograničene mogućnosti zapošljavanja i nemogućnost donošenja odluka (Sexsmith, 2017). Uskraćivanje ljudskih prava i mogućnosti izbora često se javljaju kao osnovni razlozi za odlazak ženske ruralne populacije u gradove. Na taj način, nepovoljno se utiče, kako na demografsku strukturu ruralnih područja i ostvarivanje socijalne održivosti.

Na ostvarivanje socijalno održivog razvoja, osim poljoprivrede, kao dominantne privredne delatnosti u ruralnim područjima, deluju i drugi brojni faktori. To su, pre svega, mogućnosti školovanja, zapošljavanja, ekonomski uslovi, odnosno visina prihoda, uslovi stanovanja, kao i socijalna uključenost u zajednicu (Joldžić, 2019). Održiva poljoprivreda bi trebalo da bude mehanizam koji sprečava migracije na relaciji selo-grad, odnosno depopulaciju ruralnih područja (Somanje et al., 2020). Pored toga, podsticanje kohezije i uključivanje vulnerabilnih društvenih grupa u

radne aktivnosti na gazdinstvima takođe predstavljaju preduslove održivosti. Na taj način, podsticanjem socijalizacije u ruralnim područjima i razvojem socijalnog preduzetništva, poljoprivreda može da ostvari doprinos socijalnoj održivosti ruralnih područja (Hudicova, Chovanec & Moudry, 2018). Iz svega navedenog može se zaključiti da, pored agrarne i politike ruralnog razvoja, na socijalnu dimenziju održivosti utiču i druge relevantne sektorske politike.

ZAKLJUČAK

Primena koncepta održivog razvoja u svim sferama privrede i društva odavno ne predstavlja izbor, već nužnost. Pritom, ovakav koncept privređivanja neophodno je konstantno unapređivati i prilagođavati novim ekološkim, socijalnim i ekonomskim izazovima.

Ujedinjene nacije nastoje da svojim strategijama i dokumentima daju okvir kolektivnog održivog razmišljanja i ponašanja na globalnom nivou, koje je neophodno da bude prihvaćeno kako bi model održivog razvoja postao i praktično primenjen u svim ekonomskim i društvenim tokovima.

Aktuelnim razvojnim dokumentom, Agendom 2030, Ujedinjene nacije definisale su sedamnaest ciljeva održivog razvoja. Među razvojnim prioritetima nalaze se iskorenjavanje gladi i siromaštva, očuvanje prirodnih resusa i socijalne održivosti ruralnih područja. Ostvarivanje ovih ciljeva u velikoj meri zavisi od poljoprivrede, kao dominantne privredne delatnosti kojom ruralno stanovništvo obezbeđuje svoju egzistenciju.

Minimiziranje štetnog uticaja na prirodne resurse i obezbeđenje proizvodnje dovoljne količine zdravstveno bezbedne hrane predstavlja nemerljiv doprinos poljoprivrede ostvarivanju ekološke održivosti. Sa druge strane, diverzifikacija privrednih aktivnosti ruralne populacije uz adekvatne mere finansijske podrške poljoprivredi ostvaruje direktan pozitivan uticaj na ekonomsku dimenziju održivog razvoja. Obezbeđenje ekonomske motivisanosti ruralnog stanovništva za privređivanjem i životom u ruralnim sredinama, uz poštovanje ljudskih prava predstavljaju osnov za postizanje dugoročne socijalne, odnosno demografske održivosti. Iz navedenog se može zaključiti da poljoprivreda predstavlja moćno sredstvo u ostvarivanju ciljeva održivog razvoja, a optimalan efekat moguće je postići samo uz poštovanje sva tri principa održivosti.

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THE CONTRIBUTION OF AGRICULTURE TO THE REALIZATION OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT

Katarina Đurić

Mirela Tomaš Simin

Mirjana Lukač Bulatović

Todor Marković

Danica Glavaš Trbić

Abstract: *The concept of sustainable development represents a globally accepted development model in all segments of the economy and society, including agriculture. The aim of the paper is to show, by systematizing past experiences, the contribution that agriculture makes in the realm of realizing the concept of sustainable development, with a special emphasis on food security in developing countries. The paper specifically analyzes the impact of agriculture on the ecological, economic and social dimensions of sustainable development. The main contribution of agriculture in the field of ecological sustainability is minimizing the harmful impact on natural resources and ensuring the production of a sufficient amount of healthy and safe food. One of the factors that contributes to the economic sustainability of agricultural farms, and thus of rural areas, is the diversification of the economic activities of the rural population with adequate measures of financial support for agriculture. Ensuring the economic motivation of the rural population to earn money and live in rural areas, with respect for human rights, is the basis for achieving long-term social and demographic sustainability.*

Keywords: *agriculture / sustainable development / rural development / millennium goals / Agenda 2030 / food security.*

GLOBAL STAGFLATIONARY PRESSURES: MACROECONOMIC REPERCUSSIONS OF PANDEMIC AND GEOPOLITICAL CRISES

Pejčić Jovica¹

Beljić Marina²

Glavaški Olgica³

Abstract: *This paper analyses key macroeconomic repercussions of the global pandemic and geo-political crises in terms of growing recessionary and inflationary pressures, and finally, the potential occurrence of stagflation. The aim of this paper is to primarily analyse the stagflation shocks of the 70s, afterwards, compare them with the current crisis for the period January 2020 - July 2022 using the example of selected developed economies (USA, Germany and France). Using descriptive analysis, it was shown that in the observed period inflationary and recessionary pressures existed in USA, Germany and France. However, those pressures could not be identified as stagflation, since that were not present simultaneously. Namely, during the pandemic crisis, recessionary pressures were present, since then the GDP growth decreased till first quarter of 2021 in analysed economies, while inflation rates were stable. On the other hand, with the recovery*

¹ University of Novi Sad, Faculty of Economics in Subotica, Dr Sime Miloševića 16, 21000 Novi Sad, e-mail: jovica.pejcic@ef.uns.ac.rs

² University of Novi Sad, Faculty of Economics in Subotica, Dr Sime Miloševića 16, 21000 Novi Sad, e-mail: Republic of Serbia, marina.beljic@ef.uns.ac.rs

³ University of Novi Sad, Faculty of Economics in Subotica, Dr Sime Miloševića 16, 21 000 Novi Sad, e-mail: olgica.glavaski@ef.uns.ac.rs

of economies in the second quarter of 2021, inflationary pressures became stronger and intensified by geo-political crisis. Therefore, it seems that the most visible anomaly of the global economic system in 2022 is the presence of inflationary pressures.

Key words: *stagflation / macroeconomic repercussions / USA / Germany / France.*

INTRODUCTION

This paper investigates the realization of targeted macroeconomic goals in the circumstances of global discontinuities, which could lead to stagflation pressures. Namely, the focus is on the achievement of stable, sustainable and permanent economic growth and development of the observed economies when a high dose of uncertainty and insecurity in the global environment exists.

For the policy makers, the observation and improvement of three macroeconomic indicators is of primary importance: increase of gross domestic product, low unemployment rate and low inflation. These indicators are mutually intertwined as will be discussed. So far, it has been assumed that it is almost impossible to ensure a strong pace of GDP growth without reducing unemployment or without suffering inflationary pressure. Namely, conducting an anti-inflationary policy would come at the expense of a slightly lower gross domestic product with a higher unemployment rate. The bottom line is that there is bad news as well as good news. Current circumstances, which are reflection of exogenous health shock and current geopolitical crisis, lead to an even more complicated situation. Namely, nowadays economic policy makers are faced with simultaneous pressure of inflation and recession, which can be recognized as stagflation.

Stagflation occurs when the economy experiences a halt or decline in production, a drop in overall output and an increase in unemployment, as well as high inflation. Hence, all three macroeconomic indicators are going in the wrong direction, and the economy is simultaneously threatened by output decline and inflationary adjustment. Furthermore, in the presence of stagflation pressure, high inflation and a stagnant economy can fully coexist, or low inflation and a growing economy, which has not been the case so far. Thus, the arrival of stagflation was something completely new,

far more complex for the functioning of the entire macroeconomic system that requires completely new solutions with a comprehensive approach and analyses.

The goal of this paper is twofold: (1) to elaborate a review of the stagflationary shocks of the 1970s and (2) to conduct a descriptive analysis of potential stagflationary pressures in the period 2020-2022 during the pandemic and geo-political crises, evaluating the key macroeconomic indicators of the United States of America (USA), Germany and France. Hypotheses analyzed in the paper are: (H_1) recessionary pressures are present in USA, Germany and France in the period January 2020 - July 2022; (H_2) inflationary pressures are present in USA, Germany and France in the period January 2020 - July 2022; (H_3) stagflationary pressures are present in USA, Germany and France in the period January 2020 - July 2022. The scientific contribution of this paper is to fill the gap that exists in the literature regarding key macroeconomic repercussions of the global pandemic and geo-political crises in terms of potential occurrence of stagflation, given the scarcity of scientific papers dealing with this topic after pandemic and during geo-politic crisis.

The rest of this paper is organized as follows: After the introduction, section 1 presents the literature review, section 2 deals with speculative analysis of stagflation, while section 3 discusses the stagflation shock during the 1970s. Section 4 tests the functioning of the global economy through the presence of fear of stagflation caused by the emergence of Covid-19, and the prolonged escalation of geo-political relations between Russia and Ukraine. Concluding remarks are summarized within the last section.

LITERATURE REVIEW

The 1970s constituted the beginning of a period of significant macroeconomics transformations (Goutsmedt, 2021), since during the 1970s, the US economy and world leading economies suffered from stagflation, as the simultaneous occurrence of high inflation rates, high unemployment rates and slow growth (Rosenberg, 2003). Bruno and Sachs (1985) convincingly argue that the decay of the major economies during this period resulted from the supply shocks of the 1970s, such as

the two major OPEC oil-price increases, and from the consequent policy-induced decrease in demand in response to inflationary pressures. Additionally, according to Blinder & Rudd (2008), the two roughly contemporaneous shocks, the food price and the removal of wage-price controls in 1973-1974 played starring roles in the macroeconomic events that constituted the Great Stagflation.

The emergence of stagflationary pressures is a current and omnipresent topic that is discussed vigorously at a global scale. The Survey of United Nations showed that resultant shift towards monetarism slowed global growth, especially in poorer countries, greatly enhancing their debt servicing problems (Loxley 2018). Hence, Ha, Kose & Ohnsorge (2022) stress that the global economy is in the midst of a sharp growth slowdown coincided with a steep runup in global inflation which is at multi-decade highs. It directly affects the functioning of the state, development of the economy, as well as the economic standard of individuals. Accordingly, only those countries which start "today" working hard and make extremely difficult decisions will be able to prevail in a crisis situation. That is in line with Enders, Giesen & Quint (2022) who conclude that with de-anchored inflation expectations, monetary policy will have to tighten even more strongly to rein in the de-anchored inflation expectations, at the risk of repeating the long and painful disinflationary process seen in the United States in the 1980s. Furthermore, Neck and Bluescke (2016) underline that in all scenarios the cooperative solution is necessary, referring to an enforceable pact between governments and the central bank. However, the challenge lies ahead for central banks to find their balanced paths between tightening financial conditions and slowing growth to avoid a subsequent recession (Canuto, 2022). The European Central Bank (ECB) faces difficult trade-off (Canofari, Di Bartolomeo & Messori, 2022), since a more expansionary monetary policy cannot mitigate the supply bottlenecks and supply-side restrictions, and more restrictive monetary policy would slow down the economic recovery (Demary & Hüther, 2022). Nersisyan and Randall (2022) consider that fiscal policy is more fit for the purpose, however that requires rethinking how it should be implemented.

One of the most threatening world's problems when it comes to the macroeconomy is rapidly growing inflation, due to its distorting effect on the purchasing power of the population. This is explicitly reflected in the goods market's demand reduction, which spills over into the labour market's demand decline and consequently brings down the entire aggregate supply. According to Baltussen, Swinkels & van Vliet (2022) stagflationary episodes, accompanied with rising inflation are also bad times for investors. The expected rise in prices tomorrow accelerates consumption today, automatically reflecting on damaging aggregate demand and price accumulation. Moreover, rising prices and rising unemployment is likely to follow a large permanent reduction to productivity (Brunner, Cukierman & Meltzer 1980, 2019). Therefore, the reaction of the economic authorities is "required" with the aim of curbing inflation. Demary, Herforth & Zdrzalek. (2022) emphasize that Eurozone inflation is predominantly energy-price driven, while US inflation is mainly demand-driven. These different inflation causes yield different monetary policy responses which could lead to a positive interest rate differential between the US and the Eurozone.

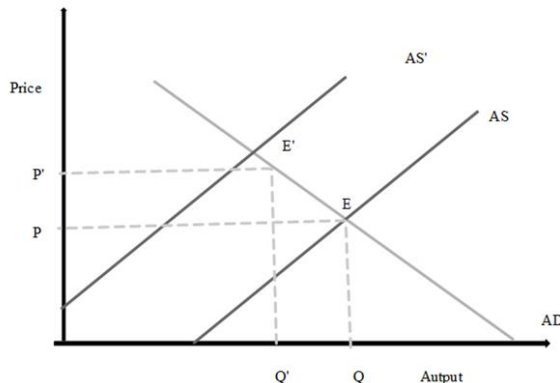
There are two essential reasons that preceded the current condition of the global economy: first, the decline in industrial production caused by the emergence of Covid-19, and second, effects of interventions in the territory of Ukraine. Pandemic crisis caused several supply shocks – many firms had no choice than to stop or drastically decrease production. As a result of a sharply lower output and income uncertainty, this shock had a major effect on demand, producing combination of a supply-side shock and a sharp demand response (Blanchard, Amighini & Giavazzi, 2021). As a reaction of monetary authorities, creation of fiat money was present in central banks worldwide. Murphy (2021) pointed out that the mentioned policy could lead to either hyperinflation or stagflation, which is explained by comparison to the hyperinflation in Germany in 1923. Zhang et al. (2021) on the example of the *People's Republic of China* showed that the impact of uncertainty shocks will lead to economic stagnation, inflation, and the stagflation effect. On the other hand, Ozili (2022) highlights that the implication of the results is that geopolitical conflicts, such as the Russia-Ukraine conflict, have wide-reaching economic effects to other countries. Hence, eventual continuation of the tightening of relations between Russia and Ukraine would lead to an increase in the price level of

oil derivatives, which would result in an increase in global inflation, moreover a gradual entry into the phase of recession, i.e. possible stagflation. As consequence of geo-political crisis there is also a negative pressure on companies' profitability. Namely, the projected increase in central bank rates and, consequently, an increase in the price of credit resources will decrease companies' performance, since, their ability to attract financing may be limited (Prohorovs, 2022). Literature survey indicated the obvious scarcity of scientific papers dealing with stagflation topic after pandemic and during geo-politic crisis. Therefore, the idea of this paper is to fill that gap regarding key macroeconomic repercussions of the global pandemic and geo-political crises in terms of growing recessionary and inflationary pressures, and finally, the potential occurrence of stagflation.

Theoretical framework of stagflation

The theoretical framework of stagflation analysis can be based on the application of the AS-AD model, on the basis of which it is possible to see the dynamics of changes and the effects of shocks caused by stagflation movements. With the aim of analysing the effect of external shocks and macroeconomic repercussions, diagram 1 is presented. The diagram 1 shows two axes (X and Y). On the Y-axis is the price level within one economy, that is, the economic system, while on the X-axis is the movement of output, that is, the produced quantity of products in a time interval of one year in one country.

Diagram 1. *Stagflation*



Source: Authors based on Blanchard (2021).

The Diagram 1 shows three curves:

- Supply curve AS,
- Supply curve AS'
- AD demand curve

At the point where the demand curve and the original supply curve intersect, the equilibrium point (E) is read and defines the given price level (p) and the given output level (q). In a situation where there is a negative shift in the supply curve (AS), i.e. moving to the left (or up) and creating a new supply curve (AS'), new intersection with the original demand curve (AD) creates a new equilibrium point (E'). E' is formed on a new, higher, price level (p') and it is defined with a new, lower, quantity of output (q').

The conclusion is that in the new equilibrium point, a smaller number of products are produced at higher prices, which indicates stagflationary pressures. The question arises, what factors cause a negative shift in the AS supply curve and consequently stagflation? Stagflation most often occurs when there is a supply-side shock, if the supply structure of a key factor of production, such as the supply of labour, electricity or oil, is disrupted. Oil, as one of the key sources of energy, can be used as input and output for almost all existential and business activities. Certainly, the primary importance for understanding a very complex topic is that if a country faces a shortage of the mentioned production factors, it will automatically be reflected in an increase in prices, along with a decrease in production.

Overcoming of situation explained in Diagram 1, refers to active role of state and policymakers. In terms of recession, policy makers apply an expansive fiscal policy to initiate and stimulate production in order to return the economy to a state of economic balance. Another situation of high frequency is the occurrence of inflationary pressure. The problem itself was overcome by the gradual application of a restrictive monetary policy, i.e. by withdrawing the money supply from circulation and increasing the reference interest rate, in order to minimize the harmful aggregate demand. When the economy is faced with inflation and recession simultaneously, the application of expansive fiscal and monetary measures would certainly lead to the recovery of the economic environment, however, then inflationary pressure could lead to a hyperinflationary problem, which is certainly not the goal. On the other

hand, although restrictive adjustment measures application would return inflation to the economic normality, the economy would move from recession to depression and face an even more catastrophic macroeconomic scenario.

The complexity of these problems could be emphasized by the fact that stagflation is a rare economic situation, thus, there is no standard solution for overcoming it, especially having in mind that current stagflation is a consequence of war and global economic uncertainty.

Review of the stagflationary shocks of the 1970s

The question arises whether any economy has experienced so far stagflationary consequences, i.e. the so-called supply-side shock. The last time such situation, which economists also call a nightmare, happened in the United States of America (USA) in the 70s of the last century (Mohan, 2015). Namely, it was a period in which energy prices rose incredibly. The USA is an economy that in the 1960s and 1970s imported enormous amounts of petroleum products in order to strengthen its macroeconomic structure, accumulate industrial production and generally meet the needs of the population. Everything was functioning smoothly until the appearance of the embargo by Organization of the Petroleum Exporting *Countries* (OPEC).

At that moment, the US economy in a short period of time simultaneously experienced an increase in the consumer price index, above 10% (such an increase has not been recorded in the US almost since the Second World War), while unemployment jumped from 4.6% in 1973 to 9% in 1975, and GDP plummeted. The OPEC countries continued to increase the oil's price in the following period, thus, this was automatically reflected in the fact that inflation grew from year to year, and the economy sank into recession. Doubtless, the USA, as one of the most developed economic systems, tried to minimize the effects of the increase in the oil derivatives' prices. USA government changed Americans' lifestyle through policy measures, which was reflected in increased savings and rationalization of the consumption of an irreplaceable energy source.

Table 1. *Trends in the rate of unemployment, inflation and GDP in the USA (1968 - 1983)*

Years	Unemployment rate %	GDP %	Inflation Rate %
1969	3.5	3.1	6.2
1970	6.1	0.2	5.6
1971	6.0	3.3	3.3
1972	5.2	5.3	3.4
1973	4.9	5.6	8.7
1974	7.2	-0.2	12.3
1975	8.2	-0.5	6.9
1976	7.8	5.4	4.9
1977	6.4	4.6	6.7
1978	6.0	5.5	9.0
1979	6.0	3.2	13.3
1980	7.2	-0.3	12.5
1981	8.5	2.5	8.9
1982	10.0	-1.8	3.8
1983	8.3	2.2	3.6

Source: trading economics (2004).

A strong USA economy, which employs hundreds of millions of people, has huge industrial production and has ambitions for further growth and development. If the oil's supply on the market decreases, it would automatically lead to an increase in the price level (inflation), while on the other hand, producers would reduce the aggregate supply. Furthermore, reduction in supply would lead to a decline in national production, with a rapidly growing unemployment rate.

Based on Table 1, it could be concluded that from 1969 until 1982, unemployment rose from a 3.5% to a 10%. While in the observed time interval, the level of inflation rose from 6.2% to the highest 13.3%. This certainly indicated that the US economy was facing stagflationary movements. Figure 1 shows that two stagflation episodes were identified, due to two oil shocks, in 1974 and in 1979-1980. Beginning with a recession, the 1970s was a decade of pessimism and ended very painfully with the Vietnam War. Memories of the Great Depression made economic policymakers reluctant to use contractionary monetary and fiscal policies to curb inflationary pressures, as it was believed that an increase in unemployment would be completely unacceptable, meaning that the American population would experience additional deflationary adjustment.

Graph 1. Stagflationary shocks in USA (1969-1983)

(a) Inflation rate



(b) GDP growth rate



Source: Authors, according to trading economics.

Graph 1, (panel a) shows the movement of the inflation rate in observed period, while (panel b) shows the movement of the GDP growth rate in the United States of America from 1969 to 1982. The conclusion is that the American economy faced simultaneous inflationary and recessionary pressure twice: the first time in the period from 1974 to 1975, while the second time was in 1980, which indicated the presence of stagflation.

Descriptive analysis of stagflationary pressures during pandemic and geo-political crises (2020-2022)

Fifty years after 1970s, fears of stagflation are vivid again. The combination of rising inflation and slowing economic growth after the initial strong recovery from the Covid-19 crisis has been challenging for major economies around the world. It is expected that the conflict in

Ukraine further raises global inflation and further dampen growth momentum. Moreover, in order to make a comparative analysis of the crisis that happened in the 1970s and the one that is happening today, it is necessary to make an observation several years back. In the first months after its outbreak, the corona virus was considered exclusively as a health problem. However, the speed of its spread which caused lock-down of economies had final effects in slowing down of economic activities. Certainly, it imprinted on the economic context of 2020. Global connectivity, intertwined relations between countries, dependence on production factors, as well as high mobility of labor, capital, goods and services, rapidly led to a negative impact on the macroeconomic indicators of almost all countries of the world.

The decrease in production, was followed by a decrease in demand on the labor market, which was reflected in the increase in the unemployment rate. The decrease in industrial production is mostly noticeable in Germany (almost the most developed economy of the European Union before the pandemic crisis), the USA, France, but also in the rest of the world.

