

UDK: 3:33 + 336

ISSN 1820-6859

---

ČASOPIS ZA POSLOVNU EKONOMIJU, PREDUZETNIŠTVO I FINANSIJE  
MAGAZINE FOR BUSINESS ECONOMICS, ENTREPRENEURSHIP AND FINANCE

---

# POSLOVNA EKONOMIJA BUSINESS ECONOMICS

Godina XVI, broj 2

vol. XXVI

Novi Sad, 2022.

**POSLOVNA EKONOMIJA**  
**BUSINESS ECONOMICS**

ČASOPIS ZA POSLOVNU EKONOMIJU, PREDUZETNIŠTVO I FINANSIJE  
MAGAZINE FOR BUSINESS ECONOMICS, ENTREPRENEURSHIP AND FINANCE

Godina XVI, broj 2  
vol. XXVI

Časopis izlazi dva puta godišnje

*Izdavač:*

UNIVERZITET EDUKONS, Fakultet poslovne ekonomije,  
Vojvode Putnika 87, Sremska Kamenica, Novi Sad  
Tel: 021/489-3647, 489-3611  
e-mail: redakcija@educons.edu.rs  
www.educons.edu.rs

*Za izdavača:*

Prof. dr Aleksandar Andrejević, Rektor

*Glavni i odgovorni urednik:*

Prof. dr Marko Malović

*Članovi izdavačkog odbora:*

Prof. dr Aleksandar Andrejević, rektor, Prof. dr Dejana Panković, predsednik  
izdavačkog odbora, dr Milena Galetin

*Članovi redakcije:*

Prof. dr Daniel Churchill (University of Hong Kong, Kina), Prof. dr Alina  
Danilowska, (WULS - SGGW, Poljska), Prof. dr Miroslava Filipović (Univerzitet  
Edukons, Srbija), Prof. dr Manuela Epure (Spiru Haret University, Rumunija), Prof.  
dr Dragan Golubović (Univerzitet Edukons, Srbija), Prof. dr Nikola Gradojević  
(University of Guelph, Kanada), Prof. dr Iveta Kovalcikova (Prešovskej univerzity,  
Slovačka), Prof. dr Jakub Kraciuk (WULS - SGGW, Poljska), Prof. dr Zagorka  
Lozanov Crvenković (Univerzitet u Novom Sadu, Srbija), Prof. dr Mustafa Ozer  
(Anadolu univerzitet, Turska), Prof. dr Paola Paoloni (Sapienza University of Rome,  
Italija) Prof. dr Plamen Patev (I-Shou University, Tajvan), Prof. dr Ige Pirnar (Yasar  
University, Turska)

*Sekretari redakcije:*

Doc. dr Jelena Jotić i Doc. dr Milan Mihajlović

*Lektura:*

Gordana Vladislavljević, Tatjana Milosavljević

*Prevod na engleski jezik:*

Tatjana Milosavljević

*Slog:*

Milan Mihajlović

*Štampa:*

PANONIJPRES, Novi Sad

*Tiraž:* 300 primeraka

# CONTENT

---

## RESEARCH, REVIEWS AND STUDIES

- *Marko Malović, Milan Mihajlović, Bela Muhi*  
ONGOING EXOGENOUS CRISES AND ECONOMIC POLICY  
COUNTERMEASURES: PECULIAR CASE OF SERBIAN TOURISM . . . . . 1
  
- *Vera Zelenović, Nebojša Malenković, Jelena Zelenović*  
THE INFLUENCE OF SMO IN UKRAINE ON GDP AND INFLATION IN THE  
EU WITH REFERENCE TO SERBIA . . . . . 16
  
- *Radojko Lukić*  
ANALYSIS OF ECONOMIC PERFORMANCE OF TRADE COMPANIES IN  
SERBIA . . . . . 32
  
- *Ivana Vladimirović, Jelena Jevtić*  
MARKETING POSITIONING AND BRANDING OF SERBIAN WINES . . . . . 54
  
- *Jelena Jovanović, Ivica Nikolić, Violeta Petković*  
SOCIO-ECONOMIC ANALYSIS OF THE QUALITY OF LIFE OF THE ROMANI  
POPULATION IN THE REGION OF THE AUTONOMOUS PROVINCE OF  
VOJVODINA . . . . . 72

## SADRŽAJ

---

### ISTRAŽIVANJA, OGLEDI I STUDIJE

- *Marko Malović, Milan Mihajlović, Bela Muhi*  
AKTUELNE EGZOGENE KRIZE I KONTRAMERE EKONOMSKE POLITIKE:  
SVOJEVRSTAN SLUČAJ TURIZMA U SRBIJI .....1
  
- *Vera Zelenović, Nebojša Malenković, Jelena Zelenović*  
UTICAJ SMO U UKRAJINI NA GDP I INFLACIJU U EU SA OSVRTOM NA  
SRBIJU .....16
  
- *Radojko Lukić*  
ANALIZA EKONOMSKIH PERFORMANSI TRGOVINSKIH PREDUZEĆA U  
SRBIJI .....32
  
- *Ivana Vladimirović, Jelena Jevtić*  
MARKETINŠKO POZICIONIRANJE I BRENDIRANJE SRPSKIH VINA. .... 54
  
- *Jelena Jovanović, Ivica Nikolić, Violeta Petković*  
DRUŠTVENO-EKONOMSKA ANALIZA KVALITETA ŽIVOTA ROMSKOG  
STANOVNIŠTVA U AUTONOMNOJ POKRAJINI VOJVODINI. ....72

UDK: 336.1/.5:338.48

POSLOVNA EKONOMIJA  
BUSINESS ECONOMICS

Godina XVI

Broj 2

Str 1 – 15

doi: 10.5937/poseko22-41906

Original Scientific Article

**Marko Malović, Phd Full Professor<sup>1</sup>**

Faculty of Business Economics,  
Educons University, Serbia

**Milan Mihajlović, Phd Associate Professor<sup>2</sup>**

Faculty of Business Economics,  
Educons University, Serbia

**Bela Muhi, Phd Full Professor<sup>3</sup>**

Faculty of Business Economics,  
Educons University, Serbia

## **ONGOING EXOGENOUS CRISES AND ECONOMIC POLICY COUNTERMEASURES: PECULIAR CASE OF SERBIAN TOURISM**

**ABSTRACT:** In this paper we argue that in spite of the grave economic, political and health consequences of the ongoing exogenous crises (COVID-19 cum economic downturn stemming from Russian-Ukrainian conflict), before too long Serbian tourism exhibited something similar to the V-shaped recovery (and then some) by means of a) government subsidies, b) substituting domestic for (temporarily) absent foreign tourists and by c) soaring prices of tourist services at stable exchange rate which more than compensate the industry for the reflation comeback.

*Key Words:* Imported (Exogenous) Crises, Economic Policy Measures, Serbian Tourism

---

<sup>1</sup> profmarkomalovic@gmail.com

<sup>2</sup> mihamilan@gmail.com

<sup>3</sup> muhi.bela@gmail.com

## INTRODUCTION

The ongoing pandemic of COVID-19 with its many strains has caused an exogenous economic crisis protracted across the globe. The most recent Russian-Ukrainian conflict is having pretty much the same negative exogenously inflicted effect. Stagflation is upon us and for underdeveloped economies at least quite possibly the worst recession endured in a lifetime might be lurking around the bend. The first part of this paper is concerned with the extent and specificities of the business aspect of pandemic in Serbia as well as with preliminary analysis of Serbian government's economic policy response. In addition, we lay out the current macroeconomic constellation Serbia is faced with due to reflation&shortages backlash of Russian military operation and the Western sanctions that ensued. The second part of the paper zooms in on the somewhat peculiar development of Serbian tourism during the perfect storm of these global crises.

The rest of the paper is organised as follows: Section 2 dwells into the ongoing health-related crises and macroeconomic policy response; Section 3 depicts macroeconomic difficulties added with the Russian-Ukrainian conflict and unprecedented economic sanctions that followed; Section 4 reads on the impact of aforementioned exogenous crises on tourism in Serbia; Section 5 offers preliminary concluding remarks.

## ONGOING EXOGENOUS CRISIS AND MACROECONOMIC POLICY COUNTERMEASURES

COVID-19, potentially lethal infection caused by controversial variety of corona virus has struck the world in the first quarter of 2020. Hence, the leadership of Serbia declared a state of emergency on March 15, pulled a barrage of prophylactic measures in the sphere of public health (with typically negative repercussions for business activity&employment) and soon launched a series of economic countermeasures to financially support the failing economy and its citizens in isolation.

The toll that COVID-19 pandemic has exacted on the global economy has been humungous: estimates indicate the virus slashed global economic growth in 2020 to an annualized rate of around -3.2% [Jackson *et alia*, 2021], while the International Monetary Fund officials claimed that the global median GDP dropped by 3.9% from 2019 to 2020, in any case making it the worst downturn since the Great Depression [Gopinath, 2020]. Szmigiera (2022) forecasts place cumulative change in global GDP of 2022 around 4.5%, which corroborates some earlier estimate that cumulative global GDP loss may well be over 8.5-9 trillion USD thus far.

Serbia's own GDP drop was luckily not of that global magnitude at least in 2020 and 2021, due to underdevelopment of its economy as well as due to the calibre and initial speed of government response. The updated IMF stats indicate a temporary decrease in GDP by mere 1.5% in 2020 and a strong rebound to 5% in 2021 (vs. 4.2% in 2019), even though we suggest taking such stellar official figures with a pinch of salt. Last year, as countries started to reopen and vaccines became more available, the global economy was expected to grow vigorously, though still short of pre-pandemic projections and very unevenly across countries and regions [Oum-Kates-Waxler, 2022]. According to official figures, Serbian economy grew impressive 7,5% in 2021.

Through lockdown at least, lower demand and liquidity problems were more pronounced than supply chains, employment or profitability across smaller Serbian firms in general and hospitality sector in particular [World Bank Group, 2020].

The structure of the adopted fiscal measures indicates that the anti-crisis state interventions were organised in three directions: 1) tax policy measures calculated to postpone the obligation to pay certain taxes and contributions; 2) providing direct incentives to the private sector, which consist of providing compensation for employees' wages and direct assistance for self-employment and assistance to the SME sector; 3) measures to preserve liquidity, which include loans and credit guarantees [NCEU, 2020].

Within the measures of the tax policy, Republic of Serbia has enabled the postponement of the payment of taxes on wages and contributions, for the private sector, during the state of emergency - until January 2021, when taxes and contributions payments had to resume, but if necessary, in instalments over two year period. The measure applies to economic entities, including foreign ones. The estimated effect of this measure is savings for the private sector of 140 billion RSD (2.5% of Serbia's GDP in 2019). Furthermore, the postponement of advance payments of corporate income tax for March, April and May based on the results from the now incomparable 2019 will have an (estimated) effect of an additional 21 billion. RSD (or 0.4% of last year's GDP). The advance payment of income tax has been postponed until the submission of the final tax return for income tax in 2020. Here, however, it should be said that for small and micro enterprises, especially from the sectors and activities most affected by the crisis, the postponement of the payment of tax duties simply will not be enough, because it they will not be able to compensate for the lost profit with more intensive activity or repair the threatened liquidity: it is necessary for them to forgive certain tax obligations in whole or in large part. Finally, exempting donors from the obligation to pay VAT is another logical and justified move from this block of measures [*Ibidem*].

The first reactions of Serbian businessmen went on about appeals that special attention and measures should be concentrated a) on helping entrepreneurs and the micro and small enterprise sector, especially in devastated areas, which are very sensitive to market turbulence anyway, but also b) on the necessity of including representatives of businessmen's associations and of civil society in decision-making processes concerning measures for the economy. In addition, several "auxiliary" measures were proposed, such as:

- enabling the payment of VAT upon invoice collection, not upon the invoicing date due to the inability of many companies to collect their claims;
- extension of deadlines for reporting property tax and submission of financial statements;
- enabling minimal "self-sufficiency" of domestic production in key activities, i.e. reducing dependence on imports while emphasizing the importance of promoting domestic products in this and post-crisis periods in order to recover the domestic economy.
- abolition of certain parafiscal levies, which in this situation significantly burden certain sectors, etc.

In the block of direct incentives to the economy, entrepreneurs, micro, small and medium-sized enterprises received help in the form of minimum wage payments during the state of emergency (3 months) with an estimated effect of about 93 billion RSD (1.7% of GDP from 2019) This is a good measure, but the payment of these funds to employers whose activities were not among the most severely and directly affected by the crisis should have been conditioned by not reducing the wages of employees in an amount greater than the state minimum that was adjusted, and in the event of a violation, benefits should have been suspended and such employers helped by paying the minimum wage directly to their workers. The second measure, on the other hand, concerns large companies in the private sector, for which 50% of the net minimum wage was intended for the duration of the state of emergency for all employees whose temporary cessation of work has been confirmed by decision (Articles 116 and 117 of the Labour Law), with an estimated effect of 4.5 billion RSD (0.1% GDP) [NALED, 2020].

When it comes to measures to preserve liquidity, the purpose-launched guarantee scheme to support the economy in the conditions of the COVID-19 crisis dominates, with an estimated effect of 240 billion. RSD (or 4.4% of GDP in 2019), supported by a much more modest program of financial support to the economy through the Development Fund of the Republic of Serbia, with an estimated effect of 24 billion. RSD (or 0.4% of GDP). Loans for maintaining current liquidity and acquiring working capital will be approved for a repayment term of up to 36 months, with a grace period of up to 12 months, in dinars. The minimum amount of loans that can be taken out by



companies is 1 million. RSD, and entrepreneurs and cooperatives RSD 200,000. The main goal is to provide support to companies for the acquisition of working capital and support for maintaining current liquidity in order to settle obligations incurred towards business partners, employees and the state. Entrepreneurs, cooperatives, micro, small and medium-sized enterprises that are mostly privately or cooperatively owned had the right to use the funds. The condition was that they perform either production, service, trade or agricultural activities. The maximum loan amount was set to be: for entrepreneurs and micro legal entities up to 10 million. RSD, for small legal entities up to 40 million. RSD and for medium-sized legal entities up to 120 million. RSD. When it comes to tourism, catering and passenger transport industries, 298 firms applied for credit 85% of which were granted loans. In fact, 18% of disbursed loans of the Development Fund in 2020 went to tourism and catering industry [CEP&NALED, 2020].

With regard to the other measures, if we exclude the one-time aid to pensioners in April in the amount of RSD 4,000 each, the valuable pure fiscal stimulus (with the intention of stimulating aggregate demand) in the amount of 70 billion RSD (1.3% of GDP) was mentioned and a moratorium on the payment of dividends and the loss of tax obligations on that basis, with an estimated effect of 16 billion RSD (0.3% of GDP). Of course, a pure fiscal stimulus would make more sense a) if its alimony does not require external borrowing with interest and b) produced better effects if it was distributed more quickly and selectively, perhaps in the form of vouchers for domestic goods and services, the value of which depreciates if not used by the second quarter, for example [NCEU, 2020].

All in all, the listed fiscal aspects of the economic policy countermeasures during the state of emergency amounted to some 3% of GDP. Total amount of the first package of countermeasures was to the tune of 608 bill. RSD or 11% of GDP. By and large it stretched from March to June 2020.

The second package of government countermeasures, again fiscal in character, was injected through August and September 2020 and consisted of either direct fiscal transfers or tax policy benefits. These 66 bill. RSD or 1.2% of GDP were once again distributed rather non-selectively.

Unlike the first two, the third package, even though the smallest, was sharply focused on almost exclusively tourism, via subsidies offered on two public call occasions. The amount earmarked was 1.6 bill. RSD only or 0.03% of GDP, subsidising private tourist organisations (hotels, agencies etc.) with 350€ per bed or 150€ per room, provided that number of employees didn't fall for more than 10% by the end of the year. According to CEP&NALED (2020), 312 hotels and some 90 tourist agencies benefited from the third package.

Lastly, in April 2021 Serbian Ministry of Finance announced the second guarantee scheme due to extended economic impact of pandemic, thereby

adding 500 mill.€ to already hefty first guarantee scheme of roughly 2 bill.€ worth of loans, with refinancing deadline moved to 31st of July 2022.

Overall, economic policy response has been swift and abundant, if inadequately focused. Health policy response to Covid-19 in Serbia has been much more ambiguous and volatile, as pointed out by *inter alia* Malovic (2020) and The Economist (2021), while complete costs of government intervention in fighting corona virus haven't been reported still (there was PM's promise to make this figure and its breakdown public once pandemic is officially over).

### **IMPACT OF RUSSIAN-UKRAINIAN CONFLICT AND WESTERN SANCTIONS ON SERBIAN ECONOMY**

Escalation of Russian-Ukrainian conflict and subsequent economic sanctions of the West have affected Serbian economy at least fourfold. First is visible jump in core and CPI reflation, driven primarily by price hikes of energy and food, not only imported foodstuff but owing to built-in inflation potential of ever dearer energy domestic food also becomes more expensive. Overall, crude oil and gas prices went up precisely because of Russia is one of the world's biggest suppliers, whereas electricity got dearer since it is to the extent a substitute for gas and petrol&diesel, similarly to biomass being increasingly used for energy production fails to satisfy its agricultural demand, thereby triggering food price reflation. Serbian electricity is scarce and hence getting more expensive also due to internal mistakes in managing EPS, while the extent of country's relying on Russian oil and gas is far greater than in the EU, since the chief distributor is a company that is 51% Russian owned (although strictly speaking, Gazprom hasn't been under sanctions for the most part so that EU members could continue buying gas from them). The second channel of influence are traditional raw materials used as an input in construction and heavy industries, as well as shortage and price inflation of several sought after metals stemming from conflict zone whilst typically utilised in Serbian manufacturing. The third channel is logistically burdensome, slowed down, reduced and dearer transport to and from the war zone and further east of it. Finally, inevitable drop in economic activity and rise in inflation across the EU and in particular among Serbia's chief trade partners, has provoked additional underperformance of Serbian -until recently buoyant- export industry.