Russia's invasion of Ukraine, which began on February 24, 2022, directly complicated the already complex situation for the functioning of the global economy. Ukraine is one of the most important producers of basic food that is an inevitable part of everyone's consumer basket. That country fulfills almost half of the world's needs for sunflower oil, 15% of corn and 10% of wheat. The lack of food was especially felt in a large number of European economies that are directly dependent on Ukrainian imports, grains and edible oil.

However, the consequences are far greater. In May 2022, the United Nations warned that the level of hunger in the world had reached a "new high" and that tens of millions of people could face long-term hunger because of the war. As of May 2022, 23 countries have imposed food export restrictions. Until the beginning of the war on the territory of Ukraine, the Russian Federation was the leading supplier and main source of energy for the whole of Europe. They ranked first when it comes to natural gas exports to the world market, second when it comes to crude oil and third when it comes to supplying coal. In 2020, Russian oil, gas and coal accounted for a quarter of energy consumption in the European Union.

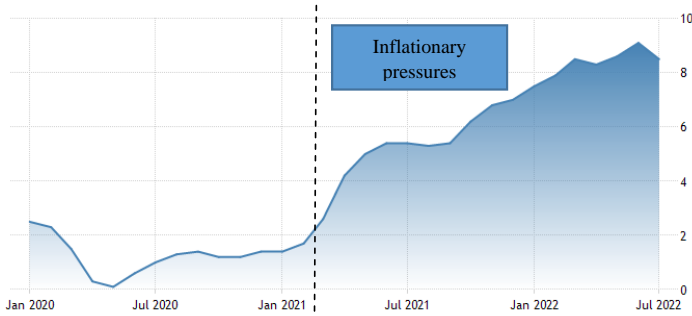
The description of the situation and pressures after the pandemic crisis and the crisis in Ukraine are irresistibly reminiscent of the period of oil shocks and stagflation in the 70s - inflationary pressures are rising again caused by the same triggers in the context of rising energy prices, with a decline in economic activity. In order to analyze whether stagnation pressures are real, an analysis of the level of GDP and inflation will be conducted on the example of the US, German and French economies. Stagflation is analyzed for the USA economy in Section 3, while stagflation pressures are analyzed in the present period in USA, followed by analysis of stagflation pressures in the largest European economies, Germany and France. The analysis is based on descriptive analysis, since data from descriptive studies can be used to examine the relationships (correlations) among variables, which allows the research on stagflationary pressures during pandemic and geo-political crises. However, descriptive analysis could be limited since the findings from correlational analyses are not strong evidence of causality.

The US's inflation rate increased to 8.7% in May 2022 (Graph 2, panel a). In the US economy, there is an increase in the price level of almost all products. The prices of energy products increased by 34.6%, due to the increase in the price of gasoline (48.7%), fuel oil (106.7%, the largest recorded increase), electricity 12%, and natural gas (30.2%, the highest since July 2008). The costs of the most basic existential activities increased by about 10%. A large increase was recorded in the prices of meat, fish and eggs (14.2%). Other increases were also seen in accommodation costs (5.5%), used cars (16.1%) and airfares (37.8%). It is clear that the citizens of one of the most developed economies in the world are facing a significant reduction in purchasing power caused by inflationary pressure.

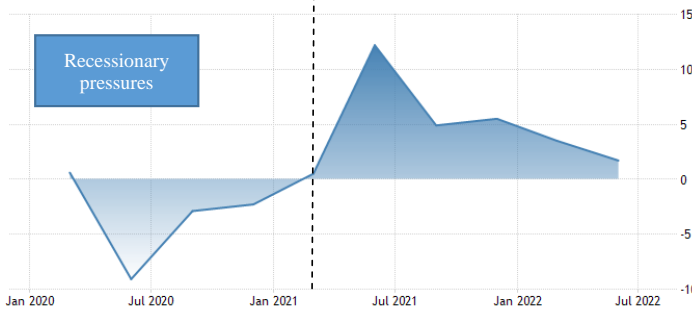
The gross domestic product of the USA (Graph 2, panel b) indicated complete stability until the emergence of Covid-19. In 2020, there was a "negative growth" of the observed indicator by 3.4%. After the fall, the US manages to consolidate its public finance, refusing recession pressures.

Graph 2. Inflation Rate and GDP growth rate in the USA (2020 - 2022)

(a) Inflation rate



(b) GDP growth rate



Source: Authors, according to trading economics (2022).

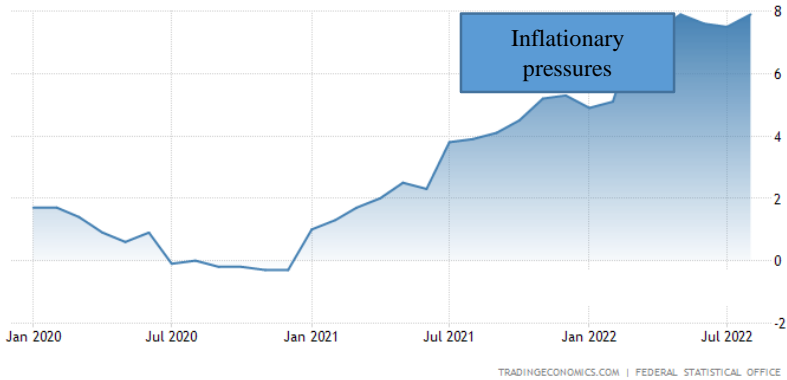
As can be seen from the Graph 3 (panel a), the annual inflation rate in Germany was confirmed at 7.9% in May 2022. It was the third consecutive month of record-high inflation since German reunification, also it was the highest since 1973/1974, driven mainly by faster increases in energy (38.3%) and food (11.1%) prices. Energy prices rose sharply, especially fuel oil (94.8%), motor fuel (41.0%) and natural gas (55.2%), reflecting the impact of Russia's invasion of Ukraine.

Based on the Graph 3 (panel b), although it is clearly visible that the presence of Covid-19 had a direct impact on the reduction of GDP in 2020 to an almost record level. In the next few months, by conducting a responsible policy, Germany's macroeconomic environment returned to a state of stability, which repeated the average growth during the last

decade of 3.6%. It seems that the reduction of GDP in Germany had a form of a structural break, and therefore could not be identified as recession and stagflation, although stagflation pressures are still present.

Graph 3. Inflation rate and GDP growth in Germany (2020 - 2022)

(a) Inflation rate



(b) GDP growth



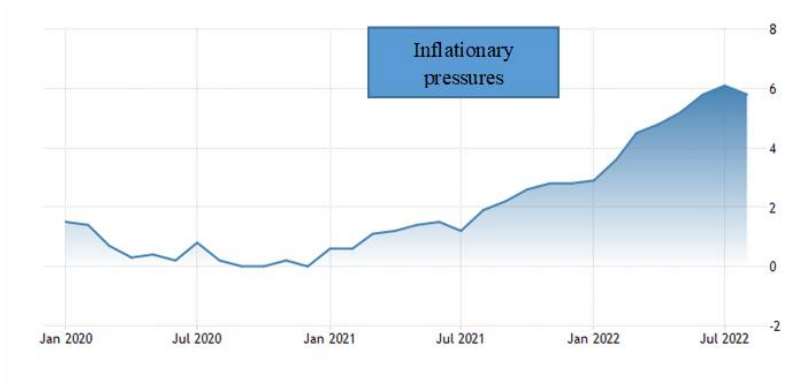
Source: trading economics (2022).

The annual inflation rate in Jun0e 2022 changed to 5.8% (Graph 4, panel a). This increase in inflation is linked to an increase in the price level of energy products (27.8%), especially oil derivatives (36.7%), diesel (35.2%), gasoline (24.2%) and gas (55.0%). As far as the price of

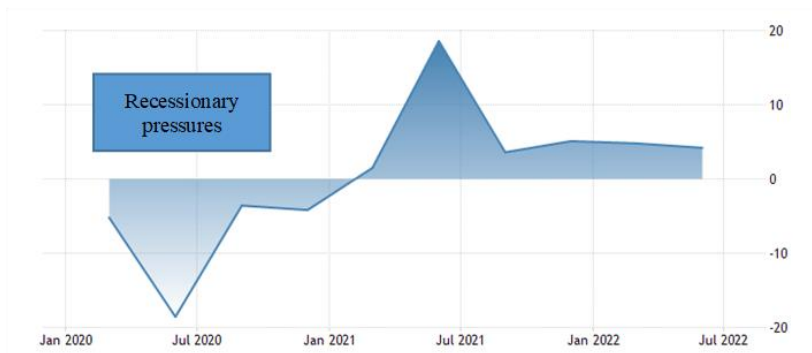
electricity is concerned, there is a slight decrease (6.5%). The prices of agricultural and food products have accumulated by about (5%). Until the emergence of Covid-19, France had a stable GDP growth of about 4%, until it experienced a steep decline in the second quarter of 2020 (Graph 4, panel b). In the second quarter of 2021, France achieves recovery. In comparison to Germany and USA, France had a similar dynamics of GDP growth and inflation rate, although, decline of GDP in second quarter of 2022 was deeper. On the other hand, inflationary pressures in France are lower in comparison to Germany and USA, achieving maximum inflation of 6%.

Graph 4. *Inflation rate and GDP growth in France (2020 - 2022)*

(a) Inflation rate



(b) GDP growth rate



Source: Authors, according to trading economics (2022).

Based on the previous analyses, we can conclude that in the observed countries (USA, Germany and France) similar dynamics of GDP growth and inflation rate exist in the period January 2020 - July 2022. Namely, during the pandemic crisis, the GDP decreased till the first quarter of 2021 in all analyzed economies, which could be recognized as recessionary pressures. In that period of time inflation rate was stable, below 2%. However, with the recovery of economies, in the second quarter of 2021, inflation rate started to increase, while inflationary pressures were stronger in each quarter till July 2022. Therefore, the conclusion drawn is that although in the observed period inflationary and recessionary pressures existed in USA, Germany and France, those pressures could not be identified as stagflation, since they were not present simultaneously. Although, there is no country that has recorded major discontinuities in economic activities that would indicate chronic macroeconomic problems, it is certain that a sense of insecurity and danger is at a high level in the current period. What is evident is that the impact of the conflict between Russia and Ukraine is already showing itself in sharply higher prices of key goods. Many developing countries that are highly dependent on food imports are now even more vulnerable. Whether the geo-political crisis will have more far-reaching effects on the functioning of the global economy remains to be seen.

CONCLUSION

Based on the described and empirically documented problem of stagflation, and taking into account experiences from stagflation in 1970s, empirical implication is that the global economy is currently in an unenviable situation. The increase in inflation with a short-term decrease in economic activities was reflected in current macroeconomic variables. Descriptive empirical analysis showed that similar dynamic of GDP growth and inflation rate occurred in USA, Germany and France in the period January 2020 - July 2022. Namely, during the pandemic crisis, recessionary pressures were present. Since then, the GDP growth decreased till first quarter of 2021 in analyzed economies, while inflation rates were stable, namely, below 2%. On the other hand, with the recovery of economies in the second quarter of 2021, and inflationary pressures were stronger in each quarter till July 2022. Therefore, the conclusion is that inflationary and recessionary pressures existed in USA, Germany and

France in the period January 2020 - July 2022. However, those pressures could not be identified as stagflation, since that did not occur simultaneously. Namely, according to the descriptive analysis conducted, hypotheses, H_1 and H_2 have been confirmed: recessionary and inflationary pressures were present in USA, Germany and France in the period January 2020 - July 2022; while hypothesis (H_3) has been rejected: stagflationary pressures were not present in USA, Germany and France in the period January 2020 - July 2022.

It seems that the most visible anomaly of the global economic system is the presence of inflation, which is partly caused by the emergence of Covid-19 (Ha, Kose & Ohnsorge, 2022), and then prolonged by the military conflict in Ukraine (Ozili, 2022). The real cost of living for the largest part of the world's population very often exceeds statistical inflation rates. Therefore, theoretical implication of the paper refers to the further statement: if the states decided to return the price level to normal and "rein" inflation (Perkins, 2018), then interest rates would increase, money would stop being printed, governments would borrow less, but there would be a certain danger of a financial system collapse.

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GLOBALNI STAGFLATORNI PRITISCI: MAKROEKONOMSKE REPERKUSIJE PANDEMIJSKE I GEOPOLITIČKE KRIZE

Jovica Pejčić

Marina Beljić

Olgica Glavaški

Sažetak: U ovom radu analiziraju se ključne makroekonomske reperkusije globalne pandemijske i geopolitičke krize u smislu rastućih recesionih i inflatornih pritisaka, i konačno, potencijalna pojava stagflacije. Cilj ovog rada je da prvenstveno analizira stagflatorne šokove 70-ih godina prošlog veka, a potom ih uporedi sa aktuelnom krizom za period januar 2020 – jul 2022. godine na primeru odabranih razvijenih ekonomija (SAD, Nemačka i Francuska). Upotrebom deskriptivne analize pokazano je da su u posmatranom periodu postojali inflatorni i recesioni pritisci u SAD, Nemačkoj i Francuskoj, ali se ti pritisci ne mogu identifikovati kao stagflacija, jer se nisu dešavali istovremeno. Naime, tokom pandemijske krize bili su prisutni recesioni pritisci, budući da je rast BDP-a u analiziranim privredama opao do prvog kvartala 2021. godine, dok su stope inflacije bile stabilne. S druge strane, oporavkom privreda u drugom kvartalu 2021. godine inflatorni pritisci su bili intenzivirani geopolitičkom krizom. Stoga se čini da je najvidljivija anomalija globalnog ekonomskog sistema u 2022. godini prisustvo inflatornih pritisaka.

Ključne reči: stagflacija / makroekonomske reperkusije / SAD / Nemačka / Francuska.

STRUČNI RADOVI

SKLONOST KA ROBNOM RIZIKU NA PRIMERU KOMPANIJA METALSKOG KOMPLEKSA

Krpić Jelena¹

Sažetak: Fokus rada je na identifikaciji sklonosti ka robnom riziku i merama preduzetim radi zaštite na primeru kompanija metalskog kompleksa. Sposobnost utvrđivanja količine rizika kojom kompanija može da upravlja ogleda se u ostvarivanju usvojenih strateških ciljeva. Istraživanje je zasnovano na podacima obelodanjenim u integrisanim godišnjim izveštajima rudarskih kompanija za 2021. godinu. Cilj rada je utvrditi da li se rukovodstva kompanija opredeljuju za toleranciju, izlaganje, transfer ili izbegavanje robnog rizika. Robni rizik je posmatran kao robni rizik nabavke i robni rizik prodaje. Nakon toga, analizirane su preduzete mere radi zaštite, odnosno, kada se primenjuje operativni hedžing a kada finansijski hedžing. Može se zaključiti da se rukovodstva kompanija opredeljuju za kombinaciju mera kako bi maksimizirali profit, očuvali novčani tok, maksimizirali vrednost kompanije.

Ključne reči: robní rizik / upravljanje rizikom / sklonost ka riziku.

UVOD

Okruženje u kome živimo i radimo, uključujući kompanije i nas kao jedinke, karakteriše neizvesnost, odnosno neprestane promene. Odgovor svakog subjekta na prisutnu neizvesnost je što efikasnije se prilagoditi promenama. Akcije koje se preduzimaju, kao odgovor na prisutnu neizvesnost, sadrže i određeni rizik, što samo po sebi ne znači negativan koncept. Ključno je prepoznati priliku i iskoristiti je na najbolji mogući

¹ Fakultet za finansije, bankarstvo i reviziju, Alfa BK Univerzitet, Palmira Toljatija 3, Novi Beograd, e-mail: jelena.krpic@alfa.edu.rs

način, odnosno, biti u stanju identifikovati rizike i zatim upravljati njima tako da ne ugrožavaju dalje postojanje same kompanije (Kot, Dragon, 2015). U tu svrhu osmišljen je korporativni sistem upravljanja rizicima na način da se poveća vrednost same kompanije, uz uspostavljanje ravnoteže između rizika kojima je kompanija izložena i ostvarivanja postavljenih ciljeva rukovodstva Institute of Risk Management (IRM) definiše proces upravljanja rizikom kao proces koji ima za cilj da pomogne organizacijama da razumeju, procene i preduzmu akcije radi identifikovanih rizika s ciljem da se poveća verovatnoća uspeha i smanji verovatnoća neuspeha (Danisman i Demirel, 2019).

Ispitivanjem 1.100 menadžera rizika iz celog sveta, E. Giambona, J. Graham, C. Harvey i G. Bodnar, sproveli su istraživanje u vezi sa primenjenim politikama upravljanjem rizicima (Giambona, Graham i Bodnar, 2018)). Rezultati istraživanja objavljeni su 2018. godine. Istraživanje se bavilo pitanjem šta menadžeri štite, i kao odgovor je da skoro 90% menadžera rizika u nefinansijskom sektoru štiti novčani tok, i da 70% do 80% menadžera štiti očekivanu zaradu kako bi se zadovoljila očekivanja akcionara. Kao primenjene mere koje se koriste radi ostvarivanja postavljenih ciljeva, navodi se da je operativni hedžing češći (ugovori sa fiksnom cenom 57%) u odnosu na finansijski (forvard ugovori 54%).

Cilj ovog rada je utvrditi koja je to količina robnog rizika koja je prihvatljiva za rukovodstva multinacionalnih kompanija metalnog kompleksa, a potom identifikovati preduzete mere radi zaštite od robnog rizika kako bi se postigli usvojeni ciljevi kompanije. Osnovna hipoteza rada je:

- utvrditi da li se rukovodstva kompanija opredeljuju za izlaganje robnom riziku, bilo da je u pitanju robni rizik nabavke ili robni rizik prodaje.

Podhipoteza:

- operativni hedžing je najzastupljenija mera zaštite u situaciji izlaganja robnom riziku.

TEORIJSKI OKVIR

Upravljanje rizikom bavi se istraživanjem mogućnosti s jedne strane i izbegavanjem gubitaka sa druge strane kako bi se pronašla ravnoteža.

Procena rizika je objektivna, naučna i na činjenicama zasnovana komponenta analize rizika, upravljanje rizikom podrazumeva korišćenje vrednosnih sudova. Menadžeri rizika postavljaju pitanje "koliko je situacija rizična?", „koliko rizika smo spremni da prihvatimo?" i „šta ćemo da prihvatimo?".

Skлонost ka riziku

Iznos rizika koji je organizacija spremna prihvatiti u potrazi za njenim dugoročnim ciljevima je sklonost ka riziku (Martens i Rittenberg, 2020).

Skлонost ka preuzimanju rizika predstavlja količinu rizika, koji je organizacija spremna da prihvati u potrazi za vrednošću. Svaka organizacija sprovodi različite ciljeve kako bi dodala vrednost, radi definisanja ciljeva potrebno je široko razumevanje i sagledavanje rizika (COSO,2023).

Skлонost ka riziku može se predstaviti kao odnos između vrednosti kompanije (izražene kao godišnji prinos) i maksimalno prihvatljivog rizika, s tim da povećanje rizika „mora” biti kompenzovano povećanjem vrednosti.

„Izjava o sklonosti ka riziku predstavlja temeljni element našeg okvira rizika, i odobrava je Odbor direktora. Ona pruža smernice rukovodstvu o količini i vrsti rizika koji želimo preuzeti u ostvarivanju ciljeva” (Izveštaj o poslovanju BHP, str. 19).

Vrednost kompanije se maksimizira kada rukovodstvo postavi strategiju i ciljeve tako da se postigne optimalna ravnoteža između ciljeva rasta, prinosa i povezanih rizika uz efikasno i efektivno raspoređene resurse u ostvarivanju ciljeva kompanije (Festus, 2013).

Jasno definisanje sklonosti ka riziku trebalo bi da pomogne rukovodstvu da ne donosi konzervativne odluke kojima se kompanija izlaže premalo riziku i na taj način generiše nedovoljan prinos (*Risk Appetite & Tolerance Guidance Paper*).

Skлонost ka riziku kompanije obično se iskazuje kao matrica 4T (tolerate, treat, transfer, terminate) tolerisati, izlagati se riziku, transferisati i izbegavati:

Tabela 1. Matrica sklonosti ka riziku

1.	Tolerisati/prihvatiti	Prihvatanje rizika može biti podnošljivo i bez preduzimanja bilo kakvih akcija.
2.	Izlaganje/kontrola	Cilj je preduzeti akcije koje bi smanjile rizik (ograničile rizik) na prihvatljiv nivo.
3.	Transfer	Prenošenje rizika putem konvencionalnog osiguranja ili plaćanjem trećoj strani za preuzimanje rizika.
4.	Izbegavanje	Neki rizici mogu se izbeći prekidom obavljanja delatnosti – prekid prodaje na pojedinim geografskim tržištima; rizik životne sredine vezan za upotrebu određenih hemikalija koje su neprihvatljive društvu ili zainteresovanim stranama; zamena alternativnim procesom ili outsourcing aktivnost koja je povezana sa rizikom.

Izvor: Hopkin, Paul (2017), *Fundamentals of risk management: understanding, evaluating, and implementing effective risk management*, Kogan Page Limited (30)

Procena svakog rizika omogućiće rukovodstvu da pozicionira rizik u matricu rizika, i na osnovu toga dobije najverovatniji odgovor na rizik.

Za rizike koji imaju nisku verovatnoću da će se desiti i nizak uticaj na poslovanje odgovor bi bio prihvatiti. Za rizike koji imaju veliku verovatnoću i mali uticaj odgovor je izložiti se. U situaciji kada je verovatnoća nastanka negativnih posledica rizika niska, a potencijal ostvarenja poslovnih aktivnosti prilično visok, kompanija će želeći da prenese takav rizik. Osiguranje je jedna od mogućnosti koja se koristi u ovoj situaciji. U nekim slučajevima, prenos rizika je usko povezan sa željom da se rizik eliminiše. Međutim, ne mogu se svi rizici preneti konvencionalnim ugovorom o osiguranju, bilo zbog previsoke premije osiguranja ili takvi rizici nisu predmet tradicionalnog osiguranja. Druge alternative su, pronaći partnera za zajednički poduhvat, ili hedžing.