Naturally, trade with Russia has been made more difficult not only due to logistical impediments (transport, expulsion from SWIFT etc.), inflation and falling purchasing power over there, even though Serbian trade with the Russian Federation is duty-free since July 2021 (owing to free trade agreement

between Serbia and Euro-Asian economic union), but also because of political pressures on Serbia to follow suit in respect to thus far 6 packages of the EU's economic sanctions against Russian Federation and its selected subjects. Be that as it may, current structure and content of trade between Serbia and Russian Federation is such that Serbian exports are much less important than Serbian imports for both partners. Measured by export share, Russia is the 6th biggest export destination for Serbia, whilst Ukraine is only 29th albeit with slightly more diversified Serbian export supply. Serbia imports from Ukraine chiefly iron and steel for construction and heavy industry purposes.

Serbian government has responded to this new challenge via upward correction of key domestic interest rate, temporary export restraints of corn, edible oil and wheat, together with putting intermittent price caps on basic foodstuff and crude oil derivatives. Government has also approved alleviating measures for (re)financing loan support for domestic companies that are deeply connected (production- or trade-wise) to markets of Russia, Belarus or Ukraine, by allowing banks to include appendices of outstanding credit contracts which enable smooth refinancing of liabilities from the first governmental guarantee scheme (related to Covid-19).

That may seem sufficient from the first aid viewpoint, but shall hardly insulate Serbian economy from geopolitical and economic arm-twists of great powers. The situation is getting more difficult by the day and dangerous confrontation on economic and geopolitical plane has clearly undertaken the scope of the initial military conflict. Even though we disagree that the global economic constellation fully resembles 1970s recession caused by the oil shocks which is claimed by Roubini (2022), stagflation has sharply risen due to deglobalisation, wage&price inflation and ramification of policies designed to tackle the climate change, on a top of overindebtedness through great moderation cum recent crises and still wobbly international supply chains as a chronic legacy of the Covid pandemics [*Ibidem*].

## **IMPACT OF CRISES ON TOURISM**

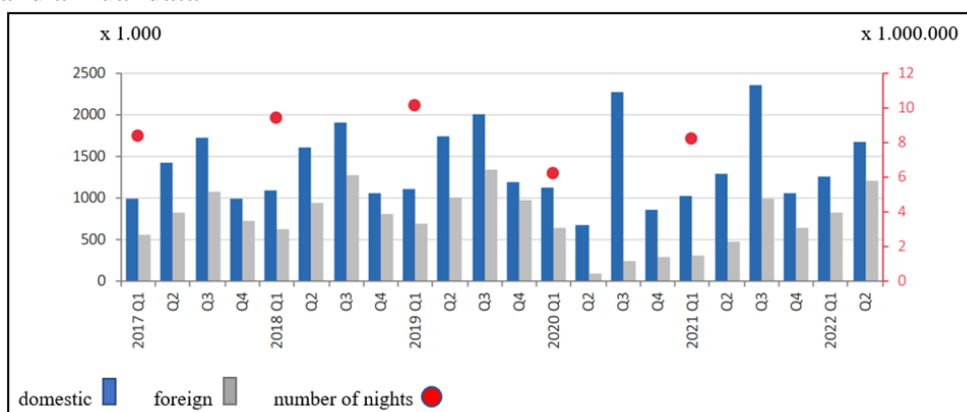
Tourist industry and tourist turnover across the civilised world take on a more massive character a while after the WW2, owing to positive constellation of certain politico-economic, demographic, social and not least technological factors. Indeed, by the mid XIX century, transport and accommodation infrastructure necessary for the speedy development of tourism had already been developed. New tourist destinations have been appearing ever since, as well as a growing number of tourist organisations, while states are nowadays being more directly involved in supporting tourism industry. The growth of the national income, the increase in free time through paid annual vacations,

the right to reduced working hours, the increase in the cultural and educational level of the population, changes in consumer attitudes and other factors have influenced the increased consumption of tourist activities and tourist services. However, frequent crises and setbacks in the development of tourism have also occurred over time. The study of economic crises' impact on tourism thus gained particular importance at the beginning of the XXI century, when the world was faced with barage of events that had had a significant impact on the decline of tourist traffic, such as the war in the Persian Gulf, the terrorist attack at the World Trade Center, spreading epidemics (SARS, H1N1, SARS-CoV-2 pandemic), the tsunami in South-East Asia and the global financial crisis [Muhi, 2022].

During the first couple of months of pandemic which in many a country passed under extra-ordinary measures if not the state of emergency, tourism took some heavy blows as an industry where remote work or remote consumption simply isn't feasible. Coming out of lockdown resulted in an expected second wave of infections so that basically entire 2020 passed with around 73% decrease of recorded international tourist arrivals to Serbia, well above the European, African or American average. Domestic tourism, in spite of 10-15 percentage points lower decrease figures (arrivals vs. overnight stays, respectively), had shown similarly bleak trend in 2020 [Bošković-Despotović-Ristić, 2021], [Popović, 2021].

Expansion of tourism in Republic of Serbia has begun in 2015, at first thanks to incentives that enabled an increase in number of domestic tourists, followed by initially modest but steadily rising interest of foreign tourists. Expressed in the number of overnight stays, tourist turnover exhibited growing trend until 2019, when the milestone of 10.1 million nights was reached. In 2020, due to pandemic caused by corona virus, contraction of overall tourist activity to only 6,2 million stays. Fall in overnight stays evidently originated more heavily from international tourism (foreign tourists had 1.3 million stays only), *i.e.* 79% of total overnight stays were made by Serbian residents. During 2021 visible recovery has been recorded at 8.2 million overnight stays, albeit again predominantly owing to domestic tourists with 5.8 million stays (tantamount to growth rate of 16%). Be that as it may, starting from a low base, international tourists almost doubled the number of overnight stays in comparison with 2021 (2.4 million).

*Graph 1. Overnight stays by tourists – domestic, foreign and total; quarterly and annual data*



Source: SORS (2022)

Positive (rising) trend has been kept throughout the first half of 2022. Over this period, number of foreign tourists has been markedly increased. In the second quarter alone number of recorded overnight stays amounted to 2.9 million, which is 64.1% more as compared with Q2 of 2021. Additionally, the number of foreign and domestic tourists has been significantly evened out (residents 58.2%, non-residents 41.8%). To sum it up, Table 1 offers comparative survey of tourist activity in Serbia through pandemic given in indices:

*Table 1. Tourist nights, indices (comparison with the same period of the previous year)*

	2020				2021				2022	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
total	98,3	28,1	74,9	52,8	76,1	228,4	133,3	148,2	156,3	164,1
domestic tourists	101,5	39,3	113,0	71,1	91,9	188,5	103,6	123,5	122,2	130,8
foreign tourists	93,2	8,9	17,9	30,2	48,3	535,8	412,6	220,0	270,1	253,8

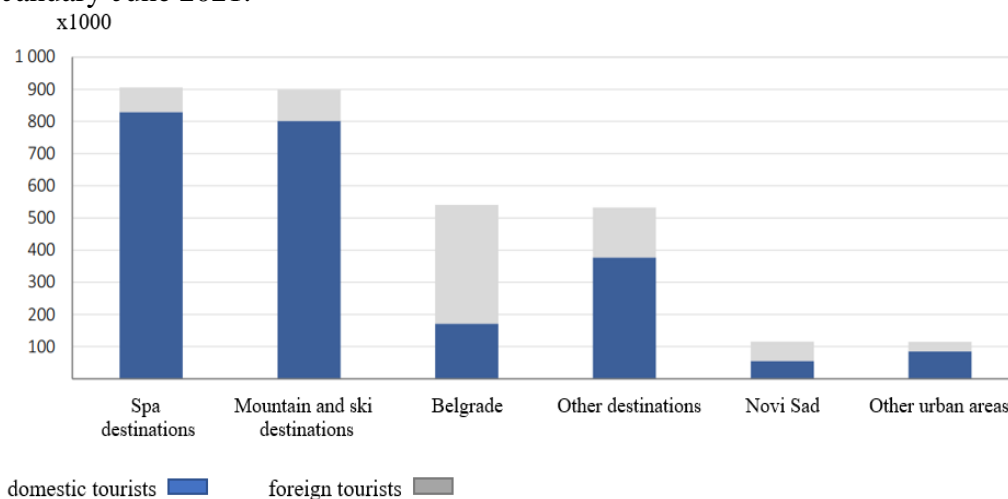
Source: SORS (2022)

Judging by the data, such a huge downturn, from a larger perspective, appears to be short lived since the numbers available for 2021 and the first two quarters of 2022 indicate almost a V-shaped recovery for Serbia! For instance, balance of payments cross-border tourism figures indicate that even contractionary 2020 was the first recent positive result from Serbian perspective (in as much as Serbian residents reduced their trips abroad by more than foreigners stopped coming in the country at least in monetary terms), while the positive trend (with absolute numbers rebounding to roughly pre-

pandemic level) continues in 2021 [NBS, 2022]. With the exception of February 2022, similar situation is recorded in the first half of the current year, namely revenues from foreign tourists spending in Serbia overshadow foreign exchange outflows due to domestic tourists travelling overseas [NBS\*, 2022].

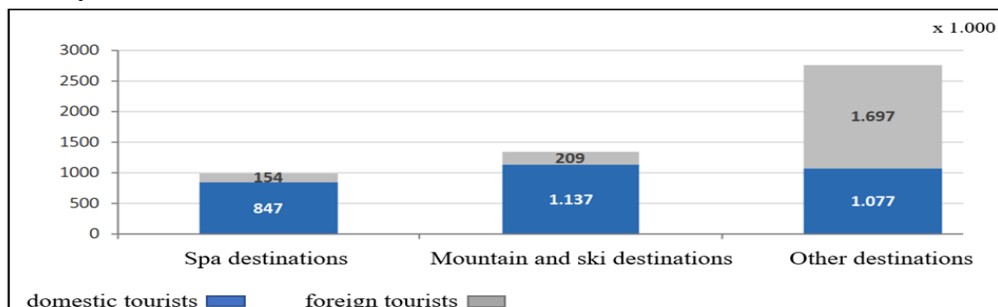
When it comes to the rate of international tourist arrivals in the first five months of 2022, Serbia is among the 10 most successful countries worldwide, with only 8% arrivals less than in the same period of 2019. Interestingly enough, influx of foreign tourists and their intertemporal increase could be easily identified by comparison of most popular tourist destinations in the country for the first six months of 2021 and 2022, respectively. In the first half of 2021 most frequently visited tourist destinations in Serbia were spas with 905,000 stays as well as mountain resorts with 899,000 stays (see Graph 2), traditionally frequented by domestic tourists (in 2021 91,6% and 89.2%, respectively) even outside COVID window. Conversely, over the first half of 2022 the most popular destinations were Serbian capital Belgrade (1.3 million overnight stays) and other bigger cities (*e.g.* Novi Sad, Subotica, Nis), with majority of tourists being non-residents (Belgrade 82% of foreigners, Novi Sad and Subotica *circa* 60%), as evident from the Graph 3.

*Graph 2.* Overnight stays by tourists in selected tourist places in the period January-June 2021.



Source: SORS (2022)

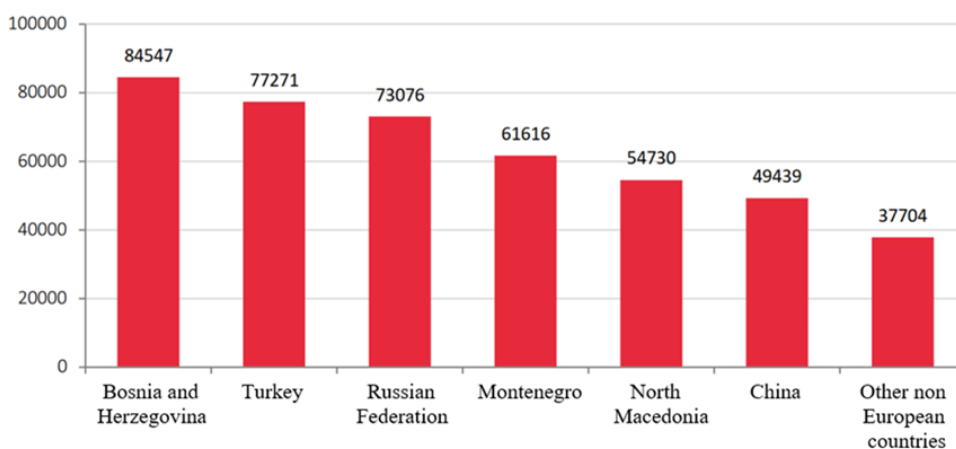
*Graph 3. Overnight stays by tourists in selected tourist places in the period January-June 2022.*



Source: SORS (2022)

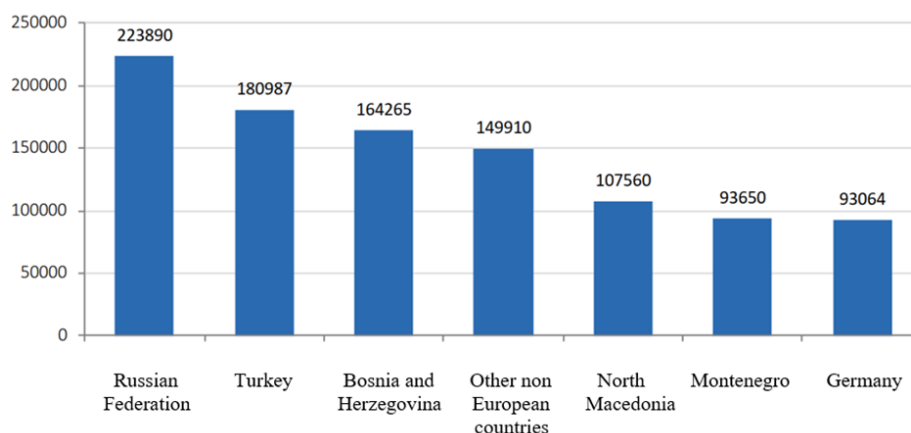
Escalation of Russian-Ukrainian conflict is another factor of principal influence on Serbian tourist market. Comparative analysis of period January-June 2022 (see Graph 5) with the same period last year (see Graph 4) undoubtedly shows a singular change in the structure of inbound foreign tourists in Serbia.

*Graph 4. Overnight stays by foreign tourists by country of origin, January–June 2021.*



Source: SORS (2022)

Graph 5. Overnight stays by foreign tourists by country of origin, January–June 2022.



Source: SORS (2022)

Three-fold increase in number of overnight stays by guests from Russian Federation, which now represents the leading country of origin for inbound foreign tourists in Serbia, is surely a novel trait of Serbian tourism statistics. Notwithstanding the fact that Russian stays in most part have nothing to do whatsoever with conventional leisure (or business) tourism, their economic benefits both for the budget and the private sector of Serbian economy should not be underestimated.

In addition, with regard to earnings from international tourism, from January to May 2022 Serbia is the second best destination in the world at 59% real growth in cross-border receipts as opposed to the same time-span in 2019 [UNWTO, 2022]! Apparently the only segment of tourism pounded by the pandemic on a more permanent basis is business tourism, which -suddenly forced to adapt- transformed itself in a cost-cutting manner that in Serbia prevails to this day, well into the 2022. Using *Zoom* and alike communication platforms contains part of the answer, the other part arguably being investors' pessimism in respect to broadening operations until the war and subsequent global crisis are credibly behind us.

Be that as it may, anecdotal evidence suggests that in respect to domestic tourism Serbia has been more than compensated for the temporary absence of foreign tourists both in numbers and revenue. Namely, lockdown itself as well as subsequent travel bans and restrictions understandably diverted Serbians from overseas travel to -before pandemic pretty much neglected- domestic destinations, thereby generously increasing number of overnight stays and pecuniary equivalent paid for the services by domestic tourists, who have been charged at often steeply growing prices for lack of hustle-free alternatives abroad. Moreover, sustained government support (direct subsidies plus



vouchers for a designated minimum stay) during the hardest times also helped preserve or even improve the potential of the Serbian tourist industry. However, to maintain such an occupancy rate in the semi-autarky over the longer run, we imagine that prices would have to go down (especially outside bigger cities and major tourist locations) in order to accommodate domestic tourists with shallower pocket that may make up for the lack of their well-to-do countrymen who are likely to return to their former habits of travelling overseas, at least for key holidays and lengthier stays.

## CONCLUSION

The ongoing pandemic of COVID-19 with its many strains has caused an exogenous economic crisis protracted across the globe. The most recent Russian-Ukrainian conflict is having pretty much the same negative exogenously inflicted effect. The first part of this paper is concerned with the extent and specificities of the business aspect of pandemic in Serbia as well as with preliminary analysis of Serbian government's economic policy response. In addition, we lay out the current macroeconomic constellation Serbia is faced with due to reflation&shortages backlash of Russian military operation and the Western sanctions that ensued.

The central part of the paper zooms in on the somewhat peculiar development of Serbian tourism during the perfect storm of these global crises. The main point of the paper is that in spite of the grave economic, political and health consequences of the ongoing exogenous crises (COVID-19 cum economic downturn stemming from Russian-Ukrainian conflict), before too long Serbian tourism arguably exhibited something similar to the V-shaped recovery (and then some) by means of a) government subsidies, b) substituting domestic for (temporarily) absent foreign tourists and by c) soaring prices of tourist services at stable exchange rate which more than compensate the industry for the reflation comeback.