Za rizike kod kojih je verovatnoća velika i veliki uticaj, odgovor bi bio izbegnuti. Moguća je i situacija da kompanija želi da otkloni rizik, ali se radi o aktivnosti koja je od suštinskog značaja za tekuće poslovanje. U takvim okolnostima kompanija ne može u potpunosti da prekine

aktivnosti kako bi eliminisala rizik, i tada se u praksi sprovode alternativne mere kontrole.

Pojam robnog rizika

Rizik promene cene robe odnosi se na nestabilnost cena roba koje se formiraju pod uticajem ponude i tražnje na robnom tržištu, uključujući i robne berze (Laing, Lusey i Leutkemayer, 2017).

Pad cena:

- može smanjiti prihod od prodaje za proizvođače, što potencijalno dovodi do smanjenja vrednosti kompanije ili do promene strategije;
- može dovesti do smanjenja obima proizvodnje ili obustave proizvodnje (ovo je karakteristično za rudarstvo);
- sa druge strane, kompanije koje koriste robu koja beleži pad cena, za njih smanjenje cena inputa znači niže troškove što potencijalno povećava profitabilnost, a to opet može značiti povećanje vrednosti kompanije;
- pad cena robe (misli se na gotove proizvode) utiče i na upravljanje zalihama jer postoji direktan uticaj na profit. Zalihe se vrednuju po nabavnoj vrednosti ili neto prodajnoj vrednosti, u zavisnosti koja je vrednost niža. U slučaju kada neto ostvariva vrednost pada ispod nabavne vrednosti postoji stvaran uticaj na novčane tokove odnosno, prodaja će se realizovati po nižim cenama.

Sa druge strane, porast cena robe može:

- povećati prihode od prodaje za proizvođače ako cena proizvoda ne utiče značajno na tražnju;
- povećati konkurenciju jer pojavljuju se novi učesnici koji bi da iskoriste povoljne cene;
- smanjenje profitabilnosti za firme koje koriste robu (sirovine i materijal) čija vrednost raste što potencijalno smanjuje vrednost kompanije.

Prema tome, promena cene robe može različito uticati na poslovanje kompanija u zavisnosti od njihovog mesta u lancu vrednosti, da li se radi o ulaznim ili izlaznim komponentama i na taj način je određena i njihova profitabilnost.

U tom smislu, robni rizik posmatran je kao (Gerken, Plantefevé i Veillard, 2019):

- robni rizik nabavke („procurement commodity risk”) i
- robni rizik prodaje („tradable commodity risk”).

Nabavka predstavlja skup aktivnosti, mere i zadatke koji se obavljaju radi nabavke materijala za reprodukciju, mašina, uređaja, pribora i alata, kako bi se nesmetano obavljao proces rada. Ovo je početna faza procesa reprodukcije. Preduzetim aktivnostima i merama nastoji se obezbediti kontinuitet procesa proizvodnje. Osnovni cilj nabavke je redovno snabdevanje uz što niže troškove – pravi materijal u pravoj količini, pod prihvatljivim uslovima, u pravo vreme, iz pravih izvora, sa pravom uslugom, na pravom mestu. Adekvatno organizovan proces nabavke treba da obezbedi optimalan nivo zaliha, uključujući i mogućnost nabavke supstituta.

Prodaja predstavlja skup međusobno povezanih aktivnosti koje kompanija preduzima u cilju plasmana svojih proizvoda/usluga. Osnovni cilj prodajne funkcije je da realizuje gotove proizvode i usluge na tržištu po cenama koje će omogućiti ostvarenje dobiti. Osnovni zadaci prodaje su sagledavanje potreba kupaca, planiranje proizvodnih kapaciteta koji bi omogućili proizvodnju proizvoda usklađenih sa zahtevima kupaca, realizaciju zaključenih ugovora, transport i isporuku proizvoda do kupca, unapređenje prodajnih kanala.

Na rukovodstvu kompanija je da što uspešnije organizuju proces nabavke i prodaje kako bi se ispunili usvojeni ciljevi društva, a to je dugoročno posmatrano povećanje ekonomske vrednosti kompanije.

PREDMET ISTRAŽIVANJA

Istraživanje se zasniva na podacima koje su kompanije metalškog kompleksa obelodanile u okviru konsolidovanih finansijskih izveštaja i izveštaja o poslovanju za 2021. godinu. Integrisani izveštaji (finansijski izveštaji i izveštaj o poslovanju) bili su predmet revizije i revizor je izrazio pozitivno mišljenje, odnosno integrisani izveštaji su istiniti i objektivni i kao takvi mogu se smatrati pouzdanim izvorom za istraživanje i donošenje zaključaka.

Kompanije su, između ostalog, obavezne da u okviru integrisanih izveštaja, obelodanjuju podatke o usvojenoj strategiji upravljanja rizicima, što podrazumeva i obelodanjivanje podataka o najznačajnijim rizicima u poslovanju i preduzetim merama zaštite za definisane rizike.

Iz integrisanih izveštaja prikupljeni su podaci, koji su nakon toga analizirani, klasifikovani, sistematizovani i na kraju, objavljeni su rezultati istraživanja.

Kompanije iz oblasti metalske industrije predmet su istraživanja iz razloga što metalska industrija ima veliki značaj na privredni rast ekonomije, kako na nivou jedne zemlje tako i na globalnom nivou. Osim toga, obezbeđuje sirovine, minerale i metale koji su značajni za avio-industriju, automobilsku industriju, građevinarstvo, brodogradnju, mostogradnju, informacione tehnologije i drugo. Prihod 40 najvećih globalnih rudarskih kompanija iznosi oko 925 milijardi američkih dolara u 2021. godini, operativni rashodi 633 milijarde američkih dolara, što je povećanje u odnosu na 2020. godinu kada su operativni rashodi iznosili 482 milijarde američkih dolara. Ukupna vrednost imovine najvećih kompanija iznosi 1.235 milijardi američkih dolara (*Statista*, 2023).

Istraživanje je obavljeno na osnovu podataka 20 multinacionalnih kompanija iz oblasti rudarstva (Tabela 2). Kao kriterijum za razvrstavanje korišćena je tržišna kapitalizacija. Prilikom rangiranja isključene su kompanije koje se ne kotiraju na berzi i državna preduzeća.

Tabela 2. *Kompanije koje su predmet istraživanja*

Naziv kompanije	Zemlja	Sedište	Tržišna kapitalizacija	Poslovne operacije
BHP Group	Australija	Melburn	192,98	diversifikovane
Rio Tinto	Australija	Melburn	143,58	diversifikovane
Vale	Brazil	Rio de Ženerio	100,08	diversifikovane
Glencore	Švajcarska	Baar	88,68	diversifikovane
Freeport-McMoRan	US	Phoenix	70,68	bakar
Anglo American	UK	London	69,68	diversifikovane
Newmont Goldcorp	US	Denver	64,28	zlato
Southern Copper	US	Phoenix	56,88	bakar
Fortescue Metals	Australija	Pert	50,08	ruda gvožđa
Zijin Mining	Kina	Xiamen	47,78	diversifikovane
Ma'aden	Saudijska Arabija	Rijad	45,98	diversifikovane
Barrick Gold	Kanada	Toronto	44,38	zlato
Norisk Nickel	Rusija	Moskva	38,78	diversifikovane
Agnico Eagle	Kanada	Toronto	32,38	zlato
Ganfeng Lithium	Kina	Lianghi	28,98	litijum
Polyus	Rusija	Moska	22,8	zlato
First Quantum Minerals	Kanada	Vankuver	22,6	bakar
Antofagasta	UK	London	21,6	bakar
Sauth32	Australija	Pert	17,2	bazni metali
Newcrest Mining	Australija	Melburn	16,3	zlato

Izvor: The top 50 biggest mining companies in the world - MINING.COM_

REZULTATI ISTRAŽIVANJA

Prema istraživanju KPMG Australija najznačajniji rizik sa kojim se u poslovanju susreću rukovodstva kompanija metalnog kompleksa je robni rizik, podaci se odnose na 2021. godinu i na 2020. godinu (KPMG Australija, 2023). Prve dve kompanije koje su predmet istraživanja su australijske kompanije, dok u ukupnom uzorku kompanije iz Australije čine četvrtinu, pa se može smatrati da je robni rizik značajan i za rukovodstva drugih kompanija.

Rezultati istraživanja prezentovani su u formi matrice 4T, posebno za robni rizik nabavke, a posebno za rizik prodaje.

Tabela 3. Sklonost ka robnom riziku nabavke i preduzete mere zaštite

I Prihvatanje rizika	Naziv kompanije	Učestalost	%
Nisu preduzimate nikakve mere			
Svega			
II Izlaganje riziku	Naziv kompanije	Učestalost	%
Širenje sopstvene baze sirovina	BHP, Glencore, Freeport McMoRan	3	9
Smanjenje operativnih troškova	Anglo American, Barrick, BHP, Newmont, Vale, Fortescue Metals, Southern Coppers, Freeport McMoran, New mont, Zijin mining Group, Polyus, Atntofagasta	12	36
Unapređenje lanca snabdevanja	Anglo American, Barrick, BHP, Zijin Mining Group, Rio Tinto, Fortescue Metals, Agnico Eagle, Antofagasta, Newmont, Vale, Southern Copper, Norisk, Nickel, Maaden, Polyus, Newcrest Mining	16	49
Razvoj sopstvene mreže transporta	Fortescue Metals	1	3
Povećanje skladišnih kapaciteta	Freeport McMoRan	1	3
Svega		33	100
III Transfer rizika²	Naziv kompanije	Učestalost	%
Upotreba finansijskih derivata	Vale, Newmont, Fortescue Metals, Zijin Mining Group, First Quantum, Antofagasta, Newcrest mining	7	30
Zajednička ulaganja	Vale, Norisk, Maaden, Gangfeng, Freeport McMoran, Fortescue Metals, Agnico Eagle, Anglo American, Barrick, BHP, Rio Tinto, Glencore, Newmont, Zijin Mining Group, First Quantum, Newcrest Mining	16	70
Svega		23	
IV Izbegavanje rizika	Naziv kompanije	Učestalost	%

Izvor: Istraživanje autora

² Prilikom istraživanja konvencionalni ugovori sa osiguravajućim kompanijama nisu predmet istraživanja, i kao takvi nisu sadržani u tabeli.

Tabela 4. *Sumarni pregled sklonosti ka robnom riziku nabavke*

Sumarni pregled	Učestalost	%
Tolerisati rizik		
Izlaganje riziku	33	59
Transfer rizika	23	41
Izbegavanje rizika		
Ukupno	56	100

Izvor. Istraživanje autora

Rukovodstva svih kompanija, smatraju da ne mogu prihvatiti robni rizik nabavke na način da ne preduzimaju nikakve mere zaštite, odnosno, smatraju da ne postoji niska verovatnoća da će se rizik desiti i da bi uticaj na poslovanje bio nizak.

Uglavnom se smatra, da je verovatnoća da će se robni rizik nabavke desiti, ali da postojeća organizacija poslovanja i finansijska pozicija kompanije može podneti eventualni negativni efekat, pa se rukovodstvo opredeljuje za izlaganje riziku nabavke. U toj prilici najčešće se primenjuju mere koje se odnose na poboljšanje efikasnosti rada (smanjenje operativnih troškova) i obezbeđenje kvalitetnih veza u lancu snabdevanja (zaključivanje dugogodišnjih ugovora sa najznačajnijim dobavljačima) (Pellegrino, Costantino i Tauro, 2019). Kako se izveštaji o poslovanju na osnovu kojih je vršeno istraživanje, odnose na godinu u kojoj je akutelnja epidemija izazvana virusom COVID-19, rukovodstva su pokušala da preusmere saradnju sa lokalnim dobavljačima.

U situaciji kada rukovodstvo proceni da je potencijalni negativni uticaj rizika visok, preduzeće se mere koje se odnose na prenos na drugog ili podela rizika sa drugim licima. Uglavnom je opredeljenje „podela” rizika sa drugim licima u situaciji kada se radi o otkrivanju, ispitivanju i eksploataciji rudnog tela. Transfer rizika, ponekad se vrši i upotrebom finansijskih derivata (Till, 2016), ali treba imati u vidu da derivati imaju rok dospeća, pa samim tim i potencijalna zaštita se vezuje za period trajanja finansijskih derivata.

„Troškovi materijala i goriva su izloženi fluktuacijama cena, posebno cene dizela i mazuta. Da bi se ublažio ovaj rizik, Grupa je ušla u kratkoročni terminski ugovor za gorivo kako bi operativne troškove održala u planiranim granicama.” (Izveštaj o poslovanju Newcrest za 2021, str. 158).

Prirodno je da se kompanije ne opredeljuju za izbegavanje robnog rizika nabavke jer je to praktično nemoguće, radi se aktivnostima koje su

suštinski vezane za poslovanje. Stalnim praćenjem poslovanja, poređenjem planiranog sa ostvarenim, praćenjem spoljnih i internih činilaca rukovodstva nastoje predupređiti preduzimanje mera kao što su zatvaranje pojedinih rudnika, gubitak tržišta prodaje...

Tabela 5. Sklonost ka robnom riziku prodaje i preduzete mere zaštite

I Tolerisati rizik	Naziv kompanije	Učestalost	%
Nisu preduzimane nikakve mere	Agnico Eagle, Ganfeng	2	100
Svega		2	
II Izlaganje riziku	Naziv kompanije	Učestalost	%
Diversifikovani portfolio	BHP, Rio Tinto, Vale, Glencore, Anglo American, Zijin, Maaden, Norisk,	8	100
Svega		8	
III Transfer rizika	Naziv kompanije	Učestalost	%
Finansijski derivati	Barrick, Newmont, Franko Nevada, Zijing, Freeport, Fortescue, Southern, Agnico Eagle, First Quantum, Antofagasta	10	83
Zajednička ulaganja	Zijin, Vale	2	17
Svega		12	
IV Izbegavanje rizika	Naziv kompanije	Učestalost	%

Izvor: Istraživanje autora

Tabela 6. Sumarni pregled sklonosti ka robnom riziku prodaje

V Sumarni pregled	Učestalost	%
Tolerisati rizik	2	9
Izlaganje riziku	8	36
Transfer rizika	12	55
Izbegavanje rizika		
Ukupno	22	100

Izvor: Istraživanje autora

Kompanije koje smatraju da se mogu izložiti robnom riziku prodaje imaju diverzifikovan portfolio gotovih proizvoda, što smatraju pouzdanom zaštitom (Jiayu, Livan, Lei i Hongchao, 2020).

„Raznovrsnost naših proizvoda znači da smo izloženi promenama cena različitih proizvoda. Uobičajena praksa je da prodajemo proizvode po preovlađujućim tržišnim cenama. Izuzeci od ovog pravila podležu striktnim ograničenjima koje je postavio Odbor direktora i definisanoj toleranciji tržišnog rizika i internim kontrolama (Izveštaj o poslovanju Rio Tinto za 2021, str. 264).

„Izloženi smo različitim faktorima tržišnog rizika koji mogu uticati na naš novčani tok. Procena potencijalnog uticaja izloženosti konsolidovanom tržišnom riziku se vrši periodično kako bi se podržao proces donošenja odluka u vezi sa strategijom upravljanja rizikom, koja može da sadrži finansijske instrumente, uključujući derivate. Portfolio finansijskih instrumenata se prati na mesečnom nivou, što nam omogućava da procenimo finansijske rezultate i njihov uticaj na tokove gotovine i obezbedimo korelaciju između implementiranih strategija i predloženih ciljeva” (Izveštaj o poslovanju Vale, str. 138).

Kada je u pitanju robni rizik prodaje, rukovodstva Kompanija se uglavnom opredeljuju za transfer (prenos) rizika upotrebom finansijskih derivata, s tim, da treba imati na umu da se radi o berzanskoj robi.

Na kraju, ne može se reći da kompanije primenjuju samo jednu meru zaštite od robnog rizika. Radi se o kombinaciji više mera, pitanje je samo koja je mera zastupljenija od druge. Za robni rizik nabavke, najveći broj kompanija se opredeljuje za mere vezane za poboljšanje efikasnosti rada i obezbeđenje kvalitetnih veza u lancu snabdevanja. Dok, kada je u pitanju robni rizik prodaje, najčešće se koriste derivatni instrumenti. Samo „adekvatna kombinacija” primenjenih mera može proizvesti željene ciljeve (Acharya, Almeida, Amihud i Liu, 2021).

ZAKLJUČAK

Merama koje se preduzimaju radi zaštite od rizika nastoji se maksimizirati dodata ekonomska vrednost kompanije, tako što će se maksimizirati poslovni dobitak, uvećati poslovna imovina ili uravnotežiti novčani tok. Upravljanje rizicima podrazumeva identifikaciju potencijalnih događaja koji mogu uticati na poslovanje društva, određivanje pravca i intenziteta uticaja i preduzimanje pravovremenih i adekvatnih mera kako bi se ispunili usvojeni ciljevi.

Važno je naglasiti, vremensku dimenziju sklonosti ka riziku. Tokom vremena, sklonost ka riziku se menja pod uticajem internih i eksternih faktora, što bi značilo da postoji "više sklonosti ka riziku" za iste ili različite rizike. Ne treba zanemariti činjenicu, da su rukovodioci koji donose odluke o količini rizika koji kompanija može prihvatiti, samo ljudska bića, sa svojim ličnim sklonostima za preuzimanjem rizika. Nadalje, to znači i da se preduzete mere zaštite menjaju radi prilagođavanja konkretnim događajima.

Neophodno je da kompanije neprekidno usavršavaju svoje modele za analizu rizika na način koji bi osigurao pravovremeno prikupljanje istinitih podataka za šta je neophodna saradnja sa IT sektorom. Pored toga, razvoj informacionog sistema trebalo bi da ide u pravcu unapređenja kontrolne funkcije, odnosno, razvoj modela za praćenje efekata preduzetih mera zaštite, što podrazumeva i praćenje ostvarivanja usvojenih ciljeva.

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COMMODITY-RELATED RISK APPETITE OBSERVED ON THE EXAMPLE OF METAL COMPLEX COMPANIES

Jelena Krpić

Abstract: *The focus of the paper is on the identification of the tendency towards commodity risk and the measures taken for protection on the example of companies of the metal complex. The ability to determine the amount of risk that the Company can manage is reflected on the achievement of adopted strategic goals. The research was based on data disclosed in the integrated annual reports of mining companies for the year 2021. The aim of the work was to determine whether the Company's management opts for tolerance, exposure, transfer, or avoidance of commodity risk. Commodity risk is viewed as commodity risk of procurement and commodity risk of sale. After that, the measures taken for protection were analyzed, that is, when operational hedging is applied and when financial hedging is applied. It can be concluded that company management opts for a combination of measures in order to maximize profit, preserve cash flow, and maximize the value of the company.*

Keywords: *commodity risk / risk management / risk appetite.*

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STRUČNI RAD

UTICAJ SOPSTVENIH PRIHODA NA RAZVOJ KAPACITETA UNIVERZITETA ODBRANE U REPUBLICI SRBIJI

Neševski Aleksandar¹,

Milenković Dragana²,

Knežević Milena³

Sažetak: Razvoj kapaciteta Univerziteta odbrane u Beogradu u savremenim uslovima poslovanja predstavlja imperativ njegovog menadžmenta. Promene i navike stanovništva izazvane pandemijom COVID-19 na globalnom nivou uticale su na svetsku ekonomiju ali i na ostale funkcije društva, a obrazovanje je samo jedna od njih. Republika Srbija predstavlja deo svetske ekonomije i sva dešavanja na globalnom nivou utiču i na njenu ekonomiju, a posredno i na obrazovanje. Nedostatak finansijskih sredstava, odliv kadrova, sve manja zainteresovanost mladih za studiranje, samo su neki od problema sa kojima se suočava obrazovanje Republike Srbije, a samim tim i Univerzitet odbrane. Predmet ovog rada je sagledavanje mogućnosti dodatnog finansiranja Univerziteta odbrane sopstvenim prihodima, kao jednim od ostalih izvora finansiranja. S obzirom da u odnosu na ostale univerzitete u Republici Srbiji i okruženju, Univerzitet odbrane nema dovoljan nivo autonomije u odlučivanju i utrošku ostvarenih sopstvenih

¹Univerzitet odbrane u Beogradu, Veljka Lukića Kurjaka 1, 11000 Beograd, e-mail: anesevski@gmail.com

²Univerzitet u Prištini, Ekonomski fakultet, Kolašinska 156, 38220 Kosovska Mitrovica, e-mail: dragana.milenkovic@pr.ac.rs

³Univerzitet odbrane u Beogradu, Veljka Lukića Kurjaka 33, 11000 Beograd, e-mail: milena.knezevic@mod.gov.rs

prihoda, finansiranje iz sopstvenih prihoda razvoja kapaciteta predstavlja imperativ menadžmenta Univerziteta odbrane. Stoga u narednom periodu Univerzitet odbrane mora, kao prvo, da preduzme odgovarajuće mere kako bi se povećali sopstveni prihodi i time delimično prevazišao problem nedovoljno odobrenih budžetskih sredstava. Drugi zadatak je pokretanje procedure za dodatnim normativnim uređenjem i tretmanom sopstvenih prihoda Univerziteta odbrane.

Ključne reči: *sopstveni prihodi / finansiranje / rashodi / budžet / Univerzitet odbrane.*

UVOD

Univerzitet odbrane u Beogradu je samostalna visokoškolska ustanova koja obavlja svoju delatnost visokog vojnog obrazovanja i posluje sredstvima u državnoj svojini. Misija Univerziteta odbrane, definisana je strategijskim dokumentima Ministarstva odbrane i predstavlja trajan zadatak njegovog menadžmenta na razvoju kapaciteta Univerziteta odbrane a radi školovanja profesionalnog kadra za potrebe Vojske Srbije. U skladu sa navedenom misijom definišu se i ciljevi za razvoj kapaciteta Univerziteta odbrane (Dragić Marić i sar., 2016). Stoga bi Univerzitet odbrane trebalo da ima redovno finansiranje koje bi bilo dovoljno da Univerzitetu pruži mogućnost nesmetanog obavljanja obrazovne funkcije u okviru sistema odbrane Republike Srbije. Međutim, u vremenima koja prethode, iskustvo nas uči da su raspoloživa finansijska sredstva iz budžeta često nedovoljna za održavanje postojećih a kamo li razvoj novih kapaciteta, te je neophodno uključiti u finansiranje i ostale izvore poput sopstvenih prihoda.