## REZIME

### **AKTUELNE EGZOGENE KRIZE I KONTRAMERE EKONOMSKE POLITIKE: SVOJEVRSTAN SLUČAJ TURIZMA U SRBIJI**

U ovom radu autori argumentuju da je uprkos teškim ekonomskim, političkim i zdravstvenim posledicama egzogenih kriza koje su u toku (COVID-19 i ekonomskog pada koji proizilazi iz rusko-ukrajinskog sukoba), srpski turizam pokazao oporavak sličan V obliku uz pomoć a) državnih subvencija, b)

zamene (privremeno) odsutnih stranih turista domaćim turistima i c) skokom cena turističkih usluga po stabilnom kursu koji više nego kompenzuje gubitke nastale u ovoj grani industrije uz povratak inflacije.

Ključne reči: Uvezene (egzogene) krize, mere ekonomske politike, srpski turizam

## REFERENCES

1. Bošković, N.-Despotović, D.-Ristić, L. (2021), „Negative Effects of Covid-19 Pandemic on International Tourism“, *Ecologica* Vol. 28, No. 102, pp. 271-276.
2. CEP&NALED (2020), «Efekti ekonomskih mera za ublažavanje negativnih posledica Covid-19 na privredu», #EU za tebe edicija.
3. The Economist (2021), „The Covid-19 Pandemic: Counting the Dead“, May 15th, *mimeo*.
4. Gopinath, G. (2020), „The Great Lockdown: Worst Economic Downturn Since the Great Depression“, IMF, April 14th, Washington, DC.
5. Jackson, J. *et alia* (2021), «Global Economic Effects of Covid-19», Congressional Research Service, November 10th, R46270, Washington, DC
6. Malović, M. (2020), «Macroeconomic Implications of Public Policies in the Pandemic-borne Crisis», (in Serbian), Zbornik Matice srpske za društvene nauke, Issue 176, pp. 611-627.
7. Muhi, B.-Mihajlovic, M.-Tadic, J. (2022), “Managing Challenges to Vojvodina’s Tourism provoked by the Global Pandemic”, Educons University, Novi Sad, (in Serbian),
8. NALED (2020), «COVID-19 uticaj na privredu i lokalne zajednice: Percepcija predstavnika privatnog, javnog i civilnog sektora», *mimeo*
9. NBS (2022), “Bilans plaćanja Srbije: Turizam po zemljama 2007-2021”, National Bank of Serbia, *excel tables* (in Serbian).
10. NBS (2022\*), «Republika Srbija: Turizam, jun 2022», National Bank of Serbia, *excel tables* (in Serbian).
11. NCEU (2020), «NCEU’s Report on Government’s Economic Measures during the State of Emergency», editor M. Malovic, (in Serbian), Monitoring Report #2, June.
12. Oum, S-Kates, J.-Waxler, A. (2022), «Economic Impact of COVID-19 on PEPFAR Countries», Global Health Policy, February 7th, *mimeo*.
13. Popović, I. (2021), «Uticaj pandemije Covid-19 na svetsku turističku industriju s osvrtom na Republiku Srbiju», in Cvetković, V. (ed.) *Taktika zaštite i spasavanja u vanrednim situacijama: iskustva sa terena i pouke*,

- 
- Naučno-stručno društvo za upravljanje rizicima u vanrednim situacijama, pp. 65-75, April.
14. Roubini, N. (2022), «From Great Moderation to Great Stagflation», Project Syndicate, August 9th, *mimeo*.
  15. Statistical Office of the Republic of Serbia (2022), “Trends in Q2”, <https://publikacije.stat.gov.rs/G2022/Pdf/G20228003.pdf>, (in Serbian), *passim*.
  16. Szmigiera, M. (2022), «Impact of the Coronavirus Pandemic on the Global Economy - Statistics & Facts», Statista, July 8th, *mimeo*.
  17. UNWTO (2022), «World Tourism Barometer», Volume 20, Issue 4, July.
  18. World Bank Group (2020), «Ekonomski i socijalni uticaj Covid-19: privatni sektor», Zapadni Balkan – Redovni ekonomski izvještaj br. 17», Spring, *mimeo*.

Ovaj rad je primljen **04.11.2022.**, a na sastanku redakcije časopisa prihvaćen za štampu **27.12.2022.** godine.

UDK: 339.138

POSLOVNA EKONOMIJA  
BUSINESS ECONOMICS

Godina XVI

Broj 2

Str 16 – 31

doi: 10.5937/poseko22-40775

Original Scientific Article

**Vera Zelenović, PhD, Professor<sup>1</sup>**

Faculty of Economics, Subotica

University of Novi Sad, Serbia

**Nebojša Malenković, Doctoral student<sup>2</sup>**

Faculty of Economics, Subotica

University of Novi Sad, Serbia

**Jelena Zelenović, Doctoral student<sup>3</sup>**

Faculty of Technical Sciences, Novi Sad

University of Novi Sad, Serbia

## **THE INFLUENCE OF SMO IN UKRAINE ON GDP AND INFLATION IN THE EU WITH REFERENCE TO SERBIA**

**ABSTRACT:** SMO in Ukraine and the imposed sanctions have their own dangerous economic side effects: a) they seriously affect the existing level of GDP, both in Europe and in the world; b) Inflationary pressure, which was already elevated after the end of the Covid pandemic, began to increase uncontrollably, with varying intensity. Serbia is also not spared from the negative effects of SMO on its economy. Purpose: The war conflict in Ukraine showed that it is not possible to limit the economic (and not only them) consequences, to a certain territory. All this indicates that the global economic connection is great, and that the negative effects of the crisis are reflected on the economic community as a whole. Methodology: In the paper, using the method of content analysis, data available from primary sources. For the research in Serbia, official data from the NBS website

---

<sup>1</sup> vera.zelenovic@ef.uns.ac.rs

<sup>2</sup> nebojsa.malenkovic@gmail.com

<sup>3</sup> jelenazelenovic.jz@gmail.com, correspondent

were used, when it comes to the movement of GDP, the growth of consumer prices, as a key indicator for measuring inflation, and the movement of nominal wages expressed in euros. For the purposes of the research, an appropriate statistical method, regression, was used. The results of the research indicate a trend of GDP reduction under the influence of SMO and sanctions, both in the world and in Serbia. Inflationary pressure is getting stronger, continuously in all presented data that are the subject of research. The nominal growth of wages in Serbia was shown to be a consequence of inflationary pressure. The limits that exist in relation to this research are the existence of different scenarios for ending this crisis, which implies different conclusions about the measures that should be taken to mitigate it, given that the situation changes on a daily basis. Suggestions for future research are given in the conclusion.

*Key words:* European Union, SMO in Ukraine, sanctions, crisis, GDP, inflation

## INTRODUCTION

Escalation of the conflict in Ukraine led to turbulence in the global financial market, and drastically increased uncertainty when it comes to the global recovery of the world economy, two years after the Covid pandemic. The global risk is further increased by the fact that Russia is the third largest producer of oil in the world, the second largest producer of natural gas and is among the top five global producers of steel, nickel and aluminum. Industries such as automotive, transport, chemical, generally all sectors that use the mentioned raw materials, will be particularly vulnerable. All of this increases the probability that high commodity prices will be a factor of instability in the global market in the long term, which affects the emergence of long-term high inflation, which, with its intensity and potential duration, seriously threatens real wages, especially in developing markets. All this affects the increased risk when it comes to social unrest, which will not be spared even developed countries, and will have an even greater impact on developing countries.

Europe as a region has an extremely high dependence on Russian natural gas and oil, so it is the most exposed to the consequences of this conflict, considering that in the short term, but also in the medium term, it is difficult to find a replacement for its 40% dependence on Russian energy. The current level of energy prices, even assuming that it does not increase until the end of the year, which is difficult to sustain, will have a significant impact on inflation

in the EU, which will damage household consumption and result in lower GDP growth. A complete cutoff of Russian gas supplies would increase prices by at least 4%, bringing annual GDP growth to zero in 2022. (Coface Economic Publications, 2022).

Using the global NiGEM macroeconomic model, it is possible to simulate the impact of the Russian-Ukrainian conflict on the commodity and financial markets during the first two weeks of the conflict. Price juices are percentage differences in the average price of selected products and goods in the period from the beginning of the special military operation until the ninth of March, compared to the average prices in January 2022. (OECD Economic Outlook, Interim Report, 2022):

Oil prices rose by 33% at the world level and coal by 80%. In Europe, the price of gas increased by 85%, in the USA by 10%, while in the rest of the world it increased by some 20%. As for metal prices, they increased by 11%, at the world level, based on weighted changes in average prices for copper, zinc, iron, gold, aluminum, nickel and platinum. As for food prices, they have risen by an average of 6% at the world level, including the price of wheat, which has increased by 90%, and the price of corn, which has increased by 40%. The assumption is that the prices of fertilizers will jump by 30%.

The biggest cost of living crisis in the twenty-first century occurred in a situation where people and countries have limited capacity to cope with it. The war in Ukraine is exactly such a situation, when on the one hand you have large profits in the food, energy and fertilizer markets, due to the significant role that Russia and Ukraine play in these markets. And on the other side are the cascading crises that the world is facing, such as the Covid 19 pandemic and climate change. Changes of historic proportions are underway that define the world (UN, 2022).

One of the most serious consequences of the war in Ukraine is a new refugee crisis. According to UNHCR reports, more than seven million people have been displaced within Ukraine itself since the beginning of the conflict. According to reports, more than 4.7 million people fled to neighboring countries by mid-April, the largest number being women and children. In Ukraine alone, which has about 7.5 million children, a huge number of them, about 4.3 million, have been displaced. According to estimates, about 2 million children are refugees in neighboring countries, and approximately the same number are internally displaced children.

The wave of refugees hit Central European countries the most, which will greatly test their ability to meet the basic needs of refugees, health, education and social protection systems. Challenges are already occurring in certain countries, because the duration of the conflict has begun to seriously affect and deplete their economies.

## LITERATURE REVIEW

After the collapse of the socialist system of the USSR in 1991, the former constituent parts of the Soviet Union systematically turned towards the West and its institutions, such as the EU and NATO. Russia, however, never accepted the Maidan revolution, the removal of the democratically elected Yanukovych regime, and Ukraine's rapid turn to the West. (Pabriks & Kudors, 2015). Russia's SMO in Ukraine 2022, which resulted in great economic and financial pressure-sanctions, not only harms Russia but also shakes the global economic and financial markets and makes life dangerous for everyone. When it comes to oil, natural gas, coal, wheat and other products, both Russia and Ukraine have a significant place in the global market. Mark Zandi, chief economist at Moody's Analytics notes that these two countries produce 70% of the world's neon, which is key to semiconductor production. Panic has already set in in the automotive industry worldwide over computer chip shortages. Both of these countries together have a global supply of 13% of titanium, which is important for aircraft production, as well as 30% of the supply on the world market when it comes to palladium, whose application is very wide, from cars to mobile phones to dental fillings (Wiseman, 2022.). The most important financial officials of the EU have stated that although the current war will slow down the economic growth of the European Union, due to rising energy prices and reduced business confidence, they believe that the EU is ready for such a thing (Thomas & Strupczewski, 2022).

The escalation of the conflict in Ukraine has caused turmoil in financial markets and dramatically increased uncertainty about the recovery of the global economy. Only two years after the start of the COVID-19 pandemic, without the possibility of a significant recovery of the global economy, a new global crisis has occurred, with very unpredictable consequences, both in terms of the duration of the crisis, as well as in which direction all its consequences will be reflected. If we keep in mind that Russia is the third in the world in terms of oil production, the second in the world in terms of natural gas production and among the top five global producers of steel, nickel and aluminum, any significant reduction or disruption in energy supply and metal deliveries will result in a jump in world prices. the price of these products, according to The Coface Economic Research team (2022).

J.P. Morgan expects the period of heightened geopolitical tensions and high risk premiums for all commodities exported by Russia to continue. Like many nations around the world, experts suggest that the EU in particular will face an increased rate of inflation as well as disruptions and disruptions in supply chains. As Saudi Arabia refuses to deliver more oil from its reserves, to compensate for the shortage of oil coming from Russia, this will greatly affect the price of commodities globally (Lanktree, 2022).

For now, it is still not possible to assess the consequences of the war, nor the sanctions that accompany it, but it can be said with certainty that there will be major consequences for companies operating both in Russia and Ukraine. Foreign companies in Ukraine are threatened with potential physical destruction, while foreign companies in Russia will either have to suspend operations for a while or even leave it.

The indirect risks caused by this crisis are also not to be underestimated (<https://www.jpmorgan.com/insights/research/russia-ukraine-crisis-market-impact>, 2022):

- Slower global growth as well as reduced consumption due to higher oil and food prices
- Secondary negative effects throughout Europe
- Supply chain distortion
- Write-offs of loans and assets
- Cyber security risks
- Tightening of monetary policy

J.P. Morgan expects the period of heightened geopolitical tensions to continue, as well as high risk premiums for all commodities affected by Russia's WMO. Since the end of February 2022, the financial markets have reacted to the escalation of the geopolitical situation, and the subsequent political responses are primarily the sanctions imposed on Russia. The direct result of SMO was a sharp rise in commodity prices and a serious drop in stock prices. Conditions in the corporate and sovereign credit markets have deteriorated significantly, particularly in several emerging markets in Europe and Asia. Russian banks are experienced a very heavy blow, partly due to the exclusion of important Russian banks from of SWIFT, the international payment network. All this has hit the international banks hard, especially those European banks with significant exposure to Russia (Impacts of the Russian Invasion of Ukraine on Financial Market Conditions and Resilience: Assessment of Global Financial Markets, 2022).

## **THE IMPACT OF SMO IN UKRAINE ON THE GDP GROWTH IN EU**

GDP is the most comprehensive measure of the total production of goods and services and economic activities in a country. It is defined as the market value of all final goods I services produced in a certain period of time period, usually for a year, within one economy viewed as a whole.

By definition, GDP measures two things at once: a) total realized income in an economy and b) total expenditures of that same economy, which it has



in the production of goods and services.

It is to be expected that the war conflict in Ukraine will have a major impact on economic activities not only in Europe, but in the rest of the developed Western world. This impact will primarily be felt in the investment segment, increased commodity and energy prices, disruptions in international trade and a constant increase in uncertainty. If we compare the forecasts for the real growth of GDP in 2022, which were made before the war conflicts, it allows us to see the extent of its economic impact.

As shown in Table 1, the GDP growth forecast in the Eurozone for 2022 decreased by 3.9% in February to 2.7% in May. The reported decline is greater than expected, both in the EU, and in the USA and the UK.

*Table 1.* Economic forecast of the movement of real GDP (growth is given in %, and possible changes in percentage points)

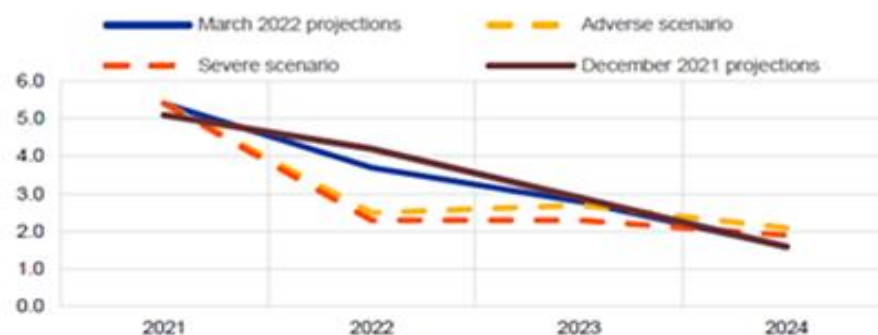
	Real GDP growth			GDP growth (2022 forecast)			Inflation (2022 forecast)		
	2019	2020	2021	7 Feb.	9 May	Revision	7 Feb.	9 May	Revision
Euro area	1.6	-6.4	5.3	3.9	2.7	-1.2	3.9	6.8	+2.9
US	2.3	-3.4	5.7	3.7	2.7	-0.9	5.2	7.2	+2.0
UK	1.7	-9.3	7.4	4.3	3.8	-0.5	7.0	9.7	+2.7

*Source:* Consensus Economics, Eurostat and the International Monetary Fund (IMF)

The UK recorded the highest rate of GDP decline from 7.4% in 2021 to 3.8% in 2022., with a possible deviation of -0.5%.

The SMO in Ukraine will primarily affect the projection of the economic growth of the EU, given the proximity of Ukraine, as well as the connection between the Ukrainian and European economic markets. The economic sanctions introduced by the EU to Russia, with the aim of weakening and exhausting the Russian economy, did not have the expected effect, but returned to the EU like a boomerang. The longer the military operation lasts, the worse the EU's economic growth projections are. The latest forecasts, based on constant commodity shocks and increasing uncertainty, suggest that real GDP in the European Union could fall below 3% in 2022. Further disruptions in supply chains and economic sanctions threaten to push the European economy into recession.

Table 2. Forecasting the trend of real GDP in the EU

**Real GDP growth projections for the euro area  
(annual percentage changes)**

Source: Invasion of Ukraine: euro area banks so far resilient to a second exogenous shock, *Morgan Stanley European*, Mart 2022.  
[www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.en.pdf](http://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.en.pdf)

As can be seen from Table 2, the projection of real GDP growth for the EU zone until 2024 is not at all optimistic, especially since the projection was made in March, when there may still have been optimistic thoughts regarding the SMO. The situation at the beginning of October is not favorable, the devastation of the EU economy is even greater, with not very good prospects for an early recovery. The reasoning is based on the fact that energy prices are continuously rising, and it is increasingly difficult to obtain them in the required quantities, which undermines the competitive advantage of the EU industry, especially Germany, and the growing shortage of consumer goods and food, with increased inflationary pressure.

## THE IMPACT OF SMO IN UKRAINE ON THE INFLATION IN EU

By inflation, in conjunction with the economic vocabulary, we can mean the continuous growth of the general price level, that is, the continuous decline of the real value of money. Monetarists believe that inflation is a purely monetary phenomenon, M. Friedman says that inflation, whether national or world, "always and everywhere arises as a consequence of an excess amount of money in relation to production" (Friedman, 1968).