Univerzitet odbrane je specifičan u odnosu na ostale univerzitete u Republici Srbiji. Posluje kao i ostali univerziteti u skladu sa propisima koji tretiraju funkciju obrazovanja u Republici Srbiji, ali i u skladu sa vojnim propisima. Finansira se isključivo iz sredstava opredeljenih Ministarstvu odbrane. Razvija kapacitet u skladu sa planom razvoja Ministarstva odbrane i nema autonomiju kao što imaju ostali univerziteti u Republici Srbiji (Knežević, 2022).

U skladu sa Zakonom o vojnom obrazovanju i Statutom Univerziteta odbrane, prihodi iz budžeta predstavljaju osnovni izvor finansiranja

Univerziteta odbrane. Univerzitet stiće sredstva i iz ostalih izvora finansiranja. Imajući u vidu ograničenost budžetskih sredstava Republike Srbije, samim tim i Univerziteta odbrane, pred menadžment Univerziteta se kao imperativ postavlja odgovarajuće dodatno angažovanje svih raspoloživih resursa kako bi se povećali ostali izvori finansiranja, pre svega sopstveni prihodi.

Međutim, da bi Univerzitet odbrane mogao angažovati dodatna sredstva prvo treba da promeni i uredi normativnu regulativu, čime bi Univerzitet stekao potrebnu samostalnost i time se izjednačio sa ostalim obrazovnim institucijama u zemlji i regionu.

Pored opštih naučnih metoda, s obzirom na predmet i cilj istraživanja težišno je korišćena komparativna metoda kojom je analizirano učešće sopstvenih prihoda u ukupno odobrenim sredstvima za finansiranje Univerziteta odbrane u periodu od 2016. do 2020. godine, kao i metoda analize sadržaja.

Iz svega gorepomenutog nameće se potreba da se, korišćenjem sopstvenih prihoda, dodatno unapredi finansiranje Univerziteta odbrane, pa će se kroz ovaj rad izvršiti kratka analiza sadašnjeg načina finansiranja Univerziteta, sa posebnim osvrtom na sopstvene prihode i izneti predlozi mogućih rešenja za unapređenje finansiranja sopstvenim prihodima.

MESTO I ULOGA UNIVERZITETA ODBRANE U SISTEMU ODBRANE

Univerzitet odbrane je visokoškolska ustanova koja je osnovana Odlukom Vlade Republike Srbije februara 2011. godine. Prevažodno školuje i osposobljava kadar za potrebe Vojske Srbije, ali i oružanih snaga pojedinih zemalja u okruženju. Univerzitet u okviru delatnosti visokog obrazovanja obavlja i naučnoistraživački rad kroz osnovna, primenjena i razvojna istraživanja koja su u funkciji unapređenja i osavremenjivanja obrazovanja u sistemu odbrane (Blagojević Papić i sar., 2022).

Univerzitet u svom sastavu ima dve visokoškolske jedinice Vojnu akademiju i Medicinski fakultet VMA. Visokoškolske jedinice u sastavu Univerziteta izvode akreditovane studije u polju društveno-humanističkih, tehničko-tehnoloških i medicinskih nauka i prepoznate su kao samostalna pravna lica (član 9 Statuta Univerziteta odbrane).

Pored navedenog, na Univerzitetu odbrane se u okviru Škole nacionalne odbrane realizuju i ostali oblici obrazovanja i usavršavanja kadra.

Univerzitet se može pohvaliti veoma razvijenom saradnjom sa drugim visokoškolskim institucijama i univerzitetima u zemlji i okruženju. Saradnja se ogleda kroz zajedničke projekte, sprovođenje zajedničkih studijskih programa, razmenu studenata i studentskih grupa na svim studijskim programima i nivoima studija, angažovanje i razmenu nastavnika i predavača u cilju poboljšanja nastavnog procesa, organizaciju i realizaciju naučnih kongresa, konferencija i seminara iz oblasti istraživanja i razvoja, izdavanje posebnih izdanja stručnih publikacija, naučnih časopisa, posebnih studija i slično (Neševski, 2015).

FINANSIJSKI PLAN UNIVERZITETA ODBRANE

Vojni rashodi svake zemlje su važan faktor u državnom budžetu, zbog svojih efekata u javnom i privatnom sektoru (Topal, Unver & Turedi, 2020). Finansijska sredstva opredeljena Ministarstvu odbrane u okviru razdela Zakona o budžetu Republike Srbije predstavljaju osnovni izvor finansiranja Univerziteta odbrane (Knežević i sar., 2021).

Međutim, pored sredstava iz budžeta Republike Srbije, a u skladu sa odredbama Statuta, Univerzitet odbrane, sredstva za obavljanje svoje delatnosti obezbeđuje i iz ostalih izvora finansiranja (prihodi i primanja, donacije, pokloni i slično).

Kako su budžetska sredstva unapred opredeljena i na njihovu visinu Univerzitet odbrane ne može neposredno da utiče, u ovom radu će se bliže predstaviti ostali izvori finansiranja i to posebno prihodi koje Univerzitet ostvaruje svojim redovnim poslovanjem. Bez obzira na odnos ovih sredstava sa ekonomskim rastom, potrošnja za potrebe vojske, samim tim i za potrebe Univerziteta odbrane daje jednu korist u vidu stabilnosti za samu državu, kao i sigurnost za njene građane (Nugroho & Purwanti, 2021).

Univerzitet, kao i jedinice u njegovom sastavu ostvaruju prihode kroz naplatu školarine, učešćem u naučnoistraživačkim projektima, pružanjem usluga trećim licima, davanjem u zakup nepokretnosti, prijemom poklona i donacija i na drugi način, ali zbog neodgovarajuće zakonske i normativne regulative ne može da troši i zadrži sve tako ostvarene prihode (Neševski, 2015).

U sledećoj tabeli dat je pregled odobrenih finansijskih sredstava Univerziteta odbrane u periodu od 2016. do 2020. godine.

Tabela 1. *Pregled osnovnih i ostalih izvora finansiranja Univerziteta odbrane za period od 2016. do 2020. godine (u hiljadama dinara)*

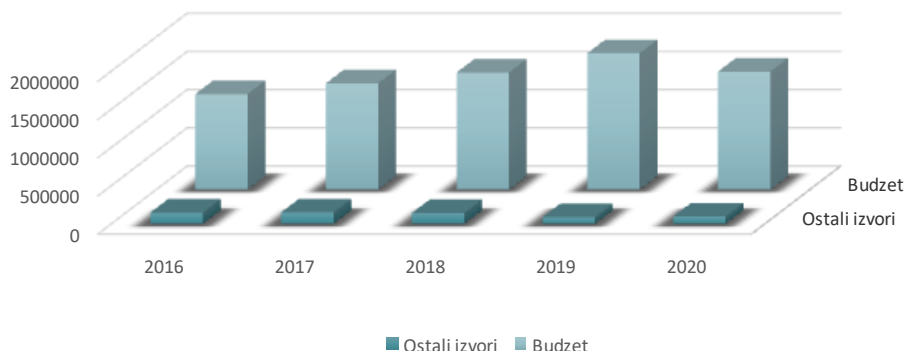
Izvor sredstava	2016. godina	2017. godina	2018. godina	2019. godina	2020. godina
Budžetska sredstva	1.252.292	1.394.219	1.535.126	1.787.236	1.546.840
Ostali izvori	148.555	149.272	141.255	86.461	95.767
Ukupno	1.400.847	1.543.491	1.676.381	1.873.697	1.642.607

Izvor: Radni materijali UO

Prethodna tabela pokazuje da su ostali izvori finansiranja zastupljeni u veoma malom procentu u ukupno odobrenim sredstvima. Uočena je tendencija smanjenja ostalih izvora finansiranja, pa su tako u 2016. godini ostali izvori finansiranja participirali sa 10,6% u ukupnim finansijskim sredstvima Univerziteta odbrane, u 2017. godini sa 9,6%, u 2018. godini sa 8,4%, a u 2019. i 2020. godini sa svega 4,6%, odnosno 5,8%.

Procenat učešća ostalih izvora finansiranja u ukupno odobrenim sredstvima Univerziteta odbrane, sličan je datom odnosu na nivou čitavog Ministarstva odbrane, gde budžetska sredstva predstavljaju 90% ukupno odobrenih finansijskih sredstava u prethodnih pet godina.

Grafikon 1. *Budžetska sredstva i ostali izvori finansiranja Univerziteta odbrane (u hiljadama dinara)*



Izvor: Rad autora

Razlozi za ovako velikim smanjenjem procenta učešća ostalih izvora finansiranja u ukupno odobrenim sredstvima za finansiranje Univerziteta odbrane su više organizacione, nego ekonomske prirode. Uz realnu pretpostavku da se u predstojećem periodu odobrena sredstva iz budžeta neće znatno povećavati, a kako bi Univerzitet imao više sredstava na raspolaganju, treba preduzeti određene radnje u svrhu povećanja ostalih izvora finansiranja. Pored prijema većeg broja samofinansirajućih studenata neophodno je i razviti kapacitete i sposobnosti Univerziteta odbrane za „profitabilne kurseve” koji imaju tražnju na savremenom tržištu. Navedeno bi imalo za posledicu ekonomsko ponašanje menadžmenta Univerziteta odbrane, koje bi se po tom pitanju znatno razlikovalo od njegovog dosadašnjeg ponašanja (Milačić & Marić, 2012).

NORMATIVNO UREĐENJE PRIHODA U SISTEMU ODBRANE

Kako je već navedeno Univerzitet odbrane se prevashodno finansira sredstvima iz budžeta i manjim delom iz sopstvenih prihoda. Univerzitet prilikom poslovanja ostvaruje prihode po više osnova, naplata prostora koji iznajmljuje drugim fakultetima i školama, stanarine, ishrane, grejanja, obuke, školovanja, iznajmljivanja sportskog centra i slično (član 42 Pravilnika o finansijskom poslovanju u Ministarstvu odbrane i Vojsci Srbije).

Prihodi se planiraju u skladu sa važećim pravnim i normativnim aktima u okviru Zakona o budžetu, a njihova naplata se realizuje preko podračuna konsolidovanog računa trezora. Takođe, realizacija sredstava po ovom osnovu je moguća samo u nivou ostvarenih prihoda (Obučinski i sar., 2022).

Odredbama Zakona o budžetskom sistemu (Službeni glasnik Republike Srbije, 2009) propisano je da budžet Republike Srbije obuhvata i prihodi i primanja, koji se ostvaruju kroz davanje u zakup pokretnih stvari i nepokretnosti, kao i primanja nastala prodajom pokretnih stvari koja su u svojini Republike Srbije, a koja pored ostalih državnih organa, koristi Ministarstvo odbrane i Vojska Srbije. Tokom ugovaranja prodaje i zakupa ovih stvari, naredbodavci korisnika sredstava u MO i VS, moraju, pre svega, da utvrde bonitet potencijalnih kupaca i ugovore rok plaćanja koji nije duži od 30 dana. U suprotnom, od kupca se mora zahtevati dostavljanje instrumenta obezbeđenja plaćanja (Žugić, 2008).

Treba naglasiti da tek posle realizacije naplate prihoda u gotovom ili proknjiženja uplate na odgovarajući račun prihoda Uprave za trezor, rukovodioci organizacionih celina MO i VS mogu ovako naplaćene prihode koristiti za pokriće određenih rashoda.

SOPSTVENI PRIHODI UNIVERZITETA ODBRANE

U skladu sa izmenama i dopunama Zakona o budžetskom sistemu (član 16. Službeni glasnik RS, 2009), od početka 2014. godine, one jedinice i ustanove Ministarstva odbrane i Vojske Srbije, koje se bave delatnošću istraživanja, edukacije, razvoja, modernizacije, remonta, proizvodnje i prometa, ispitivanja, kontrole kvaliteta i kodifikacije naoružanja i vojne opreme i metrološkom delatnošću, imaju mogućnost da prihode koje ostvare koriste kao sopstvene prihode (Stojilkov & Ivanova, 2017). Ove izmene Zakona o budžetskom sistemu nisu uspele da u celosti reše problem korišćenja sopstvenih prihoda, jer i dalje postoje veliki broj prihoda koje organizacione celine Ministarstva i Vojske nisu u mogućnosti da koriste kao sopstvene prihode, te i dalje ostaje potreba da se dodatno normativno uredi ova oblast.

Sopstveni prihodi koji se ostvare na ovakav način, knjiže se na kontu 742313 – Prihodi Vojske Srbije od specifične delatnosti. Svi ostali prihodi koje naplate organizacione celine Ministarstva i Vojske, knjiže se kao opšti

prihodi budžeta Republike Srbije. Ova vrstu prihoda nije na raspolaganju jedinicama i ustanovama i oni se ne mogu realizovati kao sopstveni prihodi. Kako je Univerzitet odbrane ustanova čija je osnovna delatnost visoko obrazovanje, deo naplaćenih prihoda Univerzitet zadržava kao sopstvene prihode.

U *Tabeli 2.* predstavljen je odnos ostvarenih, tj. naplaćenih prihoda Univerziteta odbrane u toku godine i odobrenih sredstava iz prihoda koja su Zakonom o budžetu Republike Srbije data na koirišćenje Univerzitetu. Razlika predstavlja onaj deo naplaćenih prihoda koji nije dat na raspolaganje Univerzitetu, već se knjiži kao opšti prihod budžeta Republike Srbije.

Da bi se izračunao Spirmanov (Spearman) koeficijent korelacije ranga koristiće se podaci predstavljeni u *Tabeli 2.* U koloni Rx prikazan je rang godine koji zavisi od nivoa ostvarenih, odnosno naplaćenih prihoda Univerziteta odbrane, od 2016. godine kada je nivo naplaćenih prihoda bio najniži, preko 2017. godine u kojoj je ostvareno najviše prihoda, pa do 2020. godine kada je naplaćen neznatno viši iznos u odnosu na 2016. godinu.

Oznaka Ry u tabeli predstavlja rang visine odobrenih sredstava iz sopstvenih prihoda Univerziteta odbrane u periodu od 2016. do 2020. godine, gde je rang 5 dodeljen najnižem iznosu, a rang 1 najvećem iznosu odobrenih sredstava iz prihoda.

Tabela 2. Pregled rangiranja ostvarenih prihoda i odobrenih sredstava iz sopstvenih prihoda Univerziteta odbrane za period od 2016. do 2020. godine

Budžetska godina	Ostvareni (naplaćeni) prihodi (X)	Rx	Odobrena sredstva iz prihoda (Y)	Ry	d=Rx-Ry	d ²
2016.	108.390.705	5	95.621.000	3	2	4
2017.	148.018.750	1	107.100.000	2	-1	1
2018.	127.971.019	3	130.000.000	1	2	4
2019.	145.780.923	2	82.300.000	5	-3	9
2020.	125.441.924	4	90.000.000	4	0	0
				Σ	0	18

Izvor: Radni materijali Univerziteta odbrane

Koristeći formulu za izračunavanje Spirmanovog (Spearman) koeficijenta korelacije (Kvrgić, 2008), dolazimo do sledećeg:

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2-1)},$$

u našem slučaju iznosi:

$$r_s = 1 - \frac{6 \cdot 18}{5 \cdot 24} = 1 - \frac{108}{120} = 1 - 0,9 = 0,1$$

Vrednost Spirmanovog koeficijenta od 0,1 ukazuje na izuzetno nizak stepen direktne veze između ostvarenih (naplaćenih) prihoda i odobrenih sredstava iz prihoda Univerziteta odbrane. Nizak stepen korelacije ukazuje na činjenicu da Univerzitet nema mogućnost korišćenja ukupnog iznosa naplaćenih prihoda tokom godine, već samo dela prihoda koji mu se Rešenjem o finansiranju odobri na neposredni utrošak.

U prethodnoj tabeli je uočljivo da je nivo odobrenih sredstava iz prihoda dosta niži u odnosu na nivo ostvarenih (naplaćenih) prihoda i kretao se na nivou od oko 70%. Korišćenjem sopstvenih prihoda u punom iznosu (ukupno naplaćenih prihoda u toku godine), ostvario bi se značajan napredak po pitanju pokrivanja svih rashoda koji su u direktnoj vezi sa ostvarenim prihodima. Time bi se stvorio jedan održivi i dugoročno stabilniji način finansiranja Univerziteta odbrane.

STRUKTURA PRIHODA UNIVERZITETA ODBRANE

Kao što je već navedeno, od januara 2014. godine, na osnovu izmena i dopuna Zakona o budžetskom sistemu, stvorile su se mogućnosti da Univerzitet odbrane raspolaže delom sopstvenih prihoda (školarine, usluge po osnovu kliničkih ispitivanja, izdavanje diploma, naplata raznih такси i dr.) za finansiranje pojedinih rashoda. Struktura naplaćenih prihoda Univerziteta odbrane data je u sledećem pregledu.

Uočljiv je širok dijapazon naplaćenih prihoda Univerziteta odbrane, od onih koji se uplaćuju u budžet Republike Srbije, do prihoda nastalih po osnovu obrazovanja i naučnoistraživačkog rada, koji predstavljaju sopstvene prihode. Ovakva raznolikost prihoda ostavlja mogućnost da se dodatnim angažovanjem svih resursa ostvare znatna novčana sredstva koja bi se koristila za unapređenje poslovanja Univerziteta.

Pregled 1. *Struktura naplaćenih prihoda Univerziteta odbrane u periodu od 2016. do 2020. godine*

OSNOV OSTVARENJA PRIHODA
Usluge izdavanja smeštajnih kapaciteta na 51. SP "Kopaonik"
Usluge logistike (prodaja starog papira, naplata ishrane, šišanje i sl.)
Naplaćene usluge iznajmljivanja Sportskog centra Vojne akademije
Usluge privremenog smeštaja stanara u objektima VA
Usluge po osnovu realizacije kurseva pomoraca
Po osnovu realizacije zajedničkih projekata sa Ministarstva prosvete, nauke, tehnološkog razvoja i inovacija
Usluge izdavanja raznih uverenja i potvrda
Uplate po osnovu školovanja od strane bivših studenata i kadeta UO
Prihodi po osnovu školarina civilnih studenata i studenata iz inostranstva
Naplaćene usluge po osnovu kliničkih ispitivanja na VMA
Prihodi ostvareni po drugim osnovama

Izvor: Radni materijali Univerziteta odbrane

Povećanje prihoda zasnovanih na školarinama univerziteta u Srbiji i okruženju, kao posledica nedovoljnosti sredstava iz budžeta, ne može u savremenim uslovima da predstavlja trajno rešenje, jer broj upisanih studenata iz godine u godinu opada iz različitih razloga. Međutim, školarine su i dalje značajan izvor finansiranja razvoja kapaciteta univerziteta uopšte jer se uglavnom slivaju direktno u budžete univerziteta, a institucije imaju potpunu autonomiju u odlučivanju o upotrebi ovako nastalih prihoda (Vukasović, 2009).

Uočljiva je potreba za izmenama normativnog uređenja ove oblasti, kako bi se stvorili uslovi da Univerzitet odbrane sve ostvarene prihode u budžetskoj godini može da koristi kao sopstvene prihode. Ovim izmenama Univerzitet bi stekao izvestan nivo autonomije, kojim bi se znatno unapredio i pojednostavio proces odobravanja i utroška novčanih sredstava (Neševski, 2015).

U narednom periodu Univerzitet mora preduzeti određene mere kako bi se povećao nivo sopstvenih prihoda. Pre svega, prijemom većeg broja

samofinansirajućih studenata, posebno inostranih, ostvario bi se izvestan iznos sopstvenih prihoda koji bi se koristili za finansiranje pojedinih operativnih rashoda, na čemu se već uveliko radi.

ZAKLJUČAK

U periodu kada su budžetska sredstva jako ograničena, efikasno i ekonomično raspolaganje istim postaje izuzetno značajno. Poslovanje Univerziteta odbrane dovodi do utroška ne malog iznosa odobrenih budžetskih sredstava, što dovodi do potrebe za dodatnim uređenjem ove oblasti, posebno onog dela koji se odnosi na ostvarivanje, naplatu i knjiženje sopstvenih prihoda.

Nedovoljna budžetska sredstva delom bi se mogla nadoknaditi iz ostalih izvora finansiranja, posebno iz sopstvenih prihoda Univerziteta odbrane i to: naplatom školarina samofinansirajućim domaćim i stranim studentima, pružanjem usluga trećim licima, prijemom poklona i donacija, učešćem u međunarodnim i domaćim naučnoistraživačkim projektima i ostalim приходima i primanjima.

Povećanje nivoa sopstvenih prihoda se u narednom periodu postavlja kao imperativ pred Univerzitet odbrane. Po ugledu na slične obrazovne ustanove u zemlji i okruženju, Univerzitet bi morao da angažovanjem svih kapaciteta i resursa, kroz dodatno uređivanje postojećih nastavnih planova i programa, te prijemom većeg broja samofinansirajućih studenata, ostvari znatan iznos sopstvenih prihoda.

Nameće se i obaveza dodatnog normativnog uređenja po pitanju poslovanja i finansiranja Univerziteta odbrane. Izmenama pojedinih zakonskih i podzakonskih akata neophodno je stvoriti mogućnost za nesmetanim korišćenjem svih sopstvenih prihoda koji se naplate tokom godine. Ovim bi Univerzitet imao izvestan viši nivo samostalnosti, što bi ga stavilo u ravnopravan položaj sa ostalim obrazovnim institucijama u zemlji i okruženju.