If we start from the concept of demand inflation, the assumption is that with a given level of prices and wages, there is an excess of aggregate money demand in relation to existing commodity funds, which results in price growth

that should balance them, that is, enable the realization of the entire gross domestic product, GDP (Hadžić, M., Barjaktarović, L, 2015).

Part of the world and Europe were already affected by the price increase in the energy sector, which significantly contributes to inflation, even before the Russian SMO in Ukraine. The prices of many goods started to rise two years ago, when measures against Covid were first introduced, which was already burdensome for supply chains, causing panic buying in supermarkets.

The conflict itself only worsened the crisis and increased inflationary pressure, given that there was a global risk of interruption of the supply of oil and natural gas from Russia. Moscow's position on the matter is clear, there is no restoration of deliveries at full capacity, while the West lifts sanctions against Russia. The prices of many food products are also rising uncontrollably, considering that Russia and Ukraine account for almost a third of the global production of wheat and barley and two thirds of the world's sunflower oil exports. Ukraine is the fourth largest exporter of corn in the world.

Table 3 shows the projection of inflation in the Eurozone until 2024. The projection includes four scenarios, which are presented respectively from the aspect of severity of the outcome. Of course, it should be taken into account that global tensions, the length of the war conflict and its eventual expansion will significantly affect the pre-estimated forecasts, which are anything but optimistic.

Table 3. Inflation projections for the Euro area



Source :Invasion of Ukraine: euro area banks so far resilient to a second exogenous shock, *Morgan Stanley European*, Mart 2022  
[www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.e](https://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.e)

It is estimated that the potential impact of a sudden jump in price growth is the result of the armed conflict in Ukraine, which has affected all households in the EU. Of course, there are differences in income distribution between and within EU countries, but the analysis focused on the most vulnerable households. The war conflict will primarily have an economic impact on the increase in product prices, which will affect the real consumption of the population in Europe by 1.1%, already in the first months of the war. Given that EU members are of different levels of economic development, the impact of price increases will be different. It is to be expected that the countries where the structure of the consumer basket is most sensitive to the increase in energy and food prices will be the most affected, and especially those countries whose population is most affected by poverty. From that aspect, the countries of Central, Eastern and Southeastern Europe will feel these price shocks much more strongly than the Western and Northern regions of Europe.

*Table 4. Movement of the inflation rate in the period before the crisis and now (the annual rate is expressed in %)*



*Source: How bad is the Ukraine war for the European recovery?*

European Investment Bank, 2022.

[how\\_bad\\_is\\_the\\_ukraine\\_war\\_for\\_the\\_european\\_recovery\\_en%20\(1\).pdf](#)

Considering the level of uncertainty when it comes to inflation, it is not worthwhile to engage in projections, but it is quite realistic to expect that the existing price pressures will continue. Considering the reduction of agricultural production in Ukraine with the accompanying sanctions on Russian agricultural products, it cannot be expected that there will be a stabilization or fall in the prices of agricultural products until the end of the

year. As for oil, high prices can be expected throughout 2022, with an upward trend. As shown in Table 4, inflation in Europe is expected to remain 2% to 3% above the pre-crisis average for the next 2 years.

Inflationary juice will be uneven on disposable income and its impact will be different from country to country in the European Union. The reasons for the increase in inflation in the European Union from 2% to 3% should be sought in the different economic approaches of the member countries. The impact of food and energy price increases depends primarily on the structure of the consumer basket in a given country.

Therefore, it is logical to expect that the highest inflation growth will occur in countries where food and energy have the largest share in the consumer basket.

## RESEARCH METHODOLOGY

The subject of research in this paper is how the Russian SMO affects macroeconomic trends in the European Union, with a focus on Serbia. The influence of war actions and their consequences is considered, primarily through the growth of energy and food prices, on the movement of GDP and inflation, as a result of (uncontrolled) growth in consumer prices. Regardless of the fact that these events have a global character, the greatest exposure of the SMO is in the European Union, not only because of the proximity of the war conflict, but also because of the great economic connection, as it turned out, the dependence on the hitherto cheap Russian energy and food.

The purpose of the work is to point out the interconnectedness of the globalized market, and how a problem in one part of the world has a domino effect on everyone. The WMO resulted in 8 packages of sledges, which do not fulfill their basic purpose, but return like a boomerang not only to the countries of the European Union, but also affect the world economy.

The main problem that arises here is that there is no clear estimate of how long the SMO will last, what is the far-reaching effect of the current events on the world economy, whether the war operations will expand to some other countries, since all this affects the prognosis related to the movement of GDP, inflation and inflation standard. Even the current enormous increases in energy and food prices, with no tendency to stop the trend, speak in favor of global uncertainty.

In this research, an appropriate statistical model, regression, was used to investigate whether there is a relationship between the GDP movement in the Republic of Serbia with the growth of consumer prices and average wages, expressed in euros. Data from the NBS website were used for the research, it concerns the time period of the last 5 years and two quarters from the current

year, 2022.

### **The Impact Of SMO In Ukraine On The GDP, Consumer Prices And Wages In Serbia**

The current conflict in Ukraine means that the commodity and financial markets are ruled by psychological factors, and the current situation indicates that even after the end of the conflict, Europe will emerge from it weaker than it was. All these problems will not disappear overnight, and it will be a long-term problem that we will face, given that most of our exports go to the European Union, and most investments in Serbia come from Europe, and its two largest countries are Russia and Ukraine, which should not be forgotten. When it comes to current macroeconomic trends, it has not had a negative impact on the dynamics of gross domestic product growth, but it has on inflation and the current account deficit of the balance of payments. The main risk of such developments comes from the risk of the conflict in Ukraine, which is not calming down, but rather aggravation of geopolitical tensions, which also led to the trend and growth of world energy prices, which were already at an extremely high level. Another big risk that we are facing as a country is this year's crop in agriculture, which unfortunately will not be as expected, due to the drought, which will have a bad effect on the crop of corn, soybeans, sunflowers and vegetables. Inflation in Serbia continued to move upward, and in July it amounted to 12.8% year-on-year, of which 70% was caused by the increase in food and energy prices. Core inflation, which is obtained when the prices of food, energy, alcohol and cigarettes are excluded, moved in line with expectations (Табаковић, Ј., 2022).

As for the aforementioned macroeconomic indicators in Serbia, we can state with certainty that the SMO in Ukraine is visibly reflected in the indicators in Serbia as well. As shown in Table 5, we see that GDP experienced a marked decline in 2020. during the Covid pandemic, a trend observed throughout the EU. A significant, promising GDP growth was recorded in 2021, but the SMO stopped it. Both the first and second quarters of 2022 record a continuous decline, with a tendency to unfortunately continue. As we have seen from previous analyses, this trend has been observed both at the global level and at the EU level.

We see a similar trend when it comes to the relative growth of consumer prices, as an important factor of inflation. That growth was the lowest during Corona, 2020. when the state intervened with its own measures, in order to preserve the standard of living of the people. Already next year, 2021, prices will record a significant growth of 7.9%, so that in the first quarter of 2022, that growth would be 9.1%, and in the next quarter of the same year, 11.9%! Such a sudden jump in product prices is a direct consequence of SMO in

Ukraine, but also the structure of the post-consumer basket itself in our country, in which food and energy are the dominant items.

*Table 5.* Real GDP growth, consumer prices and wage from 2017 to 2022. In Serbia

Year	Real GDP growth (in %)	Consumer prices (in %, relative to the same month a year earlier)	Wages (average for the period, in EUR)
2017	2.1	3.0	394.5
2018	4.5	2.0	419.8
2019	4.3	1.9	466.0
2020	-0.9	1.3	510.9
2021	7.4	7.9	562.2
2022-I	4.3	9.1	612.7
2022-II	3.9	11.9	627.9

*Source:* National Bank of Serbia

[https://nbs.rs/sr\\_RS/drugi-nivo-navigacije/statistika/](https://nbs.rs/sr_RS/drugi-nivo-navigacije/statistika/)

When it comes to nominal wages, we see that they will record a more significant growth in 2021, and that growth will continue continuously in the first two quarters of 2022. Given that the growth of consumer prices was also recorded in the same period, then this growth in nominal wages can be viewed in that light through the prism of inflationary pressure.

## RESULTS AND DISCUSSION

In the tables that follow, a statistical presentation is given, a regression, which investigated and showed the relationship between the three presented indicators, GDP and average wages, and average consumer prices and wages.

*Table 6.* Relationship between real GDP growth and wages

	Real GDP growth				
	Beta Coefficient	R <sup>2</sup>	F	<i>t</i>	<i>p</i>
Wages	9.316	0.066	0.357	0.597	0.576

*Source:* Authors calculation

The regression was used to test if real GDP growth carries an impact on wages.

The variable real GDP growth was regressed on variable wages. Real GDP growth predicted wages  $F(6, 2) = 0.357$ ,  $p = 0.576$ , which indicates that real GDP growth does not play a significant role in shaping wages. Moreover, the  $R^2 = 0.066$  depicts that the model explains only 6.6% of the variance in wages.

*Table 7. Relationship between consumer prices and wages*

	Consumer prices				
	Beta Coefficient	$R^2$	F	$t$	$p$
Wages	18.556	0.739	14.217	3.775	0.013

*Source: Authors calculation*

The regression was used to test if consumer prices carry an impact on wages. The variable consumer prices were regressed on variable wages. Consumer prices predicted wages  $F(6, 2) = 14.217$ ,  $p < 0.05$ , which indicates that real consumer prices play a significant role in shaping wages. Moreover, the  $R^2 = 0.739$  depicts that the model explains as much as 73.9% of the variance in wages.

## CONCLUSION

The economic and financial consequences of the escalation of the SMO in Ukraine will primarily be felt through three key transmission channels: the energy, trade and financial sectors. Which channel will be more pronounced depends on the results of the previous sanctions and any other future sanctions that will be introduced. It should not be forgotten that Russia is economically (not only economically) much stronger than it was in 2014. The world had just begun to recover from the global crisis caused by Covid-19, from which it emerged with a high inflation rate, a vulnerable financial market and disrupted supply chains, when a new crisis came in the form of WMO.

The severity of the imposed sanctions, primarily by the European Union, is a clear indicator of potentially difficult scenarios for the outcomes of the economic and financial markets. In the worst possible scenario, where Russia would completely stop gas deliveries to Europe, the prices of this energy would have a big jump, given that alternative suppliers are limited. This would certainly lead to major obstacles in the economic growth of the EU, especially when it comes to the comparative industrial advantage of European producers, which they are rapidly losing due to this development of the situation. One of the negative results could be the relocation of European industry to other



territories, which would at least maintain their comparative advantage, which presupposes the departure of capital from the EU. In any case, the recession is knocking on the door.

Russia's expected response to the imposed sanctions, which assume a ban on the import of everything from Russia, not only leads to an escalation of energy and food prices, but also affects changes in the GDP structure. In the developed countries of the West, the service sector brought the highest earnings, while earnings from raw materials, energy and food were at the bottom of the scale. The current situation threatens to change that from the roots, considering that the current situation is becoming problematic for all those who based their development (GDP) exclusively on services and entertainment. The quality of life based on cheap food and raw materials is crumbling, tectonic changes are on the horizon.

As research has shown, Serbia is not exempt from the effects of what is happening on the world stage, and the consequences of the sanctions are felt very well in our country and affect the increase in the prices of consumer foodstuffs and the nominal growth of wages. Inflationary pressure is obviously getting stronger and has consequences for the already low quality of life in Serbia. Every crisis is an opportunity, since we are engaged in food production, in that sector we should be looking for support and a way out of this global crisis. Some future research could deal with how not only the increase in food prices, but also the increase in production would have a positive effect on our GDP. An increase in production in the food sector would certainly affect the stabilization of prices in the population's consumer basket, which in the long run could affect the reduction of inflationary pressure and the stabilization of real wages.

## **REZIME**

### **UTICAJ SMO U UKRAJINI NA GDP I INFLACIJU U EU SA OSVRTOM NA SRBIJU**

Ozbiljnost uvedenih sankcija, pre svega od strane Evropske unije, jasan je pokazatelj potencijalno teških scenarija za ishode na ekonomskom i finansijskom tržištu. U najgorem mogućem scenariju, gde bi Rusija potpuno zaustavila isporuke gasa Evropi, cene ovog energenta bi imale veliki skok, s obzirom na to da su alternativni dobavljači ograničeni. To bi svakako dovelo do velikih ograničenja kada je u pitanju ekonomski rast EU, a posebno kada je u reč o komparativnoj industrijskoj prednosti evropskih proizvođača, koju zbog ovakvog razvoja situacije ubrzano gubi.

Ni Srbija nije izuzeta od negativnih efekata onoga što se dešava na svetskoj sceni, a posledice sankcija se kod nas veoma dobro osećaju i utiču na

povećanje cena životnih namirnica i nominalni rast zarada. Inflatorni pritisak očigledno jača i ima posledice na ionako nizak kvalitet života u Srbiji.

*Ključne reči:* Evropska Unija, SMO u Ukrajini, sankcije, kriza, GDP, inflacija

## REFERENCES

1. Coface Economic Research team (2022). *Economic consequences of the Russia/Ukraine conflict: stagflation ahead*, <https://www.coface.com/News-Publications/News/Economic-consequences-of-the-Russia-Ukraine-conflict-Stagflation-ahead>
2. European Investment Bank, (2022). *How bad is the Ukraine war for the European recovery?* [https://www.eib.org/attachments/publications/how\\_bad\\_is\\_the\\_ukraine\\_war\\_for\\_the\\_european\\_recovery\\_en.pdf](https://www.eib.org/attachments/publications/how_bad_is_the_ukraine_war_for_the_european_recovery_en.pdf)
3. Europ.Info, (2022). *How the Ukraine-Russia war rattled global financial markets* – Reuters, <https://europ.info/2022/08/24/countries/ukraine/how-the-ukraine-russia-war-rattled-global-financial-markets-reuters/>
4. Friedman, M., (1968), *The role of Monetary Policy*, AER, pg, 250-252.
5. Hadžić, M., Barjaktarović, L,( 2015), *Monetarna ekonomija*, Univerzitet Singidunum, Beograd
6. Lanktree, G. (2022), *Businesses in Britain, EU brace for impact of Ukraine conflict*, from <https://www.politico.eu/article/businesses-in-britain-and-europe-brace-for-impact-of-ukraine-conflict/>
7. Morgan Stanley Europea,(Mart 2022). *Invasion of Ukraine: euro area banks so far resilient to a second exogenous shock*, [www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.en.pdf](http://www.bankingsupervision.europa.eu/press/speeches/date/2022/html/ssm.sp220315~e641a6f3e4.en.pdf)
8. National Bank of Serbia, [https://nbs.rs/sr\\_RS/drugi-nivo-navigacije/statistika/](https://nbs.rs/sr_RS/drugi-nivo-navigacije/statistika/)
9. OECD Economic Outlook, Interim Report, (2022. ) *Economic and Social Impacts and Policy Implications of the War in Ukraine*, <https://www.oecd.org/publications/impacts-of-the-russian-invasion-of-ukraine-on-financial-market-conditions-and-resilience-879c9322-en.htm>
10. OECD (2022), *Impacts of the Russian Invasion of Ukraine on Financial Market Conditions and Resilience: Assessment of Global Financial Markets*, Publishing, Paris, <https://www.oecd.org/publications/impacts-of-the-russian-invasion-of-ukraine-on-financial-market-conditions-and-resilience-879c9322-en.htm>

11. Pabriks, A., & Kudors, A. (Eds.). (2015). *The war in Ukraine: Lessons for Europe*. The Centre for East European Policy Studies.
12. Табаковић, Ј., (2022). *Извештаја о инфлацији – август*, NBS [https://www.nbs.rs/export/sites/NBS\\_site/documents/publikacije/ioi/prezentacije/govor\\_ioi\\_08\\_2022\\_JT.pdf](https://www.nbs.rs/export/sites/NBS_site/documents/publikacije/ioi/prezentacije/govor_ioi_08_2022_JT.pdf)
13. Thomas, L., & Strupczewski, J. (2022). *Ukraine crisis will hit economy but EU is ready, officials say*. Reuters. Retrieved March 4, 2022, from <https://www.reuters.com/markets/europe/eu-ready-take-economicpain-imposing-sanctions-russia-2022-02-25/>
14. UN (2022), *Global impact of the war in Ukraine: Billions of people face the greatest cost-of-living crisis in a generation* <https://www.unep.org/resources/publication/global-impact-war-ukraine-billions-people-face-greatest-cost-living-crisis> ,. [https://news.un.org/pages/wpcontent/uploads/2022/06/GCRG\\_2nd-Brief\\_Jun8\\_2022\\_FINAL.pdf](https://news.un.org/pages/wpcontent/uploads/2022/06/GCRG_2nd-Brief_Jun8_2022_FINAL.pdf)
15. Wiseman, P. (2022, March 2). *Economic dangers from Russia's invasion ripple across Globe*. AP NEWS. Retrieved March 4, 2022, from <https://apnews.com/article/russia-ukraine-vladimir-putin-coronavirus-pandemicbusiness-health-9478a9825c9abfde5f6505bd34b2998c>

Ovaj rad je primljen **23.10.2022.**, a na sastanku redakcije časopisa prihvaćen za štampu **27.12.2022.** godine.

**Radojko Lukić<sup>1</sup>, PhD, Full professor**

Faculty of Economics,

University of Belgrade, Serbia

## **ANALYSIS OF ECONOMIC PERFORMANCE OF TRADE COMPANIES IN SERBIA**

**ABSTRACT:** The issue of analysis of economic performance in commercial enterprises in this paper is investigated from the angle of the impact of labor process factors (fixed, working capital and human capital) on profitability and efficiency, on the example of trade enterprises in Serbia. performance. The economic performance of trade companies in Serbia is significantly affected by fixed and working capital. The impact of human capital is moderate. In the future, in order to improve the economic performance of trade companies in Serbia, it is necessary to more efficiently manage human capital through training, salary, improvement of managerial position, compensation.

*Key words :* fixed assets, current assets, earnings per employee, ratio analysis, statistical analysis, DEA models, Serbian trade

### **INTRODUCTION**

In order to improve the economic performance of commercial enterprises, it is generally necessary to manage fixed, working and human capital as efficiently as possible. With this in mind, the subject of research in this paper is the impact of labor process factors (fixed assets, working capital

---

<sup>1</sup> radojko.lukic@ekof.bg.ac.rs

and human labor) on the economic performance of trade enterprises in Serbia. The purpose and goal of the given research is to deal with the treated issues as complex as possible, and to propose adequate measures for improving the economic performance of trade companies in Serbia in the future. This, among other things, reflects the scientific and professional contribution of this paper.

In recent times, as is well known, there is a very rich literature dedicated to the analysis of economic and financial performance in trade from different research angles - factors and measurement (Berman, 2018; Frei, 2022). Also, a very rich world literature is devoted to evaluating the efficiency and productivity of all enterprises, including trade, based on DEA (Data Envelopment Analysis) models, application of AHP (Analytical Hierarchical Process) and TOPSIS methods, econometrics, regression analysis (Malmquist, 1953; Asmild, 2004; Andersen, 1993; Donthu, 1998; Tone, 2001; Tone, 2002; Tone, 2009; Tone, 2010; Asmild, 2004; Fare, 1994; Fare, 1995; Moreno, 2010; Vaz, 2010; Wang, 2011; Moreno, 2011; Vaz, 2012; Lau, 2013; Lee, 2013; Gandhi, 2014; Al-Refaae, 2015; Anand, 2015; Majumdar, 2017; Barros, 2004; Barros, 2006; Bambe, 2017; Qiu, 2017; Sarmento, 2017; Ko, 2017; Hsu, 2018; Haidar, 2018; Camanho, 2009; Caves, 1982; Jorge, 2009; Melo, 2018; Yu, 2009; Busu, 2020; Cheng, 2020; Ali, 2018; Bhargava, 1998; Cheng, 2020; JCTrejo García et al. 2017; Karan, 2008; Keener, 2013; Kingyens, 2012; Laitinen, 1999; Manini, 2018; Mihalović, 2016; Rogova, 2018; Sami Mestiri, 2012; Simbolon, 2017). However, when it comes to literature in Serbia, it is still not at an enviable level, i.e. there are few extensive papers dedicated to the analysis of economic and financial performance of trade companies in Serbia using modern mathematical models and methods (Analytical Hierarchical Process - AHP, Data Envelopment Analysis - DEA, TOPSIS and others), econometric and statistical analysis (Lukic, 2011; Lukic, 2015; Lukic, 2018; Lukic, 2019; Lukic et al., 2019; Lukic et al., 2020). This gap should be filled to some extent by this paper, and this, among other things, reflects his scientific and professional contribution.

A complex analysis of the economic performance of trade in Romania was carried out (Busu et al., 2020). Almost the same analysis is applied in this paper on the example of trade in Serbia.

The basic research hypothesis in this paper is that continuous monitoring of the economic situation of all companies, which means trade, provides a basis for improvement in the future and taking appropriate measures. This is especially true in the case of trading companies in Serbia.

The research methodology of the treated issues in this paper is based on ratio analysis, comparative analysis, statistical analysis and DEA (Data Envelopment Analysis) approach. The comparative results obtained by applying the given methodology enable a better understanding of the situation

regarding the economic performance of trade in Serbia as a function of strengthening it in the future by applying relevant measures.

Necessary empirical data for the research of the treated issues in this paper were collected from the Agency for Business Registers of the Republic of Serbia for the period 2013 – 2021. They are “manufactured” in accordance with relevant international standards and there are no restrictions on international comparison.

### **INFLUENCE OF WORK PROCESS ON ECONOMIC PERFORMANACE OF TRADE COMPANIES IN SERBIA**

Three important factors of the work process in all companies, which means in trade, are fixed assets, working capital and human labor (Lukic, 2020a,b,c, 2021a,b,c,d,e,f, 2022a,b,c,d,e,f,g). Their effective control can significantly affect the achievement of targeted economic performance. We will analyze the impact of work process factors on the economic performance of trade companies in Serbia by applying ratio analysis and statistical analysis. In the context of ratio analysis, in this paper we will pay special attention to the return on fixed and working capital and earnings per employee in trade companies in Serbia.

Table 1 shows the initial input / output data for the analysis of economic performance of trade enterprises in Serbia. Table 2 shows the input / output data statistics.

*Table 1.* – Initial input / output data for the analysis of economic performance of trade enterprises in Serbia

<b>Year</b>	<b>(I) Fixed assets</b>	<b>(I) Current assets</b>	<b>(I) Number of employees</b>	<b>(O) Earnings before interest and taxes (EBIT)</b>	<b>(O) Net profit</b>
2013	790448	1361155	193210	124241	89730
2014	750729	1318032	191621	112922	79234
2015	802193	1424135	159621	135916	102303
2016	800659	1503476	206092	133277	102002
2017	817685	1568615	208020	159613	126734
2018	856181	1638588	219373	148905	116386
2019	932421	1744078	222049	171642	139409
2020	962951	1861105	230139	198377	162184

2021	1099726	2057718	234727	245546	208075
------	---------	---------	--------	--------	--------

*Note: Data are expressed in millions of dinars. Number of employees in the whole number*

*Source: Agency for Business Registers of the Republic of Serbia*

**Table 2. – Data input / output statistics**

		Minimum	Maximum	Mean	Std. Deviation
Fixed assets		750729.00	1099726.00	868110.3333	110773.44380
Current assets		1318032.00	2057718.00	1608544.6670	244196.45690
Number of employees		159621.00	234727.00	207205.7778	23336.38395
Earnings before interest and taxes (EBIT)		112922.00	245546.00	158937.6667	41576.34872
Net profit		79234.00	208075.00	125117.4444	40235.82024
N Valid N (listwise)		9	9	9	9
N Missing		0	0	0	0
<b>Correlations</b>					
		1	2	3	4
1 Fixed assets	Pearson Correlation	1	.975**	.747*	.978**
	Sig. (2-tailed)		.000	.021	.000
	N	9	9	9	9
2 Current assets	Pearson Correlation	.975**	1	.820**	.974**
	Sig. (2-tailed)	.000		.007	.000
	N	9	9	9	9
3 Number of employees	Pearson Correlation	.747*	.820**	1	.732*
	Sig. (2-tailed)	.021	.007		.025
	N	9	9	9	9
4 Earnings before interest and taxes (EBIT)	Pearson Correlation	.978**	.974**	.732*	1
	Sig. (2-tailed)	.000	.000	.025	
	N	9	9	9	9
5 Net profit	Pearson Correlation	.978**	.979**	.740*	.999**
	Sig. (2-tailed)	.000	.000	.023	.000
	N	9	9	9	9
**. Correlation is significant at the 0.01 level (2-tailed).					

*Note: Author's calculation using the SPSS software program*

There is a strong correlation between the analyzed variables at the level of statistical significance.

**Return on fixed and working capital** is a significant indicator of profitability. In this paper, it is expressed as: earnings before interest and taxes (EBIT) / fixed assets, net profit / fixed assets, earnings before interest and taxes

(EBIT) / current assets and net profit / current assets. Earnings before interest and taxes (EBIT) are determined as the sum of net profit, interest and taxes. Table 3 shows the return on fixed and working capital of trade companies in Serbia for the period 2013 - 2021.

*Table 3. – Return on fixed and working capital of trade companies in Serbia, 2013 - 2021*

Year	Earnings before interest and taxes (EBIT) / Fixed assets	Net profit / Fixed assets	Earnings before interest and taxes (EBIT) / Current assets	Net profit / Current assets
2013	15.72%	11.35%	9.13%	6.59%
2014	15.04%	10.55%	8.57%	6.01%
2015	16.94%	12.75%	9.54%	7.18%
2016	16.65%	12.74%	8.86%	6.78%
2017	19.52%	15.50%	10.18%	8.08%
2018	17.39%	13.59%	9.09%	7.10%
2019	18.41%	14.95%	9.84%	7.99%
2020	20.60%	16.84%	10.65%	8.71%
2021	22.32%	18.03%	11.93%	10.11%

*Note:* Author's calculation

The data in the given table show the tendency to increase the return on fixed and working capital (as indicators of profitability) in Serbian trade companies. This means, in other words, that the efficiency of managing all assets (fixed and current assets) has increased.

Recently, as it is known, the **earnings per employee** is one of the most important indicators of the performance of all companies, which means trade. It shows, among others, the influence of "invisible" characteristics of employees (for example, skill, creativity) on performance. Table 4 shows the earnings per employee in Serbian trade companies for the period 2013 - 2021.

*Table 4. – Earnings per employee in trade companies of Serbia, 2013 -2021*

Year	Fixed assets per employee	Current assets per employee	Earnings before interest and taxes (EBIT) per employee	Net profit per employee	Coefficient of ratio of current and fixed assets
2013	4091.134	7044.951	643.0361	464.417	1.722004
2014	3917.78	6878,328	589.2987	413.4933	1.755669
2015	5025.611	8921.978	851,492	640.9119	1.775302



2016	3884.959	7295.169	646.6869	494.9343	1.877798
2017	3930.8	7540.693	767.2964	609.2395	1.918361
2018	3902.855	7469.415	678.7754	530.5393	1.913834
2019	4199.168	7854.474	772.9915	627.8299	1.870483
2020	4184.214	80086.873	861.987	704.721	1.932709
2021	4685.247	8766.430	1046.118	886.455	1.871118

*Note:* Data are expressed in millions of dinars. Author's calculation

The data in the given table show the tendency to increase earnings per employee (as performance indicators) in Serbian trade companies. This was influenced, in addition to external ones, by the significant improvement of internal business conditions of a material and technical nature, as well as the increased efficiency of human resources management.

Using the **linear regression model**, we will look at the impact of fixed, working capital and human capital on the performance of trading companies in Serbia. The linear regression equation is:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e \quad (1)$$

where: Y - net profit, X<sub>1</sub> - fixed assets, X<sub>2</sub> - current assets, X<sub>3</sub> - number of employees, a and b - coefficients, and e - random error.

In Table 5 shows the results of linear regression.

*Table 5.* – Results of the application of linear regression in the analysis of the influence of work process factors on the economic performance of trade enterprises in Serbia

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.987 <sup>a</sup>	.975	.960	8070.11161	.975	64.621	3	5	.000	2.329
a. Predictors: (Constant), Number of Employees, Fixed Assets, Current Assets										
b. Dependent Variable: Net profit										
ANOVA <sup>a</sup>										
Model			Sum of Squares	df	Mean Square	F	Sig.			
1	Regression		12625736340.000	3	4208578779.000	64.621				
	Residual		325633507.100	5	65126701.410					

	Total	12951369840.000		8									
a. Dependent Variable: Net profit													
b. Predictors: (Constant), Number of Employees , Fixed Assets , Current Assets													
Coefficients <sup>a</sup>													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-133952.104	37672.133		-3.556	.016	-230791.404	-37112.804					
	Fixed Assets	.120	.126	.330	.951	.385	-.204	.444	.978	.391	.067	.042	23.961
	Current Assets	.127	.066	.770	1.909	.114	-.044	.298	.979	.649	.135	.031	32.332
	Number of Employees	-.237	.234	-.137	-1.013	.358	-.838	.365	.740	-.413	-.072	.273	3.661
a. Dependent Variable: Net profit													
Collinearity Diagnostics <sup>a</sup>													
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				(Constant)	Fixed assets	Current assets	Number of employees		
1	1	3.985	1.000					.00	.00	.00	.00		
	2	.012	18.587					.28	.00	.01	.00		
	3	.003	35.021					.12	.03	.00	.67		
	4	.000	116.738					.60	.96	.98	.33		
a. Dependent Variable: Net profit													
Residuals Statistics <sup>a</sup>													
		Minimum	Maximum	Mean	Std. Deviation	N							
Predicted Value		77880.5000	203352.5781	125117.4444	39726.77991	9							
Residual		-8229.65723	12921.76367	.00000	6379.98342	9							
Std. Predicted Value		-1.189	1.969	.000	1.000	9							
Std. Residual		-1.020	1.601	.000	.791	9							
a. Dependent Variable: Net profit													

*Note:* Author's calculation using the SPSS software program

There is a strong correlation between net profit and fixed and working capital (at the level of statistical significance). There is a moderate correlation between net profit and employment. This means, in other words, that even more work should be done to motivate employees to achieve the target profit in Serbian trade companies (through training, salary increases, better managerial positions, and compensation - bonuses). All three factors of the work process (fixed, working capital) are significantly integrated and determine the economic performance (net profit) of trade companies in Serbia (Adjusted R Square .844, Sig. .036).

The linear regression equation for trading companies in Serbia can therefore be formulated as:

$$Y = -133952.104 + .120X_1 + .127X_2 - .237X_3$$

Based on it, a projection of net profit for future observed time can be made period.

Using the **binary logistics model**, we will also investigate the impact of labor process factors (fixed, working capital and human capital) on the economic performance (net profit) of trade companies in Serbia.

Log analysis is a form of regression analysis in which the dependent variable is dichotomous, of the binary type known as the *dummy* variable. The binary logistics model is used to estimate the probability of an event occurring. It is formulated as:

$$Prob(event) = \frac{1}{1 + e^{-z}} \quad (2)$$

For one independent variable

$$z = b_0 + b_1x_1$$

For multiple independent variables

$$z = b_0 + b_1x_1 + b_2x_2 + b_nx_n$$

where:  $b_0$  and  $b_1, b_2$  - coefficients (estimated from data),  $x_1, x_2$  - independent variables,  $n$  - number of independent variables, and  $e$  - basis of natural logarithm (2,781).

Due to the nonlinearity of the model, the maximum probability method is used to calculate the coefficients, instead of the most commonly used least squares method. If the independent variable is equal to 0, the probability of

the event is determined by the segment (  $b_0$  ). If the regression coefficient is positive (negative), the risk factor increases (decreases) the probability of the event.

Table 6 shows the initial data for the application of the binary logistics model in the analysis of the impact of labor process factors on the economic performance (net profit) of trade enterprises in Serbia.

*Table 6.* – Initial data for the application of the binary logistics model in the analysis of the impact of labor process factors on economic performance (net profit) of trade enterprises in Serbia, 2013 - 2021

Year	(I) Fixed assets (in millions of dinars)	(I) Current assets (in millions of dinars)	(I) Number of employees	Economic performance, good 1, bad 0 *
2013	790448	1361155	193210	1
2014	750729	1318032	191621	1
2015	802193	1424135	159621	1
2016	800659	1503476	206092	0
2017	817685	1568615	208020	1
2018	856181	1638588	219373	0
2019	932421	1744078	222049	1
2020	962951	1861105	230139	1
2021	1099726	2057718	234727	1

*Note:* \* Author's calculation

Table 7 shows the results of the application of the binary logistics model in the analysis of the impact of labor process factors on the economic performance (net profit) of trade enterprises in Serbia.

*Table 7.* – The results of the application of the binary logistics model in the analysis of the impact of labor process factors on the economic performance (net profit) of trade enterprises in Serbia.

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	9.535	3	.023
	Block	9.535	3	.023
	Model	9.535	3	.023
Model Summary				
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	
1	.000 <sup>a</sup>	.653	1.000	

a. Estimation terminated at iteration number 20 because maximum iterations has been reached.  
Final solution cannot be found.

### Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.000	5	1.000

### Contingency Table for Hosmer and Lemeshow Test

		Economic performance = .00		Economic performance = 1.00		Total
		Observed	Expected	Observed	Expected	
Step 1	1	1	1.000	0	.000	1
	2	1	1.000	0	.000	1
	3	0	.000	1	1.000	1
	4	0	.000	1	1.000	1
	5	0	.000	1	1.000	1
	6	0	.000	1	1.000	1
	7	0	.000	3	3.000	3

### Classification Table<sup>a,b</sup>

		Predicted			
		VAR00004		Percentage Correct	
		.00	1.00		
Step 0	VAR00004	.00	0	2	.0
		1.00	0	7	100.0
	Overall Percentage				77.8

a. Constant is included in the model.

b. The cut value is .500

### Classification Table<sup>a</sup>

		Predicted			
		Economic performance		Percentage Correct	
		.00	1.00		
Step 1	Economic performance	.00	2	0	100.0
		1.00	0	7	100.0
	Overall Percentage				100.0

a. The cut value is .500

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Fixed assets	.001	.298	.000	1	.998	1.001
	Current assets	.001	.182	.000	1	.997	1.001
	Number of employees	-.014	2.336	.000	1	.995	.986
	Constant	1272.488	248875.231	.000	1	.996	.
a. Variable(s) entered on step 1: Fixed assets, Current assets, Number of employees.							
Correlation Matrix							
		Constant	Fixed assets	Current assets	Number of employees		
Step 1	Constant	1.000	-.285	.943	-.916		
	Fixed assets	-.285	1.000	-.452	-.093		
	Current assets	.943	-.452	1.000	-.836		
	Number of employees	-.916	-.093	-.836	1.000		

*Note:* Author's calculation using the SPSS software program

The data in the given table show that the factors of the labor process (fixed, working capital and human capital) affect the economic performance of trade companies in Serbia with about 70% (Cox & Snell R Square .653), or 100% (Nagelkerke R Square 1.000). The binary regression model agrees well with the data (Hosmer and Lemeshow Test - Sig. 1.000 > .05), the observed and expected frequencies do not differ significantly (Contingency Table for Hosmer and Lemeshow Test). The method is correct (Overall Percentage 100.0) and it is therefore significantly improved compared to the initial (zero) (Overall Percentage 77.8%).