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THE SIGNIFICANCE OF SELF-FINANCING FOR THE DEVELOPMENT OF THE UNIVERSITY OF DEFENSE OPERATING CAPACITIES

Aleksandar Neševski

Dragana Milenković

Milena Knežević

Abstract: *The operation of the University of Defense largely depends on the funds determined by the budget of the Republic of Serbia. For its successful functioning, it is necessary to provide regularity and timeliness of its financing as a budget user. Besides the budget, as its basic source of financing, the University of Defense has to rely on different funds and other sources of financing. Funds from other sources, although much lower compared to the state budget funds, are extremely important for certain expenses. The subject of this paper is to analyze the possibility of financing the University of Defense with its own incomes, as an additional source of funding. The limiting factor is the fact that all realized incomes of the University cannot be used to finance its*

operations, but only part of income incurred from education and scientific research. The normative regulation of this field in the defense system is not favorable for the University of Defense. Compared to other universities in the Republic of Serbia and the region, the University of Defense does not have a sufficient level of autonomy in bringing decisions related to the allocation of its own financial resources. In the following period, the University of Defense needs to take appropriate steps to increase its own revenues and thereby partially overcome the problem of insufficient budget funds. Another important task for the University of Defense is to initiate a procedure for additional normative regulations aimed at using its own revenues.

Key words: *own revenues / financing / outcomes / budget / University of Defense.*

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STRUČNI RAD

DETERMINANTE USPEHA POSLOVANJA HOTELA: STUDIJA SLUČAJA REPUBLIKA SRBIJA

Pimić Miroslav¹

Marković Zlatomir²

Dinić Goran³

Radivojević Nikola⁴

Sažetak: U radu se ispituje uticaj ključnih determinanti uspeha poslovanja hotela u Republici Srbiji. Istraživanje je sprovedeno za period od 2015. do 2020. godine na uzorku od 23 hotela. Izabrana dužina perioda posmatranja pokriva dovoljan vremenski interval da bi se primenom dinamičkog modela panel analize obuhvatile sve heterogenosti u strukturi jedinica posmatranja, ali i njene promene tokom vremena. Adekvatna veličina uzorka određena imajući u vidu veličinu populacije, željeni nivo poverenja i veličinu dozvoljenu grešku uzorkovanja. Rezultati istraživanja pokazuju da determinante poput uspeha poslovanja iz prethodnog perioda, efikasnost upotrebe ukupnih poslovnih sredstava, pripadnost lancu hotela, veličina i povećanje indeksa koncentracije hotela imaju pozitivan uticaj na uspeh poslovanja hotela, odnosno da determinante poput zaduženosti hotela, operativnog leveridža i starosti hotela imaju negativan uticaj na uspeh

¹ Gradska uprava grada Valjeva, Karađorđeva 64, 14000 Valjevo, e-mail: miroslavpimic@gmail.com

² Beogradska akademija za poslovne i umetničke strukovne studije, Bulevar Kraljice Marije 73, 11000 Beograd, e-mail: zlatomir.markovic@gmail.com

³ Akademija tehničko vaspitačkih strukovnih studija, Aleksandra Medvedeva 20, 18000 Niš, e-mail: profesor.goran@gmail.com

⁴ Akademija strukovnih studija, Trg topolivaca, 34000 Kragujevac, e-mail: radivojevic034@gmail.com

poslovanja. Determinante poput kvaliteta upravljanja zaštitom životne sredine i društveno odgovorno poslovanje hotela nemaju značajan uticaj na uspeh poslovanja hotela u Republici Srbiji.

Ključne reči: determinante poslovanja hotela / profitabilnost / panel analiza / Republika Srbija / GMM ocenjivač.

UVOD

Poslednjih godina postoji veliko interesovanje stručne i akademske javnosti za izučavanje načina poslovanja, kao i faktore uspeha poslovanja privrednih subjekata koji posluju u oblasti ugostiteljstva. Razlog tome nalazi se u činjenici da ugostiteljstvo predstavlja jedan od najbrže rastućih sektora turizma (de Grosbois, 2012), odnosno da privredni subjekti iz ove grane privrede imaju veliki uticaj na razvoj privrede. Hoteli i hotelski lanci imaju veliki uticaj na razvoj nacionalnih ekonomija jer generišu velike prilive novca i zapošljavaju veliki broj radnika, što pozitivno utiče na smanjenje stope nezaposlenosti. Ovaj uticaj je naročito evidentan za zemlje u razvoju koje se ne odlikuju značajnim sekundarnim sektorom i koje nastoje da putem diverzifikacije privrednih aktivnosti smanje zavisnost od primarnih i ekstraktivnih grana privrede i akceleriraju ekonomski rast nacionalne ekonomije.

U okviru ovih interesovanja moguće je identifikovati tri velike grupe istraživanja. Prvu grupu čine istraživanja koja proučavaju uticaj finansijskih faktora uspeha poslovanja hotela. Takva istraživanja sprovedi su Skuflic i Mlinaric (2015), Xuan (2015), Singh et al., (2016), Seal i Kumaran (2017), Dimitric et al., (2018, 2019), i dr. U okviru ovih istraživanja moguće je izdvojiti istraživanja koja su proučavala uticaj eksternih faktora, kao što su stopa bruto domaćeg proizvoda, stopa inflacija, devizni kurs, volatilnost cena finansijske aktive, struktura i razvijenost finansijskog tržišta, uticaj ekonomske krize i dr. (Leong & Hui, 2014; Singh et al., 2016). Analiza rezultata spomenutih istraživanja ukazuje da povoljni makroekonomski uslovi deluju pozitivno na uspeh poslovanja hotela i da različiti finansijski sistemi i ekonomska struktura utiču na dostupnost kapitala neophodnog za poslovanje hotela. Međutim, dominantna istraživanja jesu ona koje su za predmet istraživanja imala proučavanje uticaj internih finansijskih faktora na uspeh poslovanja

hotela, kao što su zaduženost hotela, likvidnost i solventnost, marža, novčani tokovi, struktura kapitala, operativni leveridž i sl. Takva istraživanja sprovedi su Tang i Jang (2007), Macas Nunes et al., (2009), Agiomirgianakis et al., (2012, 2013), Alarcon i Masperra (2015), Skuflic i Mlinaric (2015), Tan (2017), Dimitric et al., (2018, 2019) i dr. Ukoliko se izuzme postojanje oprečnih nalaza u pogledu uticaja stope inflacije na uspeh poslovanja, analiza rezultata ovih istraživanja nedvosmisleno ukazuje da se smer uticaja finansijskih faktora na uspeh poslovanja hotela može jasno predvideti na osnovu osnovnih postulata finansijske teorije. Otvoreno pitanje ostaje samo intenzitet uticaja ovih faktora. Step en uticaja ovih faktora na uspeh poslovanja hotela uslovljen je ostalim faktorima poslovanja. Stoga se nameće potreba izučavanja njihovog uticaja zajedno sa ostalim faktorima.

Drugu grupu istraživanja čine studije koje su za predmet istraživanja imale proučavanje uticaja faktora upravljanja, kao što su menadžment hotela, sistem upravljanja kvalitetom, sistem upravljanja prihodima hotela, sistem upravljanja zaštitom životne sredine i sl. Pored istraživanja koja su se bavila kvalitetom i stavovima menadžmenta i zaposlenih u hotelima na uspeh poslovanja (Sparks & Bradley, 2014; Martinez-Martinez et al., 2019; Koch et al., 2020), dominantna grupa istraživanja jeste ona koja je proučavala značaj i uticaj upravljanja kvalitetom na uspeh poslovanja hotela. Takva istraživanja sprovedi su Radojevic et al., (2018), González-Mansilla et al., (2019), Padma i Ahn (2020), Savaş (2020) i dr. Primarni fokus ovih istraživanja bio je na proučavanju uticaja različitih dimenzija kvaliteta usluge hotela na uspeh poslovanja hotela. Zajedničko ovim istraživanjima jeste da upućuju na jasan zaključak da kvalitet usluge hotela ima značajan uticaj na uspeh poslovanja hotela. Danas, ne samo u širim, već i u stručnim, akademskim krugovima dominira uverenje da kvalitet doprinose uspehu poslovanja hotela. Međutim, malo je istraživanja koja proučavaju uticaj korporativne društvene odgovornosti hotela na uspeh poslovanja. Naročito je ovo evidentno za zemlje u razvoju, kakva je Republika Srbija.

Treću grupu istraživanja čine studije koje su proučavale uticaj opštih faktora poslovanja na uspeh hotela, kao što su veličina, starost, lokacija i sl. (Agiomirgianakis et al., 2013; Kasim et al., 2016; Ben Aissa & Goaiied, 2016; Sánchez-Medina, 2016; Menicucci, 2018; Dimitric et al., 2019; Murimi et al., 2021). Različiti autori su predstavili oprečne rezultate značaja i uticaja ovih faktora, od toga da pojedini faktori imaju različit

smer uticaja, pa do toga pojedini faktori nemaju značaj ili da ih ne treba izučavati. Nepostojanje jedinstvenog stava u pogledu značaja ovih faktora, kao i oprečni rezultati njihovog uticaja na uspeh poslovanja hotela, nameću potrebu njihovog izučavanja u konkretnim slučajevima i uslovima poslovanja.

Imajući u vidu prethodno navedeno, jasno je da postoji potreba za istovremenim proučavanjem sve tri grupe faktora poslovanja. Činjenica je da nisu rađena na primeru hotela koji posluju u Republici Srbiji, izučavanje ove teme nameće kao imperativ. Otuda, cilj ovog rada jeste da se ispita uticaj faktora na uspeh poslovanja hotela u Republici Srbiji. Pregledom stručne literature jasno se uočava osnovna podela faktora uspeha poslovanja hotela na prethodno navedene tri grupe. Međutim, u okviru ovih grupa moguće je identifikovati veliki broj faktora poslovanja. Iz tog razloga za potrebe ovog istraživanja faktori su izabrani uzimajući u obzir sledeće kriterijume: 1) da u literaturi nema jedinstvenog stava po pitanju njihovog uticaja; 2) da nisu bili predmet značajnijih istraživanja kod nas i 3) da postoje dostupni podaci. Shodno ovim kriterijumima predmet proučavanja su zaduženost hotela, starost, veličina, lokacija, pripadnost lancu hotela i korporativna društvena odgovornost.

PREGLED LITERATURE

Budući da hoteli generišu velike prilive novca, da zapošljavaju značajan broj radnika, ne čudi zašto je uspeh njihovog poslovanja predmet brojnih istraživanja. Stručna i akademska javnost posebnu pažnju poklanjaju načinima njihovog poslovanja i faktorima koji utiču na uspeh. Veliki broj radova fokus stavlja na kvalitet usluge i sadržaj ponude hotela. Ovo je i razumljivo, budući da izbor hotela od strane gostiju zavisi od atraktivnosti sadržaja usluge hotela, odnosno od dimenzija kvaliteta usluge. Međutim, nezavisno od prethodno navedenog, sva istraživanja vezana za uspeh poslovanja hotela, prema načinu iskazivanja uspeha poslovanja mogu se podeliti u dve velike grupe. Prvu grupu čine istraživanja koja su uspeh poslovanja hotela iskazivale preko satisfakcije i lojalnosti gostiju. Takva istraživanja sprovedli su Sparks i Bradley (2014), Kim et al., (2016), Adzoyi i Klutse (2015), Radojevic et al., (2018), Ahani et al., (2019), González-Mansilla et al., (2019), Artuđer (2020) i dr. Drugu grupu čine istraživanja

koja su za predmet proučavanja imale uticaj različitih faktora poslovanja hotela na finansijske performanse poslovanja hotela. Među prvima takva istraživanja sprovedi su Brown i Dev (1999), koji su uspeh iskazivali preko stope profita. Nisu retka istraživanja koja su uspeh poslovanja hotela iskazivala u sličnim finansijskim indikatorima uspeha poslovanja hotela i pokazateljima osnovnih ekonomskih principa poslovanja. Tako, Sigala (2004) ispituje uticaj faktora poslovanja hotela na produktivnost, Barros i Santos (2006), Bresciani et al., (2015) i Poldrugovac et al., (2016) na efikasnost poslovanja, Sainaghi (2011) na prihod po dostupnoj sobi, Agiomirgianakis et al., (2013), Ben Aissa i Goaid (2014, 2016), Skuflic i Mlinaric (2015), Dimitric et al., (2018, 2019) na prinos na sopstvena sredstva odnosno aktivu.

Nezavisno od prethodno rečenog, analiza studija o faktorima uspeha poslovanja hotela, čiji su rezultati istraživanja objavljeni u vodećim časopisima iz oblasti turizma, restoraterstva i hotelijerstva u periodu od 1963. do 2016. godine, implicira da je moguće identifikovati tri grupe faktora uspeha poslovanja hotela: 1) finansijske faktore, 2) faktore upravljanja i 3) opšte faktore poslovanja hotela. Iako je u okviru jedne, odnosno druge grupe moguće identifikovati veliki broj faktora poslovanja, Alvarez-Ferrer et al., (2018) identifikovali su ključne faktore u okviru ove tri grupe: zaduženost hotela, stopa marže, operativni leveridž, kvalitet menadžmenta hotela, sistem upravljanja kvalitetom; sistem upravljanja zaštitom životne sredine i korporativna društvena odgovornost, veličina, starost i lokaciju hotela. Rezultati analize istraživanja objavljenih nakon 2016. godine, takođe su u skladu sa rezultatima prethodno spomenutim zapažanjem.

Finansijski faktori bili su predmet brojnih istraživanja. Tako zaduženost hotela, bila je predmet interesovanja kod González i Jareño (2014), Ben Aissa i Goaid (2014), Skuflic i Mlinaric (2015), Tan (2017), Dimitric et al. (2019) i dr. Zajedničko navedenim istraživanjima jeste da ističu: 1) da postoji negativna korelacija između stope zaduženosti hotela i uspeha poslovanja. Ovo objašnjavaju činjenicom da se sa rastom stope zaduženosti hotela povećavaju troškovi zaduživanja, što za posledicu ima smanjenje stope profitabilnosti. Stoga se očekuje da će hoteli sa višim koeficijentima solventnosti biti uspešniji u poslovanju u odnosu na one sa nižim koeficijentima; 2) da su mali, porodični i nezavisni hoteli zaduženiji u odnosu na velike hotelske lance; 3) da je stopa zaduženosti hotela u korelaciji sa poteškoćama koje hoteli imaju u pristupanju različitim

izvorima finansiranja i ceni pozajmljenog kapitala. Naročito je ovo evidentno u slučaju malih, porodičnih i nezavisnih hotela, koji su zbog niske snage pregovaranja izloženi višim troškovima zaduživanja. Pored ovoga, nalazi Tang i Jang (2007) i Tan (2017) ukazuju da veća stopa zaduženosti implicira veću izloženost hotela finansijskom riziku jer veću izloženost riziku moraju vlasnicima kapitala da kompenzuju većim profitom. U slučaju malih, porodičnih i nezavisnih hotela ovaj faktor dobija na značaju i zbog činjenice da se često suočavaju sa problemom održavanja tekuće likvidnosti. Međutim, ovi nalazi su u suprotnosti sa osnovnim postulatima teorije finansija i efekta leveridža, prema kojoj povećanje zaduženosti treba da dovede do povećanja stope prinosa na sopstveni kapital (Radivojević et al., 2022). Na osnovu nalaza apostrofiranih istraživanja očekivano je će veća stopa zaduženosti hotela imati negativan uticaj na uspeh poslovanja.

Stopa obrta aktive hotela bili su predmet proučavanja kod Avelini Holjevac (2001), Lee et al., (2014), Dimitric et al., (2019) i dr. Svi ovi autori saglasni su u stavu da se uspeh poslovanja hotela može unaprediti ubrzavanjem koeficijenata obrta raspoloživih sredstava. Naročito je ovo važno u slučaju malih i nezavisnih hotela jer oni pod nepovoljnijim uslovima dolaze do svežeg kapitala. Usporevanje obrta sredstava, preko opadanja obima prodaje, negativno utiče na prinos na investicije, što u krajnjoj instanci za posledicu ima smanjenje marže hotela, a time i njene profitabilnosti (Martorell & Mulet, 2009). Novčanim rezervama imaju veći nivo sigurnosti i manje fiksne troškove kamate. Agiomirgianakis et al., (2012), Alarcon i Masperra (2015), Yang et al., (2015) i Arikani (2017) izučavali su uticaj operativnog leveridža. Značaj ovog faktora uspeha poslovanja hotela nalazi se u činjenici da u hotelijerstvu fiksni troškovi zauzimaju dominantan udeo u strukturi ukupnih troškova poslovanja. Iz tog razloga Amat i Campa (2011) naglašavaju značaj poznavanja ponašanja ukupnih troškova poslovanja hotela. Zajednički zaključak ovih istraživanja jeste da efekat operativnog leveridža ima negativan uticaj na profitabilnost hotela.

Faktori upravljanja takođe su bili predmet brojnih istraživanja. Sistem upravljanja hotelima, bio je predmet interesovanja kod Claver-Cortes et al., (2007), Fernández i González (2008), Pereira et al., (2011), Amat i Campa (2011), Ivanova i Ivanov (2015), Hodari et al., (2017). Nalazi ovih istraživanja ukazuju da izbor odgovarajućeg sistema upravljanja hotelom

značajno doprinosi poboljšanju ekonomskih rezultata. Takođe, njihovi rezultati ukazuju da je izbor odgovarajućeg sistema upravljanja determinisan, pre svega veličinom i vlasničkom strukturom hotela, odnosno da je moguće identifikovati određeni obrazac izbora optimalnog sistema upravljanja hotela. Po pravilu, velikim hotelskim lancima upravljaju vlasničke kompanije, koje su vlasnici određenih brendova, dok mali i nezavisni hoteli imaju tendenciju da angažuju profesionalni menadžment putem različitih ugovora o upravljanju ili franšizi. Interesantan nalaz ovih istraživanja jeste da su ugovori o upravljanju evoluirali od nevlasničkih ugovora do ugovora o vlasništvu, kao i činjenica da ciljevi između vlasnika i uprave hotela često nisu kompatibilni. Implikacije ove neusklađenosti ogledaju se u neefikasnosti upravljanja imovinom hotelom, što se negativno odražava na uspeh poslovanja hotela (Hodari et al., 2017). Ivanova i Ivanov (2015) otkrili su da je stepen ove kompatibilnosti veći kod hotela koji pripadaju lancu hotela, nego u slučaju nezavisnih hotela kod koji je upravljanje povereno profesionalnom menadžmentu. Slične nalaze predstavili su i Fernández i González (2008), posebno apostrofirajući na problem moralnog hazarda koji je evidentniji u slučaju profesionalnog menadžmenta kod nezavisnih hotela, nego u slučaju kada hotel pripada lancu hotela. Oba istraživanja su utvrdila da stepen neusklađenosti između ciljeva vlasnika hotela i profesionalne uprave hotela negativno utiče na efikasnost upravljanja hotelom.

Ukoliko se zanemare studije, koje su za predmet proučavanja imale uticaj kvaliteta usluge hotela na zadovoljstvo gostiju, može se reći da je sistem upravljanja kvalitetom bio predmet interesovanja u najvećem broju studija koje su se bavile faktorima uspeha poslovanja hotela (Pereira et al., 2011; Rubio et al., 2011; Tari & Pereira, 2012; Alonso et al., 2012; Ladhari, 2012; Llach et al., 2016; Arbelo-Pérez et al., 2017). Ova istraživanja su jedinstvena u zaključku. Ukazuju da sistem upravljanja kvalitetom, preko kvaliteta usluge hotela, imidža, zadovoljstva zaposlenih i gostiju ima pozitivan uticaj na rezultate poslovanja hotela.

Sa jačanjem svesti turista o značaju održivog razvoja i zaštite životne sredine, poslednjih godina sva veća pažnja se poklanja proučavanju uticaja društveno odgovornog ponašanja, odnosno značaju posedovanja efikasnih sistema upravljanja zaštitom životne sredine. Autori, poput Martinez i del Bosque (2013), Martinez-Martinez et al., (2019) proučavali su značaj posedovanja znanja, informacija i politika, koje hotelima omogućavaju da se efikasno bave pitanjima životne sredine. Rezultati

njihovih istraživanja ukazuju na značaj posedovanja pojedinaca koji imaju znanja iz ove oblasti. Tzschentke et al., (2008) i López-Gamero et al., (2011) navode da lični stavovi menadžera hotela igraju centralnu ulogu u odlukama o upravljanju životnom sredinom. Sa druge strane, Park et al., (2014) otkrili su da postoji diskrepanca između stavova i ponašanja menadžmenta hotela u kontekstu održivosti, što implicira da stavovi ili namere menadžera hotela da se ponašaju *održivo* ne dovode nužno do odgovarajućeg ponašanja. Iz tog razloga važno je da hotel poseduje efikasan sistem upravljanja zaštitom životne sredine. U prilog ovoga svedoče brojna istraživanja (Segarra et al., 2012; Molina-Azorín et al., 2015; Abdel-Maksoud et al., 2016). Zajednički nalazi ovih studije jesu da posedovanje efikasnog sistema upravljanja zaštitom životne sredine doprinosi značajnom smanjenju troškova poslovanja.

Pitanje korporativne društvene odgovornosti kao faktor uspeha poslovanja hotela, primarno je bila predmet interesovanja kod autora poput, Milovanovic-a (2014), Benavides-Velasco, et al., (2014), García i Del Bosque-a (2015), Dinu-a i Nistorescu-a (2015), Bogetic-a et al., (2016), Medrado-a i Jackson-a (2016), Kim-a et al., (2017). Zajedničko ovim istraživanjima jeste nalaz da su najveći hotelski lanci koncept korporativne društvene odgovornosti prihvatili kroz implementaciju kodeksa ponašanja, najboljih ekoloških praksi, eko-oznake i indikatore ekološkog učinka. Nalazi ovih studija, takođe, impliciraju da efikasna implementacija ovih koncepata zavisi od kvaliteta upravljanja ljudskim resursima u hotelima, odnosno od razumevanja zaposlenih o važnosti korporativne društvene odgovornosti za uspeh poslovanja. Osnovni nedostatak ovih studija jeste da u istraživanju nisu uključila male i nezavisne hotele. Nalazi Kornilaki et al., (2019) jasno ukazuju da je prihvatanje koncepta korporativne društvene odgovornosti kod malih i nezavisnih hotela primarno determinisano stavom vlasnika hotela. Naime, rezultati njihove kvalitativne analize ukazuju da prihvate prakse održivosti i korporativne društvene odgovornosti zavisi od njihovog uverenja u samoefikasnost. Nedostatak istraživanja koja obuhvataju male i nezavisne hotele nameće imperativ daljeg izučavanja ovog faktora u hotelijerstvu.

Analiza stručne literature ukazuje da su opšti faktori poslovanja hotela najčešće bili predmet izučavanja, ali i kontroverznih zaključaka. Tako, Agiomirgianakis et al., (2012) izveštavaju o pozitivnom uticaju starosti na

uspeh poslovanja. Nalazi ovih istraživanja sugerišu da se uspeh poslovanja hotela povećava sa starošću zbog uticaja akumuliranog „učenja kroz rad“, reputacije i lojalnosti (Assaf & Cvelbar, 2011; Agiomirgianakis et al., 2012). Međutim, nalazi Ben Aissa i Goaid-a (2014, 2016), Skuflic i Mlinaric (2015) ukazuju na suprotno. Dimitric et al., (2019) iznose očekivanje da bi mlađi hoteli trebalo da budu uspešniji jer su obično moderniji i skloniji primeni novih tehnologija i usluga kojima lako mogu privući veći broj gostiju, posebno one sa većom kupovnom moći. Slično je i sa lokacijom. De Jorge i Suárez (2014), Lee (2014) i Kalnins (2016) navode da je lokacija najvažniji opšti faktor uspeha poslovanja hotela, dok Bresciani et al., (2015) ističu da ovaj faktor nije potrebno izučavati u uslovima kada su atrakcije na destinaciji podjednako dostupne svim hotelima. Lee i Jang (2012), navode da u uslovima preterane koncentracije hotela slične cenovne konkurentnosti, lokacija ima negativan uticaj na uspeh poslovanja hotela. Značaj veličine hotela navele su brojne autore, poput Hernández et al., (2012), Ben Aissa i Goaid (2014), Alarcon i Masperra (2015), Skuflic i Mlinaric-a (2015), Kasim et al., (2016), Andreu et al., (2017), da izučavaju njen uticaj na uspeh poslovanja. Važno je istaći da su autori koristili različite kriterijume za grupisanje hotela prema veličini, kao i da su koristili različite indikatore za veličinu, kao što su broj zaposlenih, vrednosti aktive, veličina ostvarene dobiti ili ostvarenog prometa, ukupni prihodi i sl. Posledica ovoga jeste da ne postoji jasan konsenzus o uticaju veličine hotela na uspeh poslovanja. Dominira stav da veličina hotela ima pozitivan uticaj na uspeh poslovanja. Autori, poput Claver-Cortes et al., (2007), Macas Nunes et al., (2009), Agiomirgianakis et al., (2012) i Tan (2017), ovo opravdavaju postojanjem ekonomije obima, mada je veliki broj istraživanja koja ukazuju na negativan uticaj veličine na uspeh poslovanja. Ovo je naročito evidentno kod istraživanja koja su veličinu iskazivala preko broja zaposlenih i proučavala produktivnost hotela.

Uprkos činjenici da postoji veliki broj stručnih i naučnih radova koji su za predmet proučavanja imali različite faktore poslovanja na uspeh poslovanja hotela, retka su istraživanja koja su istovremeno proučavala sve tri grupe faktora uspeha poslovanja hotela. Značaj istovremenog proučavanja ključnih faktora poslovanja hotela nalazi se u činjenici da su hoteli istovremeno izloženi dejstvu svih ovih faktora, odnosno da korelacije između faktora utiču na povećanje ili redukovanje uticaja pojedinačnih faktora na uspeh poslovanja hotela. Ovo je naročito vidljivo

u kontekstu primene modela panel podataka, a posebno primene dinamičkih modela panel podataka. Takva istraživanja su karakteristična za druge sektore uslužne delatnosti. U oblasti hotelijerstva takva istraživanja sprovedli su Agiomirgianakis et al., (2013), Skuflic i Mlinaric (2015), Tan (2017), Dimitric et al., (2018, 2019) i dr. Međutim, ova i slična istraživanja nisu obuhvatili sve faktore koje su Alvarez-Ferrer et al., (2018) identifikovali kao ključne.

VARIJABLE I METODOLOGIJA ISTRAŽIVANJA

Kako je već istaknuto, osnovni cilj rada jeste da se ispita uticaj ključnih faktora poslovanja na uspeh poslovanja hotela koji posluju u Republici Srbiji. Istraživanje je sprovedeno za period od 2015. do 2020. godine. Izabrana dužina perioda posmatranja pokriva dovoljan vremenski interval da bi se primenom dinamičkog modela panel analize obuhvatile sve heterogenosti u strukturi jedinica posmatranja, ali i njene promene tokom vremena (Radivojevic et al., 2019). Adekvatna veličina uzorka određena imajući u vidu veličinu populacije, nivo poverenja od 95% i dozvoljenu grešku uzorkovanja od $\pm 5\%$, koja se pojavljuje kao standard u istraživanjima u oblasti turizma (Muler Gonzalez et al., 2018). Uzimajući u obzir da populaciju čini 451 hotel (Ministarstvo trgovine, turizma i telekomunikacije Republike Srbije, 2022), istraživanje je sprovedeno na uzorku od 23 hotela i to: dva hotela sa jednom zvezdicom, četiri hotela sa dve zvezdice, osam hotela sa tri zvezdice, devet hotela sa četiri zvezdice i jedan hotel sa pet zvezdica. Podaci su prikupljeni iz baze podataka Amadeus (<https://www.bvdinfo.com/en-us/our-products/data/international/amadeus>).

Izbor indikatora za opisivanje ključnih faktora poslovanja hotela u skladu je sa prethodno analiziranom literaturom, što je prikazano u tabeli 1, uz napomenu da će faktori upravljanja biti iskazani pomoću binarnih varijabli i to da li hotel pripada lancu hotela ili se radi o nezavisnom hotelu; da li hoteli poseduju sertifikovan sistem upravljanja zaštitom životne sredine, odnosno koncept korporativne društvene odgovornosti.

Tabela 1. *Faktori uspeha poslovanja hotela*

<i>Faktori uspeha hotela</i>	<i>Indikator</i>
Finansijski faktori uspeha poslovanja hotela	
Zaduženost hotela	Racio zaduženosti hotela
Marža i obrt aktive	Koeficijent obrta ukupne poslovne imovine
Operativni leveridž	Odnos između kontribucionog dobitka i profita hotela
Faktori upravljanja hotelom	
Menadžment hotela	Hotelski lanac ili nezavisni hotel
Sistem upravljanja kvalitetom	Posedovanje sertifikata
Sistem upravljanja zaštitom životne sredine	Posedovanje sertifikata
Korporativna društvena odgovornost	Posedovanje sertifikata
Opšti faktori poslovanja hotela	
Starost hotela	Broj godina od osnivanja
Veličina hotela	Logaritam prihoda od prodaje
Lokacija hotela	<i>Herfindahl-Hirschman-ov indeks koncentracije</i>

Izvor: Autor

Uspeh poslovanja hotela, kao zavisna varijabla u modelu iskazan je u obliku stope prinosa na ukupnu aktivu hotela, što je u skladu sa radovima brojnih autora (Ben Aissa & Goaid, 2014; Skuflic & Mlinaric, 2015; Dimitric et al., 2019).

Primena dinamičkog modela analize panel podataka će omogućiti ne samo da se kvantifikuju uticaji ključnih faktora poslovanja na uspeh poslovanja hotela, već će omogućiti i da se kvantifikuje uticaj uspeha poslovanja hotela iz prethodnog perioda na uspeh poslovanja u tekućem periodu (Radivojević et al., 2019; Radivojevic & Jovović, 2017). Istraživanja Agiomirgianakis et al., (2013), Skuflic i Mlinaric (2015), Tan (2017), Dimitric et al., (2018, 2019) ukazuju na opravdanost primene panel analiza prilikom istraživanja uticaja faktora poslovanja na uspeh poslovanja hotela. Za potrebe ovog istraživanja razvijen je ekonometrijski model, koji se može prikazati na sledeći način:

$$ROA_{i,t} = \beta_1 + \beta_2 ROA_{i,t-1} + \beta_3 sol_{i,t} + \beta_4 kop_{i,t} + \beta_5 lev_{i,t} + \beta_6 mh_{i,t} + \beta_7 kv_{i,t} + \beta_8 me_{i,t} + \beta_9 csr_{i,t} + \beta_{10} age_{i,t} + \beta_{11} size_{i,t} + \beta_{11} HHI_t + \varepsilon_{i,t} \quad (1)$$

Pri čemu su:

- $ROA_{i,t}$ - stopa prinosa na aktivu *i*-tog hotela u (*t*) vremenskom periodu
- $ROA_{i,t-1}$ - stopa prinosa na aktivu *i*-tog hotela u (*t-1*) vremenskom periodu
- $sol_{i,t}$ - stopa zaduženosti *i*-tog hotela u (*t*) vremenskom periodu
- $kop_{i,t}$ - koeficijent ukupne poslovne imovine *i*-tog hotela u (*t*) vremenskom periodu
- $lev_{i,t}$ - operativni leveridž *i*-tog hotela u (*t*) vremenskom periodu
- $mh_{i,t}$ - pripadnost hotelskom lancu *i*-ti hotel u (*t*) vremenskom periodu
- $kv_{i,t}$ - posredovanje sertifikovanog sistema upravljanja kvalitetom *i*-tog hotela u (*t*) vremenskom periodu
- $me_{i,t}$ - posredovanje sertifikovanog sistema upravljanja zaštitom životne sredine *i*-tog hotela u (*t*) vremenskom periodu
- $csr_{i,t}$ - sertifikovana korporativna društvena odgovornost *i*-tog hotela u (*t*) vremenskom periodu
- $age_{i,t}$ - starost *i*-tog hotela u (*t*) vremenskom periodu
- $size_{i,t}$ - veličina *i*-tog hotela u (*t*) vremenskom periodu
- HHI_t - Herfindahl-Hirschman-ov indeks koncentracije u (*t*) vremenskom periodu
- $\varepsilon_{i,t}$ - slučajna greška modela

Uključivanje stope prinosa na aktivu iz prethodnog perioda u model može dovesti do problema endogenosti. Iz tog razloga za ocenu parametara modela izabran je GMM ocenjivač. Budući da primena GMM ocenjivača zahteva da varijable budu diferencirane tehnikom diferencijacije prvog reda, u konačnoj formi model izgleda:

$$\Delta ROA_{i,t} = \beta_1 + \beta_2 \Delta ROA_{i,t-1} + \beta_3 \Delta sol_{i,t} + \beta_4 \Delta nos_{i,t} + \beta_5 \Delta lev_{i,t} + \beta_6 \Delta mh_{i,t} + \beta_7 \Delta kv_{i,t} + \beta_8 \Delta me_{i,t} + \beta_9 \Delta csr_{i,t} + \beta_{10} \Delta age_{i,t} + \beta_{11} \Delta size_{i,t} + \beta_{11} \Delta HHI_t + \Delta \varepsilon_{i,t} \quad (2)$$

Pri čemu je Δ operator diferencijacije prvog reda. Naime, očekivano je da ROA iz prethodnog perioda budu u korelaciji sa greškom model $\Delta\varepsilon_{i,t}$. Otuda se očekuje pristrasnost u modelu. Kako bi se ovaj problem rešio u literaturi predložena je upotreba validnih instrumenata. S obzirom na to da je $ROA_{i,t-2}$ visoko korelisan sa $ROA_{i,t} - ROA_{i,t-1}$, a nije u korelaciji sa $\varepsilon_{i,t} - \varepsilon_{i,t-1}$, to je očekivano da ova varijabla bude validan instrument u modelu. Za testiranje validnosti instrumenta korišćen je Sarganov test za identifikaciju.

EMPIRIJSKA ANALIZA I DISKUSIJA DOBIJENIH REZULTATA

U tabeli 2 prikazani su rezultati deskriptivne statistike prikupljenih podataka. ROA se kreće od -2.412 do 2.344, što ukazuje na veoma visok disparitet između minimalne i maksimalne vrednosti profitabilnosti među hotelima. U prilog ovome svedoči i veoma visoka vrednost standardne devijacije ROA. Negativna vrednost koeficijenta asimetrije u kombinaciji sa veoma visokom vrednošću koeficijenta spljoštenosti ukazuje na veću verovatnoću ostvarivanja negativnih rezultata poslovanja u budućnosti u odnosu na pozitivne. Međutim, pozitivna srednja vrednost ROA kazuje da su hoteli u proseku bili uspešni u poslovanju. Slična je situacija i kada se analizira deskriptivna statistika ove varijable u trenutku (t-1). Velika diskrepanca između maksimalne i minimalne vrednosti varijable *sol*, kao i velika vrednost standardne devijacije ove varijable jasan je znak da postoje velike razlike u stepenu zaduženosti hotela. Takođe, velika diskrepanca između maksimalne i minimalne vrednosti varijable *kop* ukazuje na veliku razliku u efikasnosti upotrebe ukupne poslovne imovine hotela. Prosečna vrednost ove varijable ukazuje da u proseku, hoteli na svaki dinar uložen u prosečnu ukupnu poslovnu imovinu ostvare oko 2 dinara neto prihoda od prodaje. Uprkos činjenici da je za hotele karakteristično da su im visoki fiksni troškovi, prosečna vrednost varijable koja reprezentuje koeficijent operativnog leveridža ukazuje da hoteli uspevaju da prihodima iz poslovanja pokriju fiksne troškove poslovanja. Srednja vrednost varijable *mh* ukazuje da oko jedne trećine hotela iz uzorka (7) pripada nekoj većoj grupaciji, dok srednja vrednost varijable *kv* ukazuje da hoteli u Republici Srbiji značajnu pažnju posvećuju sistemu upravljanja kvalitetom. Suprotno je u slučaju upravljanja zaštitom životne sredine i korporativnoj društvenoj odgovornosti. Analiza deskriptivne statistike varijable *HHI* jasno ukazuje da se tržišta učešća ne

menjaju u značajnom procentu među hotelima, odnosno da oni uspešno čuvaju svoje pozicije na tržištu. Prosečna vrednost ove varijable ukazuje na značajnu konkurenciju na tržištu među hotelima.

Tabela 2. Deskriptivna statistika izabраниh varijabli

	<i>ROA_t</i>	<i>ROA_{t-1}</i>	<i>sol</i>	<i>kop</i>	<i>lev</i>	<i>mh</i>	<i>kv</i>
Sredina	2.344	2.781	0.179	1.981	3.295	0.304	0.826
Stand. devijacija	1.063	2.213	5.704	1.517	12.110	0.470	0.387
Koef. Spoljoštenosti	11.331	8.667	-0.432	4.812	-3.251	-1.7128	1.521
Koef. asimetrije	-1.538	-1.461	0.165	3.412	-2.416	0.911	-1.823
Minimum	-2.412	-2.231	0.020	0.984	-2.821	0	0
Maksimum	2.109	3.119	0.910	4.580	9.845	1	1
	<i>me</i>	<i>csr</i>	<i>age</i>	<i>size</i>	<i>HHI</i>		
Sredina	0.217	0.173	11.950	9.285	784.82		
Stand. devijacija	0.421	0.387	6.211	3.899	4.15		
Koef. Spoljoštenosti	0.161	1.522	3.184	-0.466	-0.04		
Koef. asimetrije	1.467	1.843	1.651	-0.822	1.13		
Minimum	0	0	5		781.65		
Maksimum	1	1	31		793.95		

Izvor: Autori

Kako bi se identifikovao potencijalni problem multikolinearnosti, sprovedena je analiza korelacije između varijabli. U tabeli 3 prikaza je matrica korelacije. Budući da ne postoji jaka korelacija između varijable u daljoj analizi su zadržane sve varijable.

Tabela 3. Matrica korelacije

	ROA_t	ROA_{t-1}	sol	kop	lev	mh	kv	me	csr	age	$size$	HHI
ROA	1.000											
ROA_{t-1}	0.054	1.000										
sol	-0.06	-0.03	1.000									
kop	0.019	0.059	0.169	1.000								
lev	0.552	0.412	0.401	-0.241	1.000							
mh	0.241	0.014	-0.401	0.050	0.822	1.000						
kv	-0.28	0.103	0.475	0.347	0.108	0.334	1.000					
me	-0.37	-0.04	0.021	-0.027	0.507	0.274	0.166	1.000				
csr	0.144	0.049	-0.053	0.433	-0.579	-0.182	0.127	-0.355	1.000			
age	0.313	0.101	-0.024	-0.297	0.486	0.014	-0.089	0.250	-0.717	1.000		
$size$	0.241	0.092	0.047	0.093	0.258	0.166	0.211	0.047	0.234	0.117	1.000	
HHI	0.115	0.348	0.090	0.174	0.226	0.020	0.130	0.057	0.217	0.220	0.307	1.000

Izvor: Autori

Validna primena panel analize podrazumeva da serije podataka pokazuju osobine stacionarnosti. Iz tog razloga u radu je izvršeno testiranje prisustva jediničnog korena u panel podacima primenom Levin–Lin–Chu (LLC) testa. Rezultati su dati u tabeli 4. Nestacionarnost je zabeležena samo u slučaju varijabli ROA_t , ROA_{t-1} , sol , kop i lev .

Tabela 4. Rezultati LLC testa

Variable		LLC test	Variable		LLC test
$ROA_{i,t}$	Level	0.314	sol	Level	0.201
	1. Diferenijala	0.000***		1. Diferenijala	0.000***
ROA_{t-1}	Level	0.141	kop	Level	0.174
	1. Diferenijala	0.000***		1. Diferenijala	0.000***
sol	Level	0.201			
	1. Diferenijala	0.000***			

Izvor: Autori

Primenom GMM ocenjivača ocenjeni su parametri modela (2). Rezultati ocene parametara modela prikazani su u tabeli 5.

Tabela 5. *Ocene parametara modela (2) dobijene primenom GMM ocenjivača*

Varijable	Koeficijenti	p-vrednost	Varijable	Koeficijenti	p-vrednost
konstanta	2.081	0.000	kv	0.138	0.036
ROAt-1	0.024	0.008	me	-0.174	0.341
sol	0.011	0.036	csr	0.016	0.892
kop	0.023	0.012	age	-0.010	0.011
lev	-0.044	0.009	size	2.050	0.047
mh	0.070	0.038	HHI	0.024	0.024
AR(1)					0.024
AR(2)					0.851
Sarganov test					0.662

Izvor: Autori

Sarganov test za prekomernu identifikaciju ukazuje da se prihvata nulta hipoteza validnosti izabranih instrumenata. Testovi za serijsku korelaciju prvog i drugog reda daju očekivane vrednosti. Test za serijsku korelaciju prvog reda odbacuje nultu hipotezu da nema serijske korelacije prvog reda, ali ne odbacuje nultu hipotezu da ne postoji serijska korelacija drugog reda. To je ono što se očekuje u modelu (2).

Analiza ocene parametara modela (2) prikazanih u tabeli 5 pokazuje sledeće:

1. da postoji statistički značajna i pozitivna veza između stope uspeha poslovanja hotela iz tekućeg perioda i iz prethodnog perioda. Ovaj rezultat je potvrđen u literaturi, naglašavajući značaj uspeha poslovanja;
2. da postoji statistički značajna i negativna veza između stope zaduženosti hotela i njegovog uspeha poslovanja. Ovakav nalaz u skladu je sa teorijskim očekivanjima, što se objašnjava činjenicom da se sa rastom stope zaduženosti hotela povećavaju troškovi zaduživanja, što za posledicu ima smanjenje stope profitabilnosti;
3. da postoji statistički značajna i pozitivna veza između efikasnosti upotrebe ukupne poslovne imovine hotela i njegovog uspeha poslovanja. Ovakav nalaz u skladu je sa teorijskim očekivanjima, ukazujući na značaj efikasnog upravljanja imovinom. Budući da

koeficijent obrta ukupne poslovne imovine predstavlja najuopšteniji pokazatelj efikasnosti korišćenja poslovnih sredstava preduzeća koji u sebi integriše koeficijente obrta pojedinih kategorija imovine, nesumnjivi interes hotela jeste maksimiziranje ovog koeficijenta, što je objektivno limitirano mogućnostima maksimiziranja obrta pojedinih kategorija imovine;

4. da postoji statistički značajna i negativna veza između operativnog leveridža i uspeha poslovanja hotela. Ovakav nalaz u skladu je sa rezultatima brojnih istraživanja, koja ukazuju na značaj poznavanja strukture troškova, pre svega fiksnih troškova. Budući da fiksni troškovi imaju značajan udeo u poslovanju hotela, to povećanje vrednosti varijable *lev* ukazuje na veliki udeo fiksnih troškova u poslovanju hotela;
5. da postoji statistički značajna i pozitivna veza između pripadnosti lancu hotela i uspeha poslovanja. Ovakav nalaz sugerise da pripadnost hotelskom lancu znači posedovanje određenih veština, iskustva i resursa koji imaju značaja na uspeh poslovanja hotela;
6. da upravljanje zaštitom životne sredine ne predstavlja značajan faktor uspeha poslovanja hotela u Republici Srbiji. Ovakav nalaz suprotan je očekivanjima. Ukazuje ili da korisnici usluga hotela ne vrednuju u značajnoj meri društveno odgovorno ponašanje hotela;
7. da korporativna društvena odgovornost hotela ne predstavlja značajan faktor uspeha poslovanja hotela u Republici Srbiji. Takođe, ovakav nalaz u suprotnosti je sa očekivanjima, budući ovakav vid ponaša ima pozitivan uticaj na imidž preduzeća. Imajući u vidu značaj koji imidž i rejting hotela imaju za privlačenje posetilaca, ovakav nalaz je iznenađujući i upućuje na nedovoljnu svest posetilaca hotela o značaju korporativne društvene odgovornosti;
8. da postoji statistički značajna i negativna veza između starosti hotela i uspeha poslovanja. Ovakav nalaz u skladu je sa istraživanjima Skulilic i Mlinaric (2015) i svedoče u prilog stavu Dimitrica et al., (2019) da su mlađi hoteli uspešniji jer su moderniji i skloniji primeni novih tehnologija i usluga;
9. da postoji statistički značajna i pozitivna veza između veličine hotela i uspeha poslovanja. Ovakav nalaz može se objasniti time da

veliki hoteli koji posluju u Republici Srbiji uspešno iskorišćavaju efekte ekonomije obima;

10. da postoji statistički značajna i pozitivna veza između HHI i uspeha poslovanja. Prilikom tumačenja ovog nalaza treba biti oprezan jer rast HHI indeksa znači smanjenje koncentracije na tržištu. Nalaz treba tumačiti da smanjenje koncentracije pozitivno utiče da uspeh poslovanja hotela. Drugim rečima, povećanje udela individualnog hotela pozitivno utiče na uspeh poslovanja.