The binary logistics model for trade companies in Serbia can, therefore, be expressed as:

$$Prob(event) = \frac{1}{[1 + e^{-(1272.488 + .001x_1 + .001x_2 - .014x_3)}]}$$

$$Z = 1272.488 + .001x_1 + .001x_2 - .014x_3$$

Based on it, we can calculate the probability of the occurrence of a certain event, in our case the good or bad economic performance of trade companies in Serbia.

## ANALYSIS OF THE EFFICIENCY OF TRADE COMPANIES IN SERBIA BASED ON THE DEA MODEL

We will perform the analysis of the efficiency of trade companies in Serbia only on the basis of the DEA model of entry orientation, with a constant and variable returns. This is because the focus of this paper is on the analysis of the impact of labor process factors (fixed, working capital and human capital) on the performance / efficiency of trade companies in Serbia.

The two basic DEA models are: CCR (Constant Returns) and BCC (Variable Returns).

The **CCR model** is based on a fixed or constant scale returns. This means that a proportional increase in all inputs results in the same proportional increase in all outputs. The dual of CCR efficiency is expressed as:

$$\text{Min } \theta$$

under restriction

$$\sum_{j=1}^n \lambda_j x_{ij} \leq \theta x_{io} \quad i = 1 \dots m$$

$$\sum_{j=1}^n \lambda_j y_{kj} \geq y_{ko} \quad k = 1 \dots s$$

$$\lambda \geq 0 \quad j = 1 \dots n \quad (3)$$

where  $\theta$  technical efficiency of DMU units is 0,  $\lambda$  is a dual variable for identifying comparable inefficient units. If  $\theta^*$  is equal to the value of one, the observed DMU unit is technically efficient.

A firm is efficient (financially non-risky) if the value of the coefficient is equal to one. However, it is inefficient (financially risky) if the value of the coefficient is less than one. The closer it is to zero, the more "disturbing" it is.

The concept of the CCR model has been modified with the introduction of the **BCC model** (by *Banker-Charnes-Cooper*) by changing the constant returns from scale (CRS) with variable returns from scale (VRS). A DMU unit operates under a variable returns from the scale if an increase in input does not result in a proportional change in output. The BCC model is shown as follows:

$$\text{Min } \theta$$

under restriction

$$\begin{aligned} \sum_{j=1}^n \lambda_j x_{ij} &\leq \theta x_{io} & i = 1 \dots m \\ \sum_{j=1}^n \lambda_j y_{kj} &\geq y_{ko} & k = 1 \dots s \\ \sum_{j=1}^n \lambda_j &= 1 & j = 1 \dots n \\ \lambda_j &\geq 0 & \end{aligned} \quad (2)$$

The BCC model divides the technical efficiency ( *TE* ) obtained by the CCR model into two parts: 1) pure technical efficiency (PTE), which ignores the influence of scale size by comparing DMU units with similar scale units and measures how DMU units use sources under exogenous conditions; and 2) scale efficiency ( *SE* ), which shows how scale size affects efficiency, and is expressed as:  $SE = TE / PTE$ .

In this cancer, the input elements are: fixed assets, current assets and the number of employees, and as output: earnings before interest and taxes (EBIT) and net profit.

Table 8 and Figures 1 and 2 show the results of the analysis of the efficiency of trade enterprises in Serbia based on the DEA model of entry orientation, with constant and variable returns.

*Table 8.* – Efficiency of trade enterprises in Serbia, DEA models (CCR-I; BCC-I)

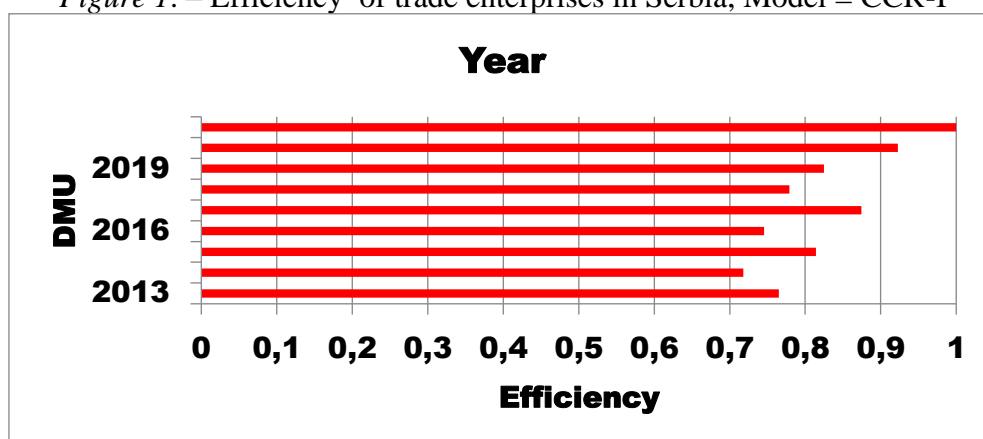
No.	DMU	Model = CCR-I		Model = BCC-I		RTS of Projected DMU
		Score	Rank	Score	Rank	
1	2013	0.7649	7	1	1	Increasing
2	2014	0.718	9	1	1	Increasing
3	2015	0.814	5	1	1	Increasing
4	2016	0.7455	8	0.9777	7	Increasing
5	2017	0.8742	3	1	1	Increasing



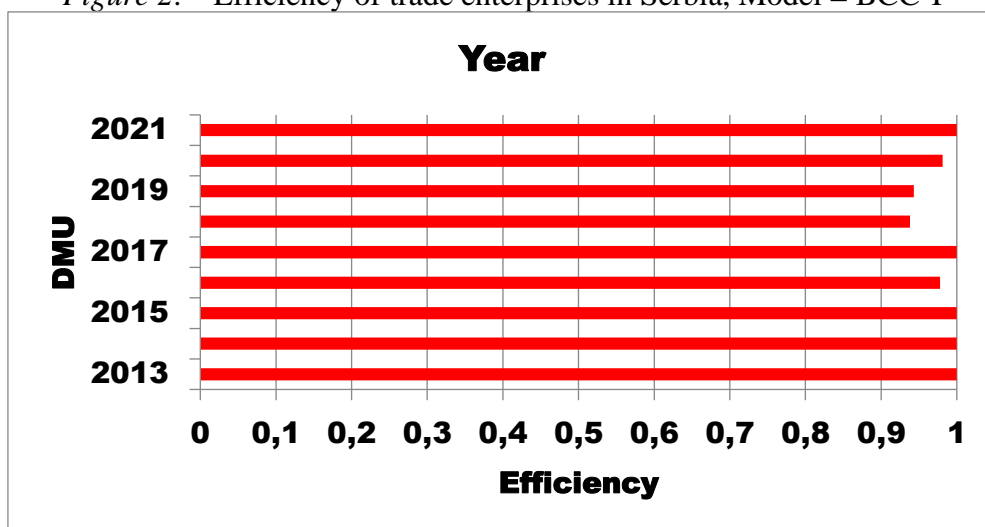
6	2018	0.7789	6	0.938	9	Increasing
7	2019	0.8247	4	0.943	8	Increasing
8	2020	0.9227	2	0.981	6	Increasing
9	2021	1	1	1	1	Constant
	Average	0.827	No. of Efficient DMUs = 1	0.982	No. of Efficient DMUs = 5	
	Max	1	No. of Inefficient DMUs = 8	1	No. of Inefficient DMUs = 4	
	Min	0.718		0.938		
	St Dev	0.091		0.025		

*Note:* Author's calculation using DEA-Solver

*Figure 1.* – Efficiency of trade enterprises in Serbia, Model = CCR-I



*Source:* Authors

*Figure 2. – Efficiency of trade enterprises in Serbia, Model = BCC-I*

*Source: Authors*

In the period 2013-2021 according to the CCR-I model, trade companies in Serbia were efficient in 2021 and inefficient in other years. According to the BCC-I model, trade companies in Serbia were efficient in 2013, 2014, 2015, 2017 and 2021, and inefficient in 2016 and 2018. According to both models, trade companies in Serbia were inefficient in 2018. They are also efficient according to both models were efficient in 2021. In order to further improve the efficiency of trade companies in Serbia, it is therefore necessary to manage assets, human capital and profits even more efficiently.

## CONCLUSION

The conducted empirical analysis in this paper shows the tendency to increase the return on fixed and working capital in Serbian trade companies. This means, in other words, that the efficiency of management of all assets (fixed and current assets) has increased.

In the observed period of time, earnings per employee, as an indicator of profitability, also tended to increase in Serbian trade companies. This was influenced, in addition to external ones, by significantly improved internal business conditions of a material and technical nature (for example, digitalization of the entire business), as well as the efficiency of human capital management.

There is a strong correlation between net profit and fixed and working capital (at the level of statistical significance). There is a moderate correlation between net profit and employment. This means, in other words, that even

more work should be done to motivate employees to achieve the target profit in trade companies in Serbia (through training, salary increases, better managerial positions, and compensation - bonuses). Significantly integrated, all three factors of the work process (fixed, working capital and human capital) determine the net profit of trade companies in Serbia (Adjusted R Square .960, Sig. .000).

The paper formulates a linear regression equation that can be used to predict the economic performance of trade enterprises with Serbia for the future observed time period. Also, a binary logistics model was formulated to assess the probability of occurrence of the event, ie the character of economic performance (good or bad) of trade companies in Serbia.

In the observed time period (2013 - 2021) according to the CCR-I model trade companies in Serbia were efficient in 2021 and inefficient in other years. According to the BCC-I model, trade companies in Serbia were efficient in 2013, 2014, 2015, 2017 and 2021, and inefficient in 2016 and 2018. According to both models, trade companies in Serbia were inefficient in 2018. They are also efficient according to both models were efficient in 2021. In order to further improve the efficiency of trade companies in Serbia, it is therefore necessary to manage assets, human capital and profits even more efficiently.

## **REZIME**

### **ANALIZA EKONOMSKIH PERFORMANSI TRGOVINSKIH PREDUZEĆA U SRBIJI**

Problematika analiza ekonomskih performansi u trgovinskim preduzećima u ovom radu se istražuje iz ugla uticaja faktora procesa rada (fiksno, obrtno i ljudskog kapitala) na profitabilnost i efikasnost, na primeru trgovinskih preduzeća u Srbiji. Što je efikasnija kontrola faktora procesa rada, utoliko su bolje ekonomske performanse. Na ekonomske performanse trgovinskih preduzeća u Srbiji značajno utiče fiksni i obrtni kapital. Umeren je uticaj ljudskog kapitala. U budućnosti u cilju poboljšanja ekonomskih performansi trgovinskih preduzeća u Srbiji neophodno je što efikasnije upravljati ljudskim kapitalom putem treninga, visine plate, unapređenja menadžerske pozicije, kompenzacija i socijalnog i zdravstvenog osiguranja .

*Ključne reči:* fiksna imovina, obrtna imovina, zarada po zaposlenom, raco analiza, statistička analiza, DEA modeli, trgovina Srbije

## REFERENCES

1. Al-Refaie, A., Najdawi, R., Al-Tahat, M.D., Bata. N. (2015). Window Analysis and Malmquist Index for Accessing Efficiency in a Pharmaceutical Industry. *Proceedings of the World Congress on Engineering 2015 Vol 1 WCE 2015*, Jul 1-3, 2015, London, U.K.
2. ALI, IFTIKHAR. and ÖZARI, ÇİĞDEM, (June 2018). Estimating the Probability of Bankruptcy Using Z-score and Distance to Default Model: An Application on Istanbul Stock Exchange. *International Review of Management and Business Research*, 7(2), 491-503.
3. Andersen, P., & Petersen, N. C. (1993). A procedure for ranking efficient units in data envelopment analysis. *Management Science*, 39(10), 1261–1264.
4. Anand, N. and Grover, N. (2015). Measuring retail supply chain performance: Theoretical model using key performance indicators (KPIs). *Benchmarking: An International Journal*, 22(1), 135-166.
5. Asmild, M., Paradi, J.C., Aggarwall, V. and Schaffnit, C. (2004). Combining DEA Window Analysis with the Malmquist Index Approach in a Study of the Canadian Banking Industry. *Journal of Productivity Analysis*, 21, 67-89.
6. Barros, C.P. and Alves, C. (2004). An empirical analysis of productivity growth in a Portuguese retail chain using Malmquist Productivity index. *Journal of Retailing and Consumer Services*, 11, 269-278.
7. Barros, C.P. (2006). Efficiency measurement among hypermarkets and supermarkets and the identification of the efficiency drivers. *International Journal of Retail & Distribution Management*, 34(2), 135-154.
8. Bambe, D. (2017). The Productivity Impact of New Technology: Evidence from the US Retailers Industry. *Advances in Social Sciences Research Journal*, (422), 88-96.
9. Bhargava, M., Dubelaar, C. and Scott, T. (1998). Predicting bankruptcy in the retail sector: an examination of the validity of key measures of performance. *Journal of Retailing and Services*, 5(6), 105-117.
10. Berman, B., Evans, J.R. and Chatterjee, P. (2018). *Retail Management*. Pearson.
11. Busu, M., Vargas, M.V. and Gherasim, I.A. (2020). An analysis of the economic performance of the retail companies in Romania. *Management & Marketing. Challenges for the Knowledge Society*, 15(1), 125-135.
12. Camanho, A.S., Portela, M.C. and Vaz, C.B. (2009). Efficiency analysis accounting for internal and external non-discretionary factors. *Computers & Operations Research*, 36, 1591-1601.

13. Caves, W., Christensen, L.R., & Diewert, W.E. (1982). The economic theory of index numbers and the measurement of input, output and productivity. *Econometrica*, 50, 1393–1414.
14. Cheng, C.S.A., Chu, K.C.K. & Ohlson, J. (2020). Analyst forecasts: sales and profit margins. *Rev Account Stud* **25**, 54–83. <https://doi.org/10.1007/s11142-019-09521-z>.
15. Cheng Few Lee (Editor), John C. Lee (Editor), (2020). Handbook of Financial Econometrics, Mathematics, Statistics, and Machine Learning, World Scientific Publishing Co. Ltd. ISBN: 978-981-12-0238-4, Available at SSRN: <https://ssrn.com/abstract=3573241>.
16. Donthu, N. and Yoo, B. (1998). Retail Productivity Assessment Using Data Envelopment Analysis. *Journal of Retailing*, 74(1), 89-105.
17. Gandhi, A. and Shankar, R. (2014). Efficiency measurement of Indian retailers using Data Envelopment Analysis. *International Journal of Retail & Distribution Management*, 42(6), 500-520.
18. Fare, R., Grosskopf, S., Norris, M., & Zhang, Z. (1994). Productivity growth, technical progress, and efficiency change in industrialized countries. *American Economic Review*, 84, 66–83.
19. Fare, R., Grosskopf, S. & Roos, P. (1995). Productivity and quality changes in Swedish pharmacies. *International Journal of Production Economics*, 39(1/2), 137–147.
20. Frei, Regina, Lisa Jack, and Sally-Ann Krzyzaniak. (2022). Mapping Product Returns Processes in Multichannel Retailing: Challenges and Opportunities. *Sustainability*, 14(3), 1382. <https://doi.org/10.3390/su14031382>
21. Hsu, S.C. (2018). Performance Analysis for Major Chain Convenience Stores in Taiwan. *Journal of Social Science Studies*, 5(1), 2014-222.
22. Haidar, A. (2018). Mixture Models with Grouping Structure: Retail Analytics Applications. Wayne State University Dissertations. 1911. [https://digitalcommons.wayne.edu/oa\\_dissertations/1911](https://digitalcommons.wayne.edu/oa_dissertations/1911).
23. Hsu, S.C. (2018). Performance Analysis for Major Chain Convenience Stores in Taiwan. *Journal of Social Science Studies*, 5(1), 2014-222.
24. J.C. Trejo García et al. (2017), Credit risk management at retail in Mexico: An econometric improvement in the selection of variables and changes in their characteristics. *Contaduría y Administración*, 62, 399–418.
25. Jorge, J. and Suárez, C. (2009). Assessing productivity growth and technical efficiency in Spain's retail sector: An aggregate sectoral perspective. *Journal of Business and Retail Management Research*, 3(2), 1-19.
26. Karan, M.B., Ulucan, A. and Kaya, M. (2008). Estimation of credit risk of retail stores by using their payment history: A combined logistic

- regression and multi-dea. 5<sup>th</sup> International Scientific Conference Business and Management 2008, 16-17 May 2008, Vilnius, Lithuania, 222- 227.
27. Keener, M.H. (August 2013). Predicting the Financial Failure of Retail Companies In The United States. *Journal of Business & Economics Research*, 11(8), 373-380.
  28. Kingyens, Angela Tsui-Yin Tran (2012). Bankruptcy prediction of companies in the retail – apparel industry using data envelopment analysis. Degree of Doctor of Philosophy Graduate Department of Chemical Engineering and Applied Chemistry University of Toronto.
  29. Laitinen, T., Kankaanpää, M. (1999). Comparative analysis of failure prediction methods: the Finnish case. *The European Accounting Review*, 8 (1), 67–92.
  30. Ko, K., Chang, M., Bae, E-S., and Kim, D. (2017). Efficiency Analysis of Retail Chain Stores in Korea. *Sustainability*, 9, 1-14.
  31. Lau, K.H. (2013). Measuring distribution efficiency of a retail network through data envelopment analysis. *International Journal of Production Economics*, 146(2), 598-611.
  32. Lee, B.L. (2013). Productivity Performance of Singapore's Retail Sector: A Two-Stage Non-Parametric Approach. *Economic Analysis & Policy*, 43(1), 67- .
  33. Lukić, R. (2011). *Evaluacija poslovnih performansi u maloprodaji*. Beograd: Ekonomski fakultet. (In Serbian: *Evaluation of business performance in retail*. Belgrade: Faculty of Economics)
  34. Lukic, R. (2015). The impact of firm size on the performance of trade in Serbia. *Economic and Environmental Studies*, 15(4), 379-395.
  35. Lukic, R. (2018). The Analysis of the Operative Profit Margin of Trade Companies in Serbia. *Review of International Comparative Management*, 19(9), 458-478.
  36. Lukić, R. (2019). Analiza efikasnosti trgovinskih preduzeća u Srbiji. *Zbornik radova Ekonomskog fakulteta Brčko*, 13(1), 2019, 15-27.
  37. Lukic, R. and Hadrovic Zekic, B. (2019). Evaluation of efficiency of trade companies in Serbia using the DEA approach. Proceedings of the 19 th International Scientific Conference Business logistics in modern management October 10-11, Osijek, Croatia, Josip Juraj Strossmayer University of Osijek, Faculty of Economics in Osijek, 145-165.
  38. Lukic, R, Hadrovic Zekic, B. and Crnjac Milic, D. (2020a). Financial performance evaluation of trading companies in Serbia using the integrated Fuzzy AHP - TOPSIS Approach. 9th International scientific symposium region, entrepreneurship, development, under the auspices of: Republic of Croatia ministry of science and education, Osijek, June, 690-703.