ZAKLJUČAK

U radu se ispituje uticaj ključnih determinanti uspeha poslovanja hotela u Republici Srbiji. Brojna istraživanja identifikovala su veliki broj determinanti uspeha poslovanja hotela. Može se reći da su saglasna u tome da veliki broj faktora utiče na uspeh poslovanja. U principu saglasna su da se ona mogu grupisati u tri velike grupe determinanti: finansijske faktore uspeha poslovanja, faktore upravljanja hotelima i opšte faktore uspeha poslovanja. Međutim, autori nisu saglasni po pitanju značaja i smera uticaja pojedinih determinanti na uspeh poslovanja hotela. Rezultati njihovih istraživanja kreću se od toga da pojedini faktori imaju različit smer uticaja, pa do toga da pojedini faktori nemaju značaj ili da ih ne treba izučavati. Pored toga, teškoće u identifikovanju ključnih faktora uspeha poslovanja hotela potiču iz činjenice da se njihov uticaj proučava iz različitih perspektiva i teorijskih koncepata. Nepostojanje jedinstvenog stava u pogledu značaja ovih faktora, kao i oprečni rezultati njihovog uticaja na uspeh poslovanja hotela nameću potrebu njihovog izučavanja u konkretnim slučajevima i uslovima poslovanja. Iz ovog stava potiče i potreba za ovim istraživanjem.

Istraživanje je sprovedeno za period od 2015. do 2020. godine na uzorku od 23 hotela. Izabrana dužina perioda posmatranja pokriva dovoljan vremenski interval da bi se primenom dinamičkog modela panel analize obuhvatile sve heterogenosti u strukturi jedinica posmatranja, ali i njene promene tokom vremena. Adekvatna veličina uzorka određena imajući u vidu veličinu populacije, željeni nivo poverenja i veličinu dozvoljenu grešku uzorkovanja. Rezultati istraživanja pokazuju da determinante poput uspeha poslovanja iz prethodnog perioda, efikasnost upotrebe ukupnih poslovnih sredstava,

pripadnost lancu hotela, veličina i povećanje indeksa koncentracije hotela imaju pozitivan uticaj na uspeh poslovanja hotela, odnosno da determinante poput zaduženosti hotela, operativnog leveridža i starosti hotela imaju negativan uticaj na uspeh poslovanja. Determinante poput kvaliteta upravljanja zaštitom životne sredine i društveno odgovorno poslovanje hotela nemaju značajan uticaj na uspeh poslovanja hotela u Republici Srbiji.

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DETERMINANTS OF SUCCESS IN HOTEL INDUSTRY: CASE STUDY OF THE REPUBLIC OF SERBIA

Miroslav Pimić

Zlatomir Marković

Goran Dinić

Nikola Radivojević

Abstract: *The paper examines the influence of the key determinants of success in hotel industry in the Republic of Serbia. The research was conducted for the period from 2015 to 2020 on a sample of 23 hotels. The chosen length of the observation period covers a sufficient time interval to cover all heterogeneities in the structure of the observation units, as well as their changes over time, using the dynamic panel analysis model. The adequate sample size was determined by considering the size of the population, the desired level of confidence, and the value of the allowable sampling error. The results of the research have shown that determinants such as business success from the previous period, efficiency of use of total business assets, belonging to a hotel chain, size and increasing hotel concentration index have a positive impact on success in hotel industry. On the other hand, determinants such as hotel indebtedness, operating leverage and hotel age have a negative impact on business success. Determinants such as the quality of environmental protection management and socially responsible hotel business do not have a significant impact on success in hotel industry in the Republic of Serbia.*

Keywords: *Determinants of success in hotel industry / profitability / panel analysis / Republic of Serbia / GMM estimator.*

POKAZATELJI FRANŠIZING POSLOVANJA U SVETU I SRBIJI

Kaarod Tareq Ayad Mansur¹

Kovačević Maja²

Ignjatijević Svetlana³

Marković Svetlana⁴

Mohamoud Omer Ali⁵

Sažetak: *Stvaranje franšiznih preduzeća ima trajan i pozitivan uticaj na ekonomije država i lokalne zajednice u kojima posluju. Nebrojeni poslovi se otvaraju i podržavaju franšizama, a ti poslovi pomažu u smanjenju stope nezaposlenosti. Franšize podržavaju nacionalni BDP kroz milijarde dolara u proizvodima i uslugama i otvaranjem radnih mesta. Recesija 2008-2010, kao i pandemija, imale su negativan uticaj na američku i globalnu ekonomiju, mada su franšize prošle bolje od*

¹Fakultet za ekonomiju i inženjerski menadžment u Novom Sadu, 21 000 Novi Sad, Cvečarska 2, e-mail: tareqkarrod@gmail.com

²Fakultet za ekonomiju i inženjerski menadžment u Novom Sadu, 21 000 Novi Sad, Cvečarska 2, e-mail: majaskovacevic5@gmail.com

³Fakultet za ekonomiju i inženjerski menadžment u Novom Sadu, 21 000 Novi Sad, Cvečarska 2, e-mail: ceca@fimek.edu.rs

⁴Univerzitet Privredna akademija u Novom Sadu, Cvečarska 2, 21 000 Novi Sad, e-mail: smarkovicw@gmail.com

⁵Fakultet za ekonomiju i inženjerski menadžment u Novom Sadu, Cvečarska 2, 21 000 Novi Sad, e-mail: hafshook@yahoo.com

većine drugih maloprodajnih lanaca i malih preduzeća. Predmet istraživanja u radu je analiza osnovnih karakteristika i osobina franšizinga, sa ciljem da se skrene pažnja na upotrebu franšize u poslovanju na domaćim i međunarodnim tržištima, da se ukažu na specifičnosti poslovanja i načine njegovog funkcionisanja, da se ukaže na prednosti, nedostatke i širi značaj franšiznog poslovanja, na postojanje indeksa atraktivnost jedne zemlje za franšizna ulaganja. Rezultati istraživanja ukazuju da su franšize ekonomski stabilnije, uglavnom zbog njihovog brendiranja, poznatosti potrošačima i jake mrežne baze. Procena je da će franšize u narednom periodu bolje, intenzivnije i raznovrsnije poslovati.

Ključne reči: franšizing / indeks atraktivnosti franšize.

UVOD

Imajući u vidu da franšizing ima veliki značaj za privredni razvoj (Jašarević, 2014; Stefanović i Stanković, 2013, 2022) na globalnom nivou, istraživanje franšizinga kao modela poslovanja je važno za dalji razvoj. Iako postoji niz studija na temu franšizinga, ova oblast je još uvek nedovoljno istražena, pogotovo u Srbiji. Franšizing, kao model poslovanja, ima veliki poslovni potencijal (Spasić, 2010) i zahvaljujući franšiznom sistemu poslovanja mnoge firme su ostvarile uspeh. Pozitivni efekti se prelivaju na sve privredne delatnosti i ekonomiju u celini (Vujović, Vujović i Pavlović, 2017).

U svetu postoji jasna tendencija razvoja postojećih, ali i novih franšiznih sistema (Lafontaine i Kaufmann, 1994), s obzirom na to da ovi sistemi doprinose porastu zaposlenosti (Economics, 2015; Aronson, 2019), društvenom proizvodu i, uopšte, privrednom rastu (Alon, Apriliyanti i Parodi, 2020; Eroglu, 1992; Huszagh et al., 1992; Alon, 2006). Prednosti koje se odnose na franšizni sistem su prvenstveno prepoznatljiva robna marka, dobar marketing i poslovni koncept dokazan u praksi. Kako se ističe, franšizing omogućava uključivanje primaoca u poslovni sistem davaoca franšizinga na osnovu svojevrsnog „iznajmljivanja image-a” i dela poslovnog uspeha poznatog, renomiranog i uspešnog preduzeća, koje poseduje goodwill i prepoznatljivost na tržištu i čiji proizvodi i usluge imaju dokazanu vrednost za potrošače (Stefanović i Stanković, 2006).

Porezi koje plaćaju pojedinačne franšize podržavaju njihove lokalne zajednice, čine segment lokalnih budžeta. Ta sredstva idu za pomoć školama, hitnim službama i infrastrukturnim ulaganjima. Franšize otvaraju radna mesta i šire se na nove lokacije brže od drugih preduzeća. Franšize pomažu lokalnim stopama nezaposlenosti obezbeđujući posao za ljude različitih profesija. Mnoge franšize se uključuju u lokalne zajednice podržavajući neprofitne organizacije i škole ili se pridružuju regionalnim poslovnim udruženjima, sponzorišu lokalne sportske timove, ili doniraju dobrotvornim organizacijama. Svojim svakodnevnom naručivanjem zaliha ili korišćenjem lokalnih usluga, franšiza vraća novac u zajednicu i podržava lokalnu ekonomiju.

Kao jedan od najvećih oblika poslodavaca, franšize svojim zaposlenima nude mnoge pogodnosti koje se protežu u zajednici. Franšize su poznate po svojim doslednim procesima obuke koje postavlja matična kompanija. Obuka na radnom mestu osnažuje ljude da nauče nove veštine i zanate sa ili bez obrazovanja. Kao rezultat, lokalna privreda dobija više kvalifikovanih i polukvalifikovanih radnika koji zarađuju prihod i stvaraju radnu snagu. Drugi potrošači tada koriste obuku zaposlenih kupovinom usluge ili proizvoda koji su sami kreirali.

Primeru radi, samo u SAD-u, kao jednom od najvećih tržišta, oko 11 miliona ljudi je zaposleno u franšiznom poslovanju, što od kuće, što sa stvarnim fizičkim lokacijama. Prognoze su da će se do kraja ovog veka skoro sva maloprodaja obavljati upravo putem franšiznog posla. Više od 90% firmi koje posluju putem franšize je uspešno i mnogo bolje posluje nego firme iz redovnog poslovanja. Sve više je franšiza o edukaciji, jer se prvenstveno odnosi na decu i na njihovo bolje učenje, zatim veoma je popularna home-based franšiza, koja omogućava lagodnost obavljanja franšiznog poslovanja od kuće i uz male rizike i troškove (Economics, 2015). Svake godine u proseku oko 300 kompanija započne franšizing poslovanje (Frankart Global - <https://frankart.global/about>).

McDonald's je najveća franšiza na svetu, sa globalnom prodajom od 112 milijardi dolara u 2021. Druge velike franšize uključuju KFC, 7-Eleven, Burger King i Subway. Subway, sa skoro 43.000 pojedinačnih restorana, ima najviše lokala od svih globalnih franšiza. 7-Eleven ima preko 55.000 prodajnih mesta u 16 zemalja. McDonald's je možda najveća franšiza na svetu, ali 7-Eleven postoji duže, od 1927. godine.

U prvih 20 franšiza, na globalnoj listi, dve nemaju sedišta u SAD, i to su: Tim Hortons i CNHLS. Tim Hortons iz Kanade nalazi se na 18. poziciji, dok je CNHLS, takođe poznat kao Wallace Foods u Kini, na 19. mestu. Od 2019. godine, 93% McDonald's restorana su bili franšizni. U 2019. McDonald's je izvestio da je 36.059 njegovih restorana (od ukupno 38.695) franšize. Ova visoka stopa je i dalje ispod cilja McDonald'sa da 95% svojih restorana napravi franšize. U Kini posluje oko 4.500 franšiza. Prema statistici franšize Ministarstva trgovine, u Kini je od 2019. godine bilo više od 4.368 registrovanih davalaca franšize, od kojih je više od 4.500 nezvanično u funkciji. Stručnjaci procenjuju da širom zemlje postoji preko 400.000 franšiznih lokacija. Indija ima skoro 200.000 operativnih franšiznih jedinica. Nacionalni i regionalni brendovi čine 84% franšizing industrije u Indiji. Veruje se da franšizing u Indiji sada vredi više od 50,4 milijarde dolara, što raste po godišnjoj stopi od 30% -35%. 7-Eleven je 2021. godine bio najveći davalac franšize na svetu sa 68.236 prodavnica širom sveta. Najfranšiziraniji brend hrane i pića je Subwaysa 44.758 prodajnih mjesta, a sledi McDonald's sa 36.525 prodajnih mjesta. McDonald's ima svoje franšize u 117 zemalja, dok Subwayima svoje franšize u 112 zemalja. Cafe Coffee Day je jedini indijski brend na Globalnoj listi sa franšizama u 101 zemlji i blizu 1800 prodavnica i nalazi se na 46. mestu (Frankart Global).

Zbog značaja koji franšizing u globalnoj ekonomiji ima predmet rada predstavlja izučavanje osnovnih karakteristika i osobina franšizinga, kao veoma efikasnog i profitabilnog načina poslovanja. Cilj istraživanja u radu je da se skrene pažnja na upotrebu franšize u poslovanju na domaćim i međunarodnim tržištima, da se ukažu na specifičnosti poslovanja i načine njegovog funkcionisanja, kao i da se uporedi sa tradicionalnim načinima i formama poslovanja. Pored ovih ciljeva, važno je ukazati i da istraživanjem nastojimo da doprinesemo širenju znanja o načinima na koji franšizing doprinosi promociji preduzeća, a samim tim doprinosi rastu poslovnog uspeha preduzeća i poboljšanju njegove pozicije na globalnom tržištu. Istraživanje će ukazati na prednosti, nedostatke i širi značaj franšiznog poslovanja, na postojanje indeksa koji meri atraktivnost jedne zemlje za franšizne kompanije.

NASTANAK I RAZVOJ FRANŠIZINGA

Franšizing kao reč potiče sa anglo-američkog područja, i učesnici franšizing posla ostvaruju odnos na bazi ugovora. Do pojave franšizinga u današnjoj formi dovele su društvene i ekonomske prilike u Americi, nagli ekonomski rast, narasle potrebe za različitim vrstama proizvoda i usluga, nedovoljna količina kapitala i manjak profesionalno obučenog osoblja. Prva upotreba franšizinga je od strane *Singer Sewing Machine Company* (1863.godine); *General Motors*(1883.godine); *Coca-Cola*(1892. godine), a kasnijih godina slede: *McDonald's*, *Holiday Inn*, *Coca-Cola*, *Hertz*, *Wimpy* i druge.

U vreme nakon 1945. godine franšizing počinje intenzivno da se razvija, a tome su doprineli razvoj tehnologije, distribucije, komunikacije, otvaranje novih tržišta i narasle potrebe za proizvodima i uslugama. Franšizing se razvija u različitim oblastima privređivanja, a početni dominantni oblici su bili prodaja i vršenje usluga, sa primesama marketinga, prenosa prava i znanja. Osnova za razvoj franšizinga je bio razvoj sektora usluga, razvoj sektora MSP (malih i srednjih preduzeća) sa sposobnošću da se efikasno nose sa izazovima multinacionalnih kompanija. Franšizing se uspešno proširio na Evropu, Kanadu, Australiju, Japan i dr.

POJAM I OSNOVE FRANŠIZINGA

Stefanović (2004) franšizing karakteriše kao poslovni aranžman koji podrazumeva da jedan subjekat dozvoljava drugom subjektu pravo na distribuiranje proizvoda ili usluge, prodaju imidža ili biznis modela (Stanković i Vukmirović, 1995). Franšizing je ugovorni odnos, oblik poslovnog integrisanja (Altinay i Wang, 2006), gde se definiše pravo i način upotrebe poslovne tehnologije, biznis modela, zaštitnog znaka, žiga i sl. Zauzvrat subjekat koji koristi franšizu plaća određen procenat kao naknadu za korišćeno (Aliouche & Schlenrich, 2011; Baena & Cerviño, 2012; Yin & Zajac, 2004; Wu, 2015). Shodno tome, korisnik franšiziga se, zaključenjem franšizing ugovora, uključuje u odgovarajući poslovni sistem davaoca (Spasić, 1996). Strogo uzevši, franšizing nije finansijski, već trgovački posao, a u nekim slučajevima posao o proizvodnji i prodaji (Rodić, 1991). U franšizing poslovanju prava i obaveze ugovornih strana su jasno definisane, tako da donose korist svim učesnicima.

Sistem franšizinga ima svojih prednosti i nedostataka, kako u celini, tako i za stranke, učesnike u poslu, pojedinačno. Franšizing sistem obezbeđuje korist za sve učenike posla, podržava MSP sektor i doprinosi razvoju tržišta (Radenković Jocić, 2002). Korišćenje franšize obezbeđuje unapređenje poslovanja, poslovno širenje i tržišnu ekspanziju, povećanje obima poslovanja i poveća ugled celog poslovnog sistema.

Davalac franšize obezbeđuje proširenje mrežu proizvodnih i uslužnih mesta, i to bez dodatnih investicija. Na taj način povećava obim prometa i dobit, uz minimalan poslovni rizik. Sa druge strane korisnik franšizinga može neuspeli biznis da „vrati” davaocu, ustupi franšizing posao drugom korisniku ili da sam počne posao. Ulaganja u obezbeđenje i razvoj kadra su takođe zajednička aktivnost. Davalac franšize može da obezbedi obuku i nadzor zaposlenih, dok korisnik franšizinga posluje samostalno. Korisnik franšize je svestan činjenice da sam ne bi mogao da otpočne poslovanje, da mu nedostaje znanje i iskustvo, prepoznatljivo ime, tehnologija, marketinški alati, kadrovi i dr. što dobija ulaskom u franšizing poslovni odnos. Time se smanjuju rizici poslovanja. Kada se govori o negativnim aspektima franšizinga potrebno je pomenuti neravnopravan poslovni odnos i to na početku i kasnije tokom poslovanja (Spasić, 1996).

POKAZATELJI FUNKCIONISANJA FRANŠIZING SEKTORA U SVETU I SRBIJI

Međunarodna asocijacija za franšizing (*International Franchise Association – IFA*) u SAD osnovana je 1960. godine, a u Evropi je 1972. godine osnovana Evropska franšizna asocijacija, koja danas okuplja 17 nacionalnih franšiznih asocijacija. Prema podacima Međunarodne franšizne asocijacije (*International Franchise Association – IFA*) u SAD u 2011. godini franšize su ostvarile prihod od 745 milijardi dolara, a u toj specifičnoj oblasti trgovine zaposleno je bilo 7,9 miliona ljudi u 75 delatnosti.

Prema podacima *European Franchise Federation (EFF)* u Evropskoj uniji u 2010. godini je bilo oko 10.000 franšiznih sistema od čega su 80% davaoci franšize iz Evropske unije. U 2023. godini u EU je preko 14.900 franšiznih sistema, od čega je takođe preko 80% iz Evrope (<https://eff-franchise.com/>).

Za 2023. godinu predviđa se da će franšize u Sjedinjenim Američkim Državama doneti 826,6 milijardi dolara. Pre par godina, 2017. godine, monetarna proizvodnja franšize u SAD bila je 720,44 milijarde dolara, a povećanje iznosa odražava koliko su franšize popularne kod preduzetnika i da američki potrošači i dalje stalno povećavaju svoje zadovoljstvo franšizama.

Tabela 1. *Struktura industrija franšiza u svetu*

Računovodstvo i finansije	Računar i Internet	Zdravlje i Lepota	Fotografske franšize
Oglašavanje i marketing	Konsultanti i poslovni brokери	Zdravstvena nega i nega starijih osoba	Franšize nakon COVID-a
Automobilске franšize	Zapošljavanje i osoblje	Kućne franšize	Štampač, kopiranje i potpisivanje
Poslovne mogućnosti	Zabavne franšize	Kućne usluge Franšize	Franšize za nekretnine
Poslovne usluge	Fitnes franšize	Industrijske franšize	Franšize restorana
Dečje franšize	Franšize za hranu	Mailing & Shipping	Maloprodajne franšize
Franšize za čišćenje	Preprodaja franšize	Premeštanje i skladištenje	Sportske franšize
Franšize za kafu	Provajderi franšiznih usluga	Franšize za kućne ljubimce	Poreske franšize
Franšize za obuku	Putničke franšize	Franšize za prodaju i bankomate	

Izvor: <https://eff-franchise.com>

Franšizing sistem je naročito primenljiv u oblasti prometa i u uslužnom sektoru, gde doživljava i najveću ekspanziju. Ipak, nema delatnosti u kojoj se franšizing ne može uspešno primeniti (trgovinski i drugi brendovi, restorani brze hrane, klasični restorani, promet nekretnina, auto-servisne usluge, konsultantske i druge poslovne usluge, usluge održavanja, hotelijerstvo, turističke usluge i sl.). Posledica tendencije rasta u uslužnom sektoru je potiskivanje klasične trgovine, naročito u maloprodaji.

Analizom situacije u bližem regionu u periodu 2009-2012. godine, prvo mesto prema broju franšiznih brendova zauzima Turska sa preko 1500 brendova. U toj strukturi više od 60% čine nacionalni brendovi, a u periodu od 2009. do 2012. godine zabeležen je rast od 21%. Sledeća je Francuska, sa preko 1300 franšiznih brendova, od čega su 89% nacionalni brendovi,

zatim sledi Nemačka sa 940 franšiznih brendova, od čega su 75% nacionalni brendovi, Italija sa 860 franšiznih brendova (96% nacionalnih brendova), Španija sa 900 franšiznih brendova (81% domaćih), Velika Britanija sa 840 franšiznih brendova (89% domaćih), Grčka sa 560 franšiznih brendova (70% domaćih), Poljska sa 560 franšiznih brendova (73% domaćih), Mađarska sa 350 franšiznih brendova (70% domaćih), Slovenija sa 107 franšiznih brendova (52% domaćih), Hrvatska sa 170 franšiznih brendova (25% domaćih) (Munitlak Ivanović, 2014).