39. Lukic, R., Vojteski Kljenak, D. and Anđelić, S. (2020b). Analyzing financial performances and efficiency of the retail food in Serbia by using the AHP – TOPSIS method. *Economics of Agriculture*, Year 67, No. 1, 2020, (pp. 55-68), Belgrade.
40. Lukic, R. (2020c). Analysis of the efficiency of trade in oil derivatives in Serbia by applying the fuzzy AHP-TOPSIS method. *Business Excellence and Management*, 10 (3): 80-98.
41. Lukic, R. (2021a). Application of MABAC Method in Evaluation of Sector Efficiency in Serbia. *Review of International Comparative Management*, 22(3), 400-417. DOI: 10.24818/RMCI.2021.3.400
42. Lukic, R. (2021b). Application of electre method in performance analysis of food retailers in Serbia. *Business Excellence and Management*, 1(3): 84-102. DOI: <https://doi.org/10.24818/beman/2021.11.3-05>
43. Lukic, R. (2021c). Analysis of trade efficiency in Serbia based on the MABAC method. *Economic Outlook*, 23(2): 1-18.
44. Лукић, Р. (2021d). Анализа ефикасности трговинских предузећа у Србији на бази SAW методе. *Економски погледи*, 23(1):1-16.
45. Lukic, R. and Hadrovic Zekic, B. (2021e). Evaluation of transportation and storage efficiency in Serbia based on ratio analysis and the ocr method. Proceedings of the 21 th International Scientific Conference Business logistics in modern management October 7-8, Osijek, Croatia, Josip Juraj Strossmayer University of Osijek, Faculty of Economics in Osijek, 189-200.
46. Lukic, R. and Kozarevic, E. (2021f). Application of ARAS method in assessment of trade efficiency in Serbia. December 2021, Conference: 7<sup>th</sup> Scientific Conference with International Participation “Economy of Integration” I C E I 2021 – Economic Response and Crisis Recovery Caused by the Covid-19 Pandemic. At: Tuzla, Bosnia and Herzegovina, 21-30.
47. Lukic, R.(2022a). Application of MARCOS method in evaluation of efficiency of trade companies in Serbia. *Економски погледи – Economic Outlook*, 24(1):1-14. DOI: 10.5937/ep24-38921
48. Lukic, R. (2022b). Application of the MARCOS Method in Analysis of the Positioning of Electronic Trade of the European Union and Serbia. *Informatica Economică*, vol. 26, no. 3/2022, 50-63. DOI: 10.24818/issn14531305/26.3.2022.05
49. Lukic, R. (2022c). Employee costs of distribution trade of the European Union and Serbia. *Business excellence and management*, 12(3), 60-76. DOI: <https://doi.org/10.24818/beman/2022.12.3-05>

50. Lukic, R.(2022d). Operating costs of trade in serbia. *Southeast European Review of Business and Economics*, 3(1), 26-43. DOI: 10.20544/SERBE.05.01.22. P02
51. Lukić, R. (2022e). Performansna analiza distribucione trgovine Evropske unije i Srbije. Performance Analysis of the Distribution Trade of the European Union and Serbia. Izzivi Globalizacije In Družbenoekonomsko Okolje Eu – Globalisation Challenges and The Socioeconomic Environment Of The Eu, Zbornik Prispevkov – Conference Proceedings 11. Mednarodna znanstvena konferenca - 11<sup>th</sup> International Scientific Conference Novo mesto, 19. maj 2022, University of Novo mesto Faculty of Economics and Informatics – Univerza v Novem mestu Fakulteta za ekonomijo in informatiko. Kataložni zapis o publikaciji (CIP) pripravili v Narodni in univerzitetni knjižnici v Ljubljani COBISS.SI-ID 130333443 ISBN 978-961-6770-56-9 (PDF), 327-335.
52. Lukic, R. (2022f). Analysis of Kosovo and Metohija Trade Performance. *Management and Economics Review*, 7(3), 379-391. DOI: 10.24818/mer/2022.10-08
53. Lukić, R. and Hadrović Zekić, B. (2022). Efficiency analysis of trade companies in serbia using the aras method. 22 nd international scientific conference Business Logistics in Modern Management, Josip Juraj Strossmayer University of Osijek Faculty Of Economics In Osijek, October 6-7, 2022, Osijek, Croatia, 105-119.
54. Majumdar, S. and Asgari, B. (2017). Performance Analysis of Listed Companies in the UAE-Using DEA Malmquist Indeks Approach. *American Journal of Operations research*, 7, 133-151.
55. Malmquist, S.(1953).Index numbers and indifference surfaces. *Trabajos de Estadística*, 4, 209–242.
56. Melo, F.L., Sampaio, R.M.B. (2018). Efficiency, productivity gains, and the size of Brazilian supermarkets. *International Journal of Production Economics*, 197, 99-111.
57. Manini, R. and Amat, O. (2018). Credit scoring for the supermarket and retailing industry: Analysis and application proposal. Economics Working Paper Series, *Working Paper* No. 1614, Universitat Pompeu Fabra, Barcelona, Department of Economics and Business, 1-14.
58. Mihalovič, M. (2016), Performance Comparison of Multiple Discriminant Analysis and Logit Models in Bankruptcy Prediction, *Economics and Sociology*, Vol. 9, No 4, pp. 101-118. DOI: 10.14254/2071-789X.2016/9-4/6.
59. Moreno, J.J. (2010). Productivity growth of European Retailers: a benchmarking approach. *Journal of Economic Studies*, 37(3), 288-313.
60. Moreno, J.J. and Maria, S-T. (2011). Estimating technical efficiency and bootstrapping Malmwuist indices: Analysis of Spanish retail sector.



- International Journal of Retail & Distribution Management*, 39(4), 272-288.
61. Rogova, E. and Blinova, A. (2018). The Technical Efficiency of Russian Retail Companies: An Empirical Analysis. *Zesz. Nauk. UEK*, 5 (977), 171–185.
  62. Sami Mestiri & Manel Hamdi (2012). Credit Risk Prediction: A comparative study between logistic regression and logistic regression with random effects. *International Journal of Management Science and Engineering Management*, 7:3, 200-204, DOI: 10.1080/17509653.2012.10671224.
  63. Sarmiento, J., Renneboog, L. and Matos, P.V. (2017). Measuring highway efficiency by a DEA approach and Malmquist index. *European Journal of Transport and Infrastructure Research EJTIR*, 17(4), 530-551.
  64. Tone, K. (2001). A slacks-based measure of efficiency in data envelopment analysis. *European Journal of Operational Research*, 130, 498-509.
  65. Tone, K. (2002). A slacks-based measure of super-efficiency in data envelopment analysis. *European Journal of Operational Research*, 143, 32-41.
  66. Tone K, Tsutsui M. (2009). Network DEA: a slacks-based measure approach. *European Journal of Operational Research*, 197, 243–252.
  67. Tone K, Tsutsui M. (2010). Dynamic DEA: a slacks-based measure approach. *Omega*, 38, 145-156.
  68. Qiu, C. and Meng, L. (2017). Study on total factor productivity of retail industry in east China. *Advances in Economics, Business and Management Research*, 33, 756-763.
  69. Vaz, C.B., A.S. Camanho, A.S. and Guimarães, R.C. (2010). The assessment of retailing efficiency using Network Data Envelopment Analysis. *Annals of Operations Research*, 173(1), 5-24.
  70. Vaz. C.B. and Camnho, A.S. (2012). Performance comparison of retailing stores using a nalmguist-tyupe index. *The Journal of Operational Research Society*, 63(5), 631-645.
  71. Wang, Z-M. and Lan, Z-X. (2011). Measuring Malmquist productivity index: A new approach based on double frontiers data envelopment analysis. *Mathematical and Computer Modelling*, 54, 2760-2771.
  72. Yu, W. and Ramanathan, R. (2009). An assessment of operational efficiency of retail firms in China. *Journal of Retailing and Consumer Services*, 16, 109-122.

Ovaj rad je primljen **15.05.2022.**, a na sastanku redakcije časopisa prihvaćen za štampu **27.12.2022.** godine.

**Ivana Vladimirović, MSc, Lecturer<sup>1</sup>**

Academy of Vocational Studies Šabac,

Department of Agricultural Business Studies and Tourism

**Jelena Jevtić, PhD, Senior Lecturer<sup>2</sup>**

Academy of Vocational Studies Šabac,

Department of Medical and Business Technology Studies

## **MARKETING POSITIONING AND BRANDING OF SERBIAN WINES**

**ABSTRACT:** The purpose of the academic study is establishing a clear vision and objective in the process of Serbian wine branding in the demanding international market. Wines produced with as few oenological interventions or manipulations as possible, combined with a significant amount of faith and quality assurance certainly make a good foundation for success. The comparative method with the viticultural and winemaking situation in Croatia has been applied. The wines made from local and indigenous sorts have the greatest chance of the global market positioning. The indigenous sorts of wine, Tamjanika and Prokupac may be a significant brand in Serbian wine and gastronomic offer, as well as an ideal opportunity for a creative performance which must be accompanied with an elegant wine label and luxurious package. A very good quality of our indigenous sorts of grapes is often hidden by excessive barricading and attempts to create a spectacular sort of wine, which contributes to loss of authenticity. It is possible to overcome the former branding deficiencies in the demanding and quite

---

<sup>1</sup> ivanavl85@mts.rs

<sup>2</sup> jevticj.vts@gmail.com

---

saturated markets through joint and planned activity, by grouping all the countries in the Balkans region, which is a familiar term to the consumers in the global market.

*Key words:* branding, wine, autochthonous sorts, Serbia, global market, positioning, authenticity, comparative analysis

## INTRODUCTION

Serbia has excellent gastronomic and wine offer, but it still lacks in quality communication. The only way to success of the domestic products in the saturated and demanding international market is a well-designed investment in communication with potential markets.

After the World War II, winemaking passed into the hands of big state-owned companies and combines, so that the winemakers were forced to produce grapes which they would then deliver. Literally, they would *deliver*, *not sell* them to big public combines, which would pay for them whenever they wanted and at the price they set themselves. It was a highly unprofitable business, since the vine growers were nothing but mere producers of cheap raw materials, i.e. grapes, while the privilege of wine production was in the hands of the state. Quantity, not quality was the indicator of success in winery business. Table wines, without geographical origin and grape assortment prevailed in the offered selection of wines. Serbian wine was on its knees until 1990s.

The 1990 Privatization Law allowed the private person to have their label. Wine production was cut down from former 100,000 hectares of the planted vines to one quarter of the number. Numerous vineyards were grubbed up because big wineries had suffered bad privatization process. It takes around 10 to 15,000 euros per hectare to plant new vines. It takes 3 years to wait for the harvest, and if the yield is good, the profit is up to €40,000 per hectare. There is a state stimulus for newly planted vineyards, but what would be of considerable significance to the winemakers is opening up new major markets.

There has been a noticeable growth of viticulture in the past 20 years. Dozens of new wineries have arisen and about 2–3,000 hectares of new vineyards have been planted, but this is not enough to put Serbia into the deserved place. Serbia has only 6,500 hectares in the viticultural land register. The fact that Slovenia, a country several times smaller than Serbia, has more than 30,000 hectares illustrates how small a number it is. Therefore, it can be said that Serbian viticulture and winemaking are in the springtime of their life. That being said, the quality of Serbian wines has

certainly grown since we often receive the news of the medals won for our wines at European competitions. However, in future we need a lot more viticultural land and it can be expected that in this period the state will make more investments in vineyard growing, opening and equipping, as well as viticultural area and wine tourism development.

Firstly, there should be a designed strategy of wine region development and a plan to plant at least 20-25,000 hectares of vineyards in the next 10 years. Next necessary step is to provide the winery construction and equipment subsidy, as well as education of winemakers. It takes from 7 to 10 years for a winery to function independently.

The help of the state is necessary for investing into hotels, restaurants, specialized wine shops and fairs, building infrastructure to the winery in those wine regions, marking winery signals, wine roads, marketing, work on joint presentations at international fairs under the common name Serbia. In Europe, we are still not recognized as a wine region, they don't know yet that we have vineyards and wines, and lot of people around the world don't even know where we are located. So all the activities in that field must be within one national strategy for winery region development, which will be the place where *Made in Serbia* labelled wine will originate.

In Serbia, wine culture arrived as late as after the year 2000, when the youth of our country, having worked in prestigious restaurants in the West, began returning to their homeland. At the same time, Serbian winemaking developed, so that there began to appear all the accompanying activities, starting with viticulture magazines, blogs, fairs etc. almost on daily basis.

Talking about Serbian brands, they are mostly connected with the winemaker's surname (Radovanovic, Kovacevic, Aleksandrovic) or the region of its origin (Fruska Gora Vineyards, The Negotin Wine Cellars). Following up, wine consumers always want to know where the wine comes from – which viticultural region, who the winemaker is, what grape sort the wine was produced from, how much alcohol and sugar it contains.

## **BALKAN WINE BRANDING IN THE DEMANDING WESTERN MARKET**

Having a clear vision of what our wine branding should look like is required. It is necessary to build a platform similar to the one already in use for the existing brands and brand our wines from the *Balkan Wine Project* in a similar way. Basically, the idea is quite simple: instead of confusing people with the names of small Balkan countries and explaining the breakup of

Yugoslavia, it is necessary to gather all the countries geographically into the Balkan region, which may ring a bell to foreigners.

Regarding the wines themselves, there should be chosen the ones made from the indigenous sorts, suitable for different markets' needs. The labels should be highly specific and give all the information about the wine, including the instruction for the regional vine selection. (Sladic, N., Wine Style, No.08, The Label – Wine's Visiting Card).

Branding process is particularly complex in the Western world. Everything is regulated: the export, labels, alcohol percentage, taxes, import, distribution, etc., which is the reason why someone not working in the global industry finds it difficult to understand how complicated it is. The law is strict and has to be respected to the least detail, since the fines are substantial. This makes the industry into excessive transparency in doing business. The USA, for example, have some of the most severe alcohol distribution and sales law. Likewise, the competition is fierce, so that doing business in the Western market is not easy at all.

The greatest difference has been noticed in restaurant wine consumption. Due to the commonly known situation, the consumption has significantly decreased, payment is delayed, and the result is decreased alcohol (including wine) consumption in restaurants. People have suddenly realised that nothing lasts forever, including their successful career. As a result, they take more care of their health, they save more, do more sports and travel, spending less money on food and drink. Habits are changed, so has the entire lifestyle. At the same time, costly wine sales have disappeared over night and they are just slowly picking up now. This segment suffered the greatest change.

Objectively speaking, the chances for our indigenous wine placement are good if they are branded properly, constantly and energetically, but to achieve that goal one has to undergo a long way full of hardship. The standards must be constant and at the highest level. There must be no slackening of effort, each bottle of wine branded with the Serbian flag or any other country from the Balkan region must be the same as the previous one. Not one bottle of wine may be released into market if its quality is insufficient. *Branding and market penetration is a kind of work which is done in the long run and there is no other way to reach the goal.* Being rigorous in wine selection for the Western market is a must, because they represent much more than a bottle of wine, they represent our part of the world presented at the international scene, certainly not within a context of political conflict.

Wines made from indigenous grape varieties, with minimum manipulation, have the greatest chances for success in a demanding market. There is a prevailing opinion that wines ought to be made and branded in a

simple way, with maximum transparency, without any additional complications, with a dose of optimism and the inevitable fanatic faith in their success. Lack of faith in the wine identity is one of the basic problems of contemporary wineries. Our indigenous varieties have a very good grape quality, but there is a tendency to camouflage it through excessive usage of barrels (barrique), all for the purpose of creating a *superb wine*.

*This is the point where we reach the category of natural wines, i.e. wines made using the minimum technological interference. Sometimes it takes courage not to do something*, is the famous maxim of winemakers' father, Dominique Lafond. This includes certain caution and great focus on what you want to do. A great problem with a number of these wines is that a smaller amount of interference does not mean absence of any technology in winemaking. Small amount of interference means close observation of the winemaking process and making a rational decision to avoid doing something. You must be fully aware of all the processes in the winery in each moment. Lots of winemakers who practise the so-called natural winemaking are so far away from the vinification process that one can taste only a method, and not the taste of wine. *If only a method can be tasted in your wine, and not the grapes and vineyard it grew in, you have lost the game.*

The moment when Serbian and Balkan wines would become successful is the one when sommeliers and consumers recognized that the wines originate in Serbia or Balkans. This eventually influences the way our region is perceived internationally. It would be a great success if they were able to identify the region, if not the variety, instead of comparing our wines with the one they already tasted. It will be done easily using the indigenous varieties. Geographical indication of our wines may enable easier branding and distinction, internationally above all.