Tabela 2. *Lista prvih 10 globalnih franšiznih brendova u 2023. godini*

1	Chick-fil-A Franchise Costs, Fees & FDD Fast food franchises	Fast Food Franchises
2	The UPS Store Franchise Costs, Fees & FDD	Business Services Franchises
3	Ace Hardware Franchise Costs, Fees & FDD	Home services franchises
4	McDonald's Franchise Costs, Fees & FDD	Fast food franchises
5	Wendy's Franchise Costs, Fees & FDD	Fast food franchises
6	Snap-on Tools Franchise Costs, Fees & FDD	Automotive franchises
7	PIRTEK USA	Maintenance Services
8	Matco Tools Franchise Costs, Fees & FDD	Automotive repair
9	RE/MAX Franchise Costs, Fees & FDD	Real estate franchises
10	Express Employment Professionals	Employment & Staffing Franchises

Izvor: Prema istraživanjima koje je iznela Međunarodna franšizna asocijacija (www.ifa-franchise.com)

U Srbiji je 2000. godina poslovalo malo inostranih i domaćih franšiza, uz tendenciju povećanja (Stefanović i Stanković, 2013). U 2009. godini u Srbiji su poslovale: *Zara, Mango, Springfield, Time-Out, Accessor* i dr. Prema podacima 2012. godine u franšiznim sistemima je bilo zaposleno oko 10 000 ljudi, a 2014. godine 164 sistema (Kovačević i Injac, 2016). Generalno posmatrano, franšizing je sagledan kao značajan činilac privrednog razvoja koji je našao svoje mesto u brojnim uslužnim i trgovinskim delatnostima (Munitlak Ivanović, 2014).

MEĐUNARODNI INDEKS ATRAKTIVNOSTI FRANŠIZE RIFC

Istraživači iz Međunarodnog franšiznog centra Rosenberg (RIFC) razvili su indeks koji rangira 131 zemlju prema njihovoj atraktivnosti, kao međunarodnog tržišta, za proširenje franšiza za franšize sa sedištem u SAD. Ovaj indeks se generiše kroz kvantitativni model koji se zasniva na recenziranom istraživanju i anketi rukovodilaca franšize. Model proizvodi dva različita rangiranja indeksa (uravnoteženi rast i agresivni rast) na osnovu nivoa tolerancije rizika kompanije.

Koristeći makro okvir, model uključuje ključne determinante potencijala međunarodnog tržišta (veličina tržišta, rast tržišta i kupovna moć); i tržišni rizici (ekonomski, politički, pravni i regulatorni rizici) kao i geografske i kulturne udaljenosti (Aliouche, 2015, 2017).

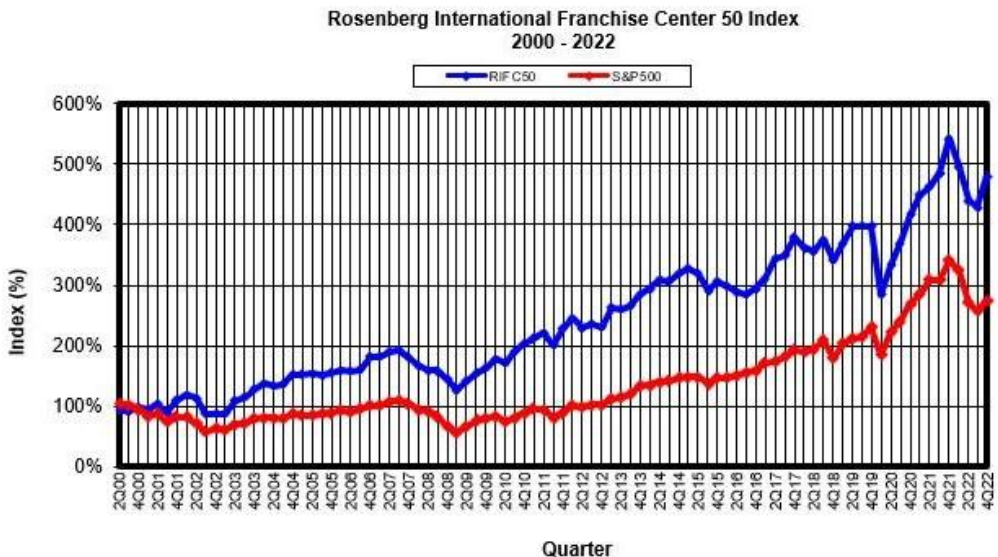
Mnoge od ovih varijabli nisu direktno vidljive. Stoga je upotreba proksi vrednosti neophodna da bi se oni operacionalizovali. Pomenućemo varijable:

- BDP stanovništva po glavi stanovnika i rast BDP-a; tržišni potencijal neke zemlje je predstavljen ponderisanim prosekom veličine njenog stanovništva (koji predstavlja broj potencijalnih kupaca), njenog realnog rasta BDP-a u poslednjih pet godina (da bi se obuhvatio rast tržišta) i BDP-a po glavi stanovnika (koji predstavlja njenu naciju). Podaci se dobijaju od Svetskog ekonomskog foruma, Međunarodnog monetarnog fonda.
- Ekonomski i politički rizici su predstavljeni indeksom rizika zemlje Euromonei-a, indeksom koji se naširoko koristi za hvatanje ekonomskih i političkih rizika zemlje.
- Pravni i regulatorni rizici su predstavljeni Indeksom lakoće poslovanja Svetske banke, indeksom koji obuhvata ključne faktore koji određuju pravne i regulatorne rizike sa kojima se može suočiti kompanija koja posluje u stranoj zemlji.
- Geografska udaljenost se izračunava uzimanjem jednostavnog proseka rangiranja ciljne zemlje u smislu udaljenosti u miljama od zemlje domaćina davaoca franšize i njenog ranga u smislu vremena putovanja do nje od zemlje domaćina.

- Kulturna distanca se kvantifikuje izračunavanjem indeksa zasnovanog na razlikama u Hofstedeove četiri kulturne dimenzije: izbegavanje neizvesnosti, individualizam, muškost i distanca moći.

Prema podacima *ROSENBERG CENTER*

(<https://paulcollege.unh.edu/rosenberg/franchise-indices/rifc-50-index>) stiče se utisak da se sektor franšizinga u 2022. godini oporavio.



Slika 1. Kretanje RIFC 50 Index-a

Prema podacima *ROSENBERG CENTER*

(<https://paulcollege.unh.edu/rosenberg/franchise-indices/rifc-50-index>) stiče se utisak da se sektor franšizinga u 2022. godini oporavio.

Prema podacima Centra od 50 franšiznih kompanija koje čine tzv. The RIFC 50 Index (<https://paulcollege.unh.edu/rosenberg>), čak 34 kompanije je imalo pozitivne prinose. Mnoge komponente Indeksa imale su izvanredne performanse u ovom kvartalu. *Planet Fitness*, operater i davalac franšize fitnes centrima, je u 2022. godini ostvario rast prihoda i profita koji je premašio očekivanja analitičara. Prehrambeni sektor je bio najbolji među glavnim sektorima franšiznog poslovanja (npr: Burger King's, Tim

Horton's). Odlične rezultate (promene vrednosti RIFC 50 Index-a) ostvarili su Restaurant Brands International (+21.5%), Wendy's (+20.9%), Yum!Brands (+20.3%), McDonald's (+14.2 %). Ipak, ukupni pokazatelji franšiznog poslovanja ukazuju da je 2022. godina bila izazovna za većinu preduzeća, i da su se kompanije borile sa visokom inflacijom, rastućim kamatnim stopama, nedostatkom radne snage, uskim grlima u lancu snabdevanja i oružanim sukobima u Ukrajini.

Ocene atraktivnosti izračunavaju se za 131 zemlju koja je imala najmanje milion stanovnika i koja je imala javno dostupne podatke, na bazi istraživanja stavova više od 100 rukovodilaca franšize (koji predstavljaju franšizne kompanije sa više od 165.000 jedinica širom sveta). Iako se ova analiza može primeniti na većinu međunarodnih poslovnih firmi, trenutna studija se uglavnom fokusira na franšizne firme sa sedištem u SAD. Rezultati su zatim poređani od najniže (#1 je najatraktivnije) do najviše (#131 je najmanje atraktivno) da bi se dobio indeks privlačnosti zemlje (Aliouche, 2015, 2017). Generišu se dva skupa indeksa:

- Uravnotežen rast: relevantno za kompanije koje traže međunarodne mogućnosti širenja franšize sa uravnoteženim potencijalnim rizicima i prinosima.
- Agresivan rast: relevantno za kompanije koje su spremne da preuzmu značajne rizike kako bi iskoristile velike mogućnosti na međunarodnim tržištima.

Tabela 3. Vodeće zemlje sveta prema RIFC indeksu (2021, 2020 i 2019. godina)

Srbija	Poljska	Francuska	Kanada	Australija	Velika Britanija	Nemačka	USA			Country
							2021	2020	2019	
61			22	2	27	14	16	/	Economic/ Political Risks	
69	27	21	16		29	11	/	/		
68	30	21	9		20	10	/	/		
43			23	14	8	22	/6	/	Legal/ Regulatory Risks	
43	39	31	23		8	22	/	/		
46	32	31	21		9	23	/	/		
93			2	40	4	9	1	1	Cultural/ geographical distance	
93	18	12	2		4	9	/	/		
93	18	12	2		4	9	/	/		
59			14	6	8	10	2	2	Risk Rank	
65	24	15	11		9	7	/	/		
64	22	17	6		7	9	/	/		
66,85			32,95	32,95	29,28	27,60	17,75	17,75	Attractiveness Index Score	
72,83	33,25	33,23	32,13		28,80	26,38	/	/		
76,98	33,20	33,95	29,58		26,08	25,50	/	/		
64			5	4	3	2	1	1	Attractiveness Ranking	
81	5	4	3		2	1	/	/		
87	4	5	3		2	1	/	/		

Izvor: The RIFC 50 Index (<https://paulcollege.unh.edu/rosenberg>)

Analizom podataka koji su prikazani u Tabeli 3. možemo da zaključimo da je USA zemlja sa najvećim indeksom atraktivnosti za franšizna ulaganja. Razlog za takvu poziciju nalazimo u vrlo niskoj vrednosti ukupnog rizika, dok je prema parametru pravne regulative visoko pozitivno ocenjena. Nemačka je u sve tri analizirane godine bila na 2 mestu. Velika Britanija se nalazi na trećem mestu prema atraktivnosti za franšizna ulaganja i visoko su ocenjeni kulturna i geografska distanca, kao i pravna regulativa i ukupan rizik. Interesantan je podatak da je Australija najbolje pozicionirana zemlja prema parametru ekonomski rizik, dok je prema ukupnom riziku takođe na visokom mestu, što za rezultat daje četvrtu poziciju na svetskoj listi atraktivnosti za franšizna ulaganja u 2021. godini. Kada je u pitanju Srbija, možemo da izdvojimo pravnu regulativu, međutim ekonomski i ukupan rizik je značajan i doprinosi da je prema ukupnom RIFC indeksu na 64 mestu u 2021. godini.

Rezultati analize RIFC indeksa u 2020. godini pokazuju da je u prvih 5 zemalja zadržana slična geografska struktura. Najbolje je pozicionirana Nemačka kod koje je su ukupan tržišni rizik i kulturna i geografska distanca najbolje ocenjeni. Srbija je u odnosu na 2021. godinu lošije ocenjena, čak 17 mesta niže. Pogoršani su parametri ekonomskog i ukupnog tržišnog rizika. Pozicija Srbije u 2019. godini je dodatno pogoršana, a tome je doprinelo pogoršanje pravne regulative.

ZAKLJUČAK

Franšizing poslovanje ima posebnu važnost u savremenoj privrednoj delatnosti koje obezbeđuje koristi svim ugovornim učesnicima. Za potrošače, franšizing pruža poznat skup usluga, a kako su ljudi pretežno stvorenja navike, bavljenje franšizama im omogućava da imaju predstavu o tome šta treba da očekuju, gde, kada i kako. Za vlasnike franšize, odnosno primaocce franšize, nekoliko glavnih prednosti kupovine franšize su već uspostavljeni proizvod/usluga i brendiranje. U zamenu za njihovu kupovinu i rad, primaoci franšize dobijaju pristup znanju i iskustvu davaoca franšize za njegov poslovni sistem. Na ovaj način, oni koji žele da poseduju posao mogu skratiti krivu učenja koja dolazi sa pokretanjem posla. To je takođe način da ti ljudi izbegnu trošenje značajnog dela vremena i novca koji obično prati razvoj poslovne ideje. Za davaoce

franšize (ili matične kompanije franšize), franšizing njihovog brenda pruža nekoliko prednosti. Neke od ovih prednosti su smanjenje „troškova praćenja” kompanije, postizanje optimalnije ekonomije obima, poboljšanje njihove sposobnosti da se prilagode različitim tržištima i još mnogo toga.

Franšize otvaraju radna mesta u svojim zajednicama i šire. Na primer, procenjuje se da je 8,2 miliona ljudi u Sjedinjenim Američkim Državama direktno zaposleno u franšizi. Međutim, ukupan uticaj franšiza na zapošljavanje je mnogo veći. Ne samo da na svakoj poslovnoj lokaciji ima zaposlenih, već postoje i zaposleni koji prevoze robu, obezbeđuju isporuku materijala, upravljaju skladištima koja distribuiraju njihove zalihe i rade u fabrikama ili farmama koje isporučuju njegovu robu.

U svetu, među najbolje pozicioniranim zemljama prema indeksu atraktivnosti za franšizna ulaganja spadaju, Nemačka, Velika Britanija, Kanada, Francuska, Poljska i Australija. U SAD, 10 najboljih država za rast franšize u 2022. (po redu) će biti Teksas, Florida, Arizona, Južna Karolina, Ajdaho, Tenesi, Severna Karolina, Montana, Nebraska i Nevada.

Prema podacima doprinos franšiza ukupnoj ekonomiji će ostati stabilan, uz tendenciju rasta na nove lokacije brže od tradicionalnih malih preduzeća. Brza ekspanzija je odgovor na potražnju potrošača, a franšize nude stabilnost za vlasnike i doslednost za potrošače.

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INDICATORS OF FRANCHISING BUSINESS IN THE WORLD AND IN SERBIA

Tareq Ayad Mansur Kaarod

Maja Kovačević

Svetlana Ignjatijević

Svetlana Marković

Omer Ali Mohamoud

Abstract: *The creation of franchise companies has a lasting and positive impact on the economies of the countries and local communities in which they operate. Countless jobs are created and supported by franchises, and those jobs help lower the unemployment rate. Franchises support the national GDP through billions of dollars in products and services, and job creation. The 2008-2010 recession, as well as the pandemic, had a negative impact on the US and global economy, although franchises fared better than most other retail chains and small businesses. The subject of research in the paper is the analysis of the basic characteristics and features of franchising, with the aim of drawing attention to the use of franchise in business on domestic and international markets, to point out the specifics of business and its ways of functioning, to point out the advantages, disadvantages, and wider significance of franchise business, on the existence of the attractiveness index of a country for franchise investments. Research results indicate that franchises are economically more stable, mainly due to their branding, consumer familiarity, and strong network base. It is estimated that franchises will operate better, more intensively and more diversely in the coming period.*

Keywords: *franchising / franchise attractiveness index.*

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4. Font: Latin, Times New Roman, Font size 12 pt., (applies to all subtitles, table titles, pictures, abstract, key words), with spacing of 1.5. Abstract should be written in *italic*. Paper title: 14 pt. bold, footnotes: 10 pt.
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6. For reference list and quotations separate guidelines are given.

Reference list:

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Bandin, T. (1995).

Bandin, T. (1998).

Bandin, T. (2000).

Books, brochures, book chapters, encyclopedia entries, reviews

The main format for books

Author, S. I. (year of publishing). *Title*, Place of publishing, Publisher

One author

Carić, S. (2007). *Bankarski poslovi i hartije od vrednosti*, Novi Sad, Privredna akademija

One author, new edition

Vunjak, M. N. (2008). *Finansijski menadžment: Poslovne finansije* (7th edition). Subotica, Proleter A.D. Bečej, Ekonomski fakultet

Two authors

Soleša, D., Carić, M. (2016). *Informacione i komunikacione tehnologije*, Novi Sad: Univerzitet Privredna Akademija, Fakultet za ekonomiju i inženjerski menadžment.

Three to six authors

Soleša, D., Juričić, V., Raisman, M. (2014). Web 2.0 as a potential for development of young people, *Technical Gazette* 21(6), 1403-1409.

Without author

Publication Manual of the American Psychological Association (Fourth Edition). (1994). Washington, D.C., American Psychological Association

Without author, has only editor, ed.

Cattell, R.B. (Ed.). (1966). *Handbook of Multivariate Experimental Psychology*, Chicago, Rand McNally & Company.

Citing unpublished papers (doctoral dissertations, master's theses and other unpublished works)

Jovanović, M. (2009). *Investicioni instrumenti u bankarskom poslovanju*. Master's Thesis, Novi Sad, Fakultet za ekonomiju i inženjerski menadžment.
Ignjatijević, S. (2011). *Komparativne prednosti agrara Srbije u spoljnoj trgovini*, Doctoral dissertation, Novi Sad, Fakultet za ekonomiju i inženjerski menadžment.

Book chapter

Last name, First name initial. (Year). Title of the chapter. In: Initial of the first name of editor.

Last name of editor (Ed.), *Title of the book* (p. first page of the chapter- last page of the chapter). Place of publishing, Publisher.

Momirović, K., Bala, G. i Hošek, A. (2002). Taksonomska struktura nekih simptoma aberantnog ponašanja dece od 4 do 7 godina. In: K. Momirović i D. Popović (Ed.), *Psibopatija i kriminal* (p. 125-142). Leposavić, Univerzitet u Prištini, Centar za multidisciplinarna istraživanja Fakulteta za fizičku kulturu.

Journals and other periodicals:

Article from a journal, single author

Last name, first name initial. (Year). Title. *Name of the journal*, volume, (number), first page of the article-last page of the article.

Schneider, F. (2005). Shadow Economies Around the World: What do we really know?. *European Journal of Political Economy*, 21(3), 598-642

Article from a journal, two authors

Hill, M., & Hupe, P. (2007). Street-level bureaucracy and public accountability. *Public Administration*, 85 (2), 279-299.

Article from a journal, three to six authors

Solesa, D., Juričić, V., Raisman, M. (2014). *Web 2.0 as a potential for development of young people*, *Technical Gazette* 21(6), 1403-1409.

Article from a journal, more than six authors

Ljubojević, K., Dimitrijević, M., Mirković, D., Tanasijević, V., Perić, O., Jovanov, N. et al. (2005). Putting the user at the center of software testing activity. *Management Information Systems*, 3 (1), 99-106.

Proceedings of conferences, symposiums or congresses or excerpts from encyclopedias

Author's last name initial, year, title of the paper, name of symposium, page numbers, place of publishing, publisher.

Soleša, D., Černetič M., Gerlič I., (2007). *New Media in Education*, Selected topics, University of Novi Sad - Faculty of Education in Sombor, Faculty for Organizational Sciences in Kranj and University of Maribor - Faculty of Education Maribor, pg. 219

If you use an Internet source (Title/Heading of the web-page, date of using the source, web-site)

1. Ministarstvo za nauku i tehnološki razvoj (2010, January 20), Lista časopisa za društvene nauke, Taken from http://www.nauka.gov.rs/cir/index.php?option=com_content&task=view&id=930&Itemid
2. Ekonomija u Wikipediji (2010, February 02), Taken from: <http://bs.wikipedia.org/wiki/Ekonomija>

QUOTATIONS FROM SOURCES USED IN THE PAPER

Quotations

If a source is quoted word by word, it is necessary to give the author's name, year of publishing and page from which the quotation was taken (using "p.")

The quote is introduced by giving the author's last name, followed by the year of publishing in brackets.

According to Mirković (2001), "primena skladišta..." (p. 201) or Mirković (2001) believes that "primena skladišta..." (p. 201).

If the introducing phrase does not mention the author's name, the author's last name should be put at the end of the quotation, followed by the year of publishing and page number in brackets.

Summary or paraphrase

According to Vunjak (2008), the elasticity of financial management ischeaper additional capital, (p. 32).

The elasticity of financial management ischeaper additional capital (Vunjak, 2008, p.32)

One author

Babović (2009) compares the structures of approaches...

Two authors

Both last names have to be supplied

In another research (Babović and Lazić, 2008) it is concluded that...

In the English text (conjunction *and*) is marked as "&"

Three to five authors

When mentioned for the first time, all the authors' names need to be supplied. In repeated quoting, the last name of the first author is supplied, followed by "et al."

(Babović, Veselinović, Carić, Đorđević i Ćirić, 2011)

Six or more authors

In the introductory phrase, there has to be the last name of the first author, or in brackets

Carić et al. (2010) claim that...

...is not relevant (Carić et al., 2011)

When more than one work by the same author are mentioned:

(Bandin, 2005, 2007)

When more than one work by the same author were published the same year, they are marked with letters a, b, c etc.

(Bandin, 2006a, 2006b, 2006c)

If you haven't read the original work, you should give the name of the author which referred you to the mentioned source:

Bergson's research (mentioned by Mirković and Boškov, 2006).

Pages are always supplied in quotations:

(Mirković, 2006, p. 12)

When quoting parts

(Carić, 2008, ch. 3)

(Carić, 2008, p. 231–258)

Unnamed author

If a work has not been authorized, that source is mentioned by the introducing phrase, or with the first one or two words put in brackets.

Titles of books and reports are given in italic, while titles of articles and chapters are given under quotation marks.

A similar poll has been conducted in a number of organizations with database managers employed full-time ("Limiting database access". 2005).

FOOTNOTES

Sometimes it is necessary to supply additional comments or explanations for certain issues mentioned in the text. This is done in the form of footnotes, which can be directly related to the topic or simply give some additional technical information.

Footnotes are marked with exponent in Arabic numbers at the end of the sentence.

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