Mainly, it is the quality that sells. If the quality is real and the price is reasonable, then there are good conditions for cooperation. One more factor is very important for the success of wine in such a demanding market as Western one, that is a good relationship between a distributor's sales representatives and someliers in the restaurants, as well the customers in shops. The small, i.e. ethnic importers, who import the wines from certain less famous countries, can hardly get their chance to present the wines to a somelier, and this is often the end of the story. If wines are placed in the market through an eminent, large distributor, the chances for success are much bigger. Moreover, if we present another chardonnay, the customers will not be too excited and enthusiastic about Balkan wines, since it will be just another chardonnay in the long line. In an average customer's shopping bag there is room for six bottles of wine, and the companies we are talking about have between three and six thousand wines in their portfolio. Sales

representatives can not present all the wines in the market even if they work every day.

Wine selection in offer is becoming more and more diverse and it is getting more and more difficult to make the right choice. Choosing a wine greatly depends on the label, especially its visual effect, since it draws the attention before seeing the wine's name, origin or price. All this is of a great importance, especially if we don't know what the bottle contains, which happens very often. The label (in Latin, "Es it quaestio") is the key factor in recognizing wines. It is, actually, what catches the eye to the bottle itself, gives us the guarantee and confirmation of our choice. Without this special costume, the bottle is insignificant and anonymous. Let's assume, we are ready to pay € 500 for a bottle of Chateau Latour, but we wouldn't even lay an eye on the same bottle if there weren't for its noticeable label. The significance of this paper decorating every bottle is such that we can freely call it the wine's identity card. (Sladic, N. Wine Style, No.08, The Label – Wine's Visiting Card).

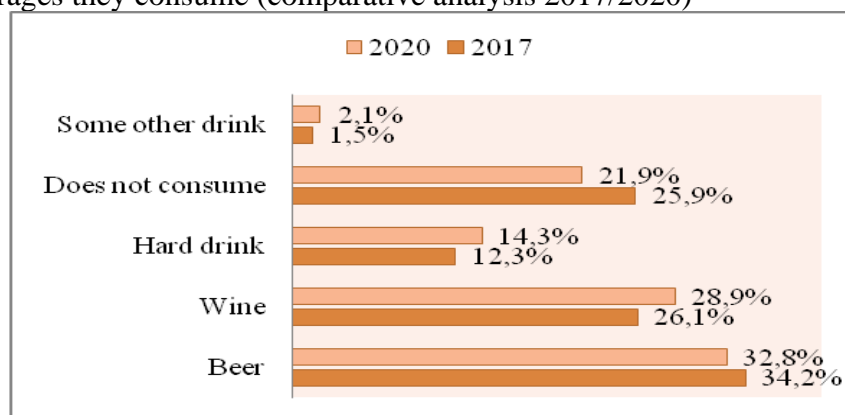
## **COMPARATIVE ANALYSIS OF VITICULTURE IN SERBIA AND CROATIA**

Fairly small vineyards and small wineries are some common characteristics of the viticulture and winemaking in Serbia and Croatia, whose winemakers have the opportunity to upgrade their cooperation and admit the possibility of joint appearance in other markets.

Grape and wine production in Serbia and Croatia are characterized by a number of similarities, the key ones being a small piece of land with a fairly small vineyard on each farm, as well as small winery. The possibilities of cooperation improvement in the area of viticulture and winemaking of the two countries are discussed at traditional annual wine and viticulture fairs, while tasting Croatian and Serbian wines.

In Serbia, there are approximately 22,000 hectares of vineyards, in Croatia around 20,000 hectares. An average vineyard in Croatia is about one half hectare surface area, considering that there are approximately 40,000 registered wine grape producers. In Serbia, approximately 80,000 agricultural holdings deal with grape production and 217 wineries are doing business, of which a great majority does not employ more than 10 employees. A research shows that wine, after beer, is the alcoholic beverage mostly consumed in Serbia. Likewise, wine consumption has grown in the year 2020 compared to 2017 (Figure 1).

Figure 1. - Attitudes of Serbian citizens about the type of alcoholic beverages they consume (comparative analysis 2017/2020)



Source - The Research and Publishing Center Demostat, available on: [www.demostat.rs](http://www.demostat.rs), modified by authors

On average, 45 million litres of wine are produced in Serbia. In 2014, approximately 17 million litres were exported, and almost 40 million litres were imported. According to *the Stabilisation and Association Protocol*, Serbia has a quota of 67,300 hectolitres for a duty-free import into the European Union (EU), whereas the duty-free import quota is 25,000 hectolitres, with a 30 per cent duty if the quota is exceeded. At the last explanatory screening in Brussels, Serbian wine production legislation was highly rated, with prospects that the full agreement with the EU legislation will be completed relatively soon.

In a demanding market, a good balance between quality and price is always a winning combination. When we analyse what brought Croatian winemakers to the EU, we can declare that, after entering, Croatia faced a bigger pressure of imported agricultural and food products, including wine, mostly cheaper ones. According to the Croatian Chamber of Commerce's records relating the foreign trade exchange, the wine import from the developing countries has significantly grown, which is explained by abolishment of administrative barriers.

In 2014, Croatia imported 22,5 million hectolitres worth \$ 32 million, while the export results were considerably weaker – 3,5 million hectolitres of wine were put on the market, resulting in \$15.5 million foreign exchange inflow. Croats do not give up on investing into viticulture and growing vineyards, which is proved in the fact that wine production makes 7.3 per cent of the total agricultural production, with as much as 75 per cent of the wine on the market has the geographical origin label.

Currently, the project of wine made in developing countries promotion is ongoing. 19 wineries are included in that project, and they are



divided into four wine region – from Slavonia to Istria and Dalmatia, and they were visited by some journalists from Serbia. The overall impression is that all the winemakers agree that small series of high-quality wine production is the only way to deal with the competition of cheap exported wine. They also believe that insisting on the brand authenticity is the winning combination which can facilitate the access to the regional markets in the first place. Here we can mention the Kozlovic winery, which is famous among Serbian customers for its *Malvasia* wine. This manufacturer, who has planted approximately 25 hectares of fertile Istrian land (with the subcontractors cultivating around ten more hectares), annually produces about 200,000 bottles of wine and has no intention to expand production or aim for the world markets he is not ready for. At the moment it is not possible to make a good profit in big markets, since the customers are not familiar with Croatian wines, so the desired price could not be achieved, whereas entering the race with cheap wine manufacturers is not the right way to go. Comparison with wines from Serbia imposes itself.

Small producers can hardly compete with big players in the global market, so they should go for production of high quality wine. Kutjevo winery produces 6 million litres of wine and exports 2 million litres, which makes 40% of the total Croatian export. It is a fact that this winery can not compete with the big chardonnay producers. The right strategy is promotion of the most popular Croatian wine – *Grasevina*. This is not an easy job because the public are unfamiliar with this sort of wine, but this is the right choice.

*Ilok Cellars*, where between 4.5 and 5.5 million litres of wine are produced annually (the cellar capacity is 10 million litres) are the nearest to Serbian border. Approximately 3 million litres is sold to domestic customers, while 2 million litres ends in the foreign, mostly European market. At 290 metres altitude, the best growing sorts are Chardonnay, Grasevina and Traminac, which arrived from South Tyrol. German saying, *vine is a plant of the Sun, but likes its master's shadow* gets its full meaning.

The biggest area of land is owned by Agrolaguna, a joint stock company with Agrokor as the majority shareholder. Out of 1,2000 hectares of land, 600 hectares are planted with the vine, 200 hectares are reserved for olive groves, and the rest is for the vegetable production. €32 million were invested in this agricultural property, where, besides wine, cheese and olive oil are produced, and the annual wine production exceeds 4.5 million litres – with *Malvasia* prevailing (as much as 50 per cent of the total *Malvasia* production comes from this cellar). However, the first ecological winery in Croatia is a real attraction. It is the *Skaulj* winery, which is, together with the *Jokic* and *De Georgis* wineries (Zadar county), included in the project of Croatian wine promotion. Approximately 80% of all the work in the

vineyards which occupy around 7 hectares is done manually, which significantly raises the production price. Manure briquettes are used for land cultivation. It takes almost 10 years to prepare the land for ecological production, and the licenced institutions can control it twice a year. Also, Croatian Organic Production Law was made based on the Swiss Law, which is one of the most restrictive legal documents in this subject. If it is affirmed that the principles of ecological production have been compromised, the fines are up to €50,000. Speaking of state incentives, Croatian winemakers can count on subsidy of € 800 per hectare.

The main remark made by the importers of Croatian wines is about a long process of obtaining the import license, which lasts up to 20 days from the moment of the wine's arrival in the quality control laboratory, whereas waiting for the control number can last up to 40 days.

According to the records from the Republic Bureau of Statistics, the agricultural and food product foreign trade exchange among Serbia and Croatia is not at high level. For illustrative purposes, 204,307 litres of wine has been imported from Croatia, while 224,930 litres have been exported from Serbia to Croatia. The fact that the total of more than \$1.1 million was imported from Croatia does not speak in favour of Serbian winemakers, which significantly surpasses the total of \$540,000 worth of wine placed in Croatian market by Serbian exporters.

Wines with the geographical origin mostly reach Serbian market from Croatia. With the intention to encourage production, turnover and consumption of domestic wine with geographical origin, the Ministry of Agriculture has, apart from the incentive measures for raising vine and viticulture equipment acquisition, introduced the incentive measures for the wine quality improvement and establishment of Serbian geographical origin labels according to the European model. This includes the association of geographical origin winemakers from a certain region and their joint promotion. So far, there have been registered 10 associations of winemakers with geographical origin label, which would enable better competitiveness for Serbian winemakers in both domestic and international market.

The main aim is branding Croatia as *the land of wine*. In that context we should mention the project, or better said the branding strategy of *Vina Croatia – Vina Mosaica*, financed by the EU funds, the state budget, and partly the association members' financial support. The first document accepted by the European Commission is the Wine Envelope 2014–2018. This means promotion of Croatian wines in the developing countries' markets. Istrian wines are mostly present in the Serbian market, the best results being with the producers who balanced quality and price, which is between €7 and 10.

At present, there are no administrative obstacles for promotion of Serbian wines into Croatian market. However, Croatia exports into Serbia three times more wine than they import from Serbia. They argue that Serbia is in the third place of the Croatia wine export list, and at the same time it is not even among the first 10 countries Croatia imports wine from. The main problem in the top-class Serbian wine placement in Croatia is, allegedly, high prices and weak competitiveness of the brand.

## INDIGENOUS VARIETIES – OUR CHANCE

In our market, there is a number of undiscovered wine sorts which can have an outstanding international potential. One of them is muscadine (tamjanika), an indigenous variety which started growing in our region in the 15th century. Along with prokupac, also an old, indigenous variety, this may be a very important brand in our wine and gastronomical offer and a perfect opportunity for a creative presentation which, among other things, is manifested in the form of a wine label and luxurious box.

The renaissance of creating top-class wine from the forgotten indigenous varieties is very exciting. The market is flooded with international varieties planted everywhere – in some regions with great success, and in others with a disastrous failure. There are indigenous varieties which can help us overcome both consequences of the climate change and monotony sometimes created by international varieties. It is commonly known that many varieties grown in certain regions can make exceptional wines with depth and grandeur. (Andrew Jefford, *Vino&Fino*, 2019, Search for your chance in autochthonous varieties)

Indigenous varieties are often mentioned, among which there are some that are not indigenous. Although it is not always easy to trace the origin of some varieties, in Serbia there is a small number of varieties which can be called indigenous. Due to lack of funds for scientific research, a lot of indigenous sorts in Serbia have been insufficiently examined. Still, the only indigenous varieties we can comment on are prokupac and muscadine (tamjanika), whose wines are available to the majority. Smederevka can be added to the group, it is still in the research process. Therefore, the number is very small.

However, besides the indigenous varieties, several dozens of new grape vine varieties have been created in Serbia, and they are being grown successfully as well as made into excellent wines. Some of them are *Probus*, *Sila*, *Morava*, *Petra*, *Neoplanta*, etc. These are not indigenous, but they are ours, the reflexion of Serbia and Serbian winemaking.

*Prokupac*: In Župa it is also famous as rskavac, it gives dark wine full of red fruit. The former viewpoint that those are wines with high alcohol level and have to be consummated fast because they are not suitable for aging, is being forgotten thanks to the growing number of excellent Serbian wines. *Župa is the centre of the prokupac story* – the Ivanovic Winery has opened a new chapter of this most exciting authentically Serbian wine story, the *Čokot (Trunk) Winery* continued to develop it through the *Experiment* wine, and the *Budimir* winery has recently elevated it to new heights with the wine *Prokupac Colour Purple*. The *Temet* winery is quickly joining the story, and there are more and more prokupac vineyards toward Smederevo.

*Tamjanika (muscadine)*: Although it rarely smells of incense, although it does not originate in this region, but comes from the international sort *Muscat Blanc á Petits Grains*, tamjanika is absolutely ours – indigenous. We have been growing this variety ever since the Turkish Empire came to this region. Appealing to most wine lovers due to its noticeable muscadine smell and aromatic sweetness, harmonic, traditionally associated with Župa and local growers like Minić, Spasić, Ivanović, Budimir, Đorđević, Rajković Brothers... the Aleksić Winery and *Tri Morave* by the Temet Winery, speak of the spread of this variety from the farthest south to the high north.

*Black Tamjanika*: Specific muscadine variety of which there are records to have been grown as long ago as the Middle Ages. Rare in the world and difficult to grow, it survived in Serbia primarily thanks to the Bukovo Monastery near Negotin, and their agricultural school. The black tamjanika wine has emphasized aroma, the taste of merging flowery, fruity and spicy tones and, as a rule, high alcohol percentage with residual sugar. All in all, the black tamjanika potential has not at all been checked in practice, although there is a story that this was one of the most favourite wines of Josip Broz Tito.

*Slankamenka*: An ancient sort poor in acid, aroma and with low sugar percentage, therefore unsuitable for varietal wines or aging. This is the reason why it most commonly stays in the brandy cauldrons or as a basic raw material for white coupage. Its varieties are red and black slankamenka (plovina), and the grapes are delicious. Interestingly, the *Slankamenka* wine devotees cooperative, a group of 33 winemakers, was founded almost a decade ago.

*Bagrina*: Currently, bagrina is being experimented with along the Romanian border and along the Timok river. Made from pink berries, these wines have nice acid and can age. The *Matalj* winery deals with this sort most seriously.

*Začinak (spice)*: As its name implies, it is used for adding colour to red wines. Although, there are smaller manufacturers trying to introduce

začinak to a higher rank, like the *Panić* winery from Negotin which, together with black tamjanika, šipon and četereška, produces začinak as well.

*Kreaca*: Or, if you prefer – Banat Riesling. The wine of self-governing socialism, still is a dear guest in every glass of spritzer. The sort misses quality acids and aging ability in order to become a *proper Riesling*. It is claimed that the *kreacer* wine heals the soul and that the Germans of Banat made it in the Vrsac vicinity by crossbreeding almost three centuries ago. (Babsek, M., Wine Style, No.42. The chance is in the autochthonous varieties)

## **THE ASCENT OF SERBIAN WINEMAKING AND VITICULTURE – THE ALEKSANDROVIC WINERY**

Vinča, a village near Topola, situated among countless vineyards, is currently known mostly to the local people around Topola and Russian buyers of Serbian fruit. It seems that the fruit capital of Serbia and the pearl of Šumadija will stay away from the world fame not for long, because here exactly, in the tame hills of Topola, there is a vision being born, the vision to present our best to the world. There is a vision to put Serbia on every wine map, as a strategic chance of development and opportunity for our country to step into the world scene, through one of the best Serbian wineries, *the Aleksandrovic Winery*.

In the heart of Šumadija, a strategic initiative has been created for the Serbian winemaking development, as well as acknowledging the wine tourism significance in Serbia and the appeal for the whole country to join the patriotic invitation to brand Šumadija as Serbian Tuscany. If the Hungarians can brand Tokaj, The Croats Istria, The French Burgundy, why would Serbia not brand its Šumadija? So far, only the visitors to the Wine Museum in Bordeaux had a chance to get familiar with the quality of *Aleksandrovic* wine.

At the very beginning of production in 1992, the winery had only two hectares of the family land. Approximately 7 to 8,000 bottles of wine were produced in their own cellar. It was a period of stagnation, craft learning and survival. It was only after the political reforms in 2000, when the banking system started functioning, that they started to enter the professional wine production, step-by-step. They started with building their own vineyard and winery, whose construction lasted for 16 years in total. In the meantime, there have been planted 73 more hectares of vineyards.

The Aleksandrovic Winery owns 75 hectares of vineyards in total, as well as rich assortment. They also produce sparkling wines or, as the French call them, champagne. Three labels of champagne have been branded. They

are *Trijumf Sparkling* chardonnay, pinot noir and a rose. Then, there are white wines in the assortment: ''*Triumph*'' (where white sauvignon prevails), ''*Harizma*'', ''*Oplen Riesling*'', ''*Tema*'', ''*Trijumf Barik*'', as well as ''*Trijumf Gold*''. Apart from the white wines there are rose wines, too. They are ''*Trijumf Rose*'', ''*Euphoria*'' and ''*Varijanta (Variant)*''. The red wine palette includes: ''*Trijumf Noir*'', ''*Vision*'' (the blend of cabernet fran and cabernet sauvignon), ''*Regent*'' (cabernet sauvignon and merlot, 50:50 ratio) and the most famous wine ''*Rodoslov (Pedigree)*''. We should mention the dessert wine ''*Trijumf Kasna Berba (Triumph Late Harvest)*''. The total assortment includes 18 labels.

Quality is dominant in the whole concept of production. When the team was gathered and the decisions were made to produce wine, the idea was to produce only the top quality wines. The region of Šumadija is ideal for production of white and red wines which are in the wine list of the best hotels and restaurants. 25% of the total production is exported and these wines are on offer of more than 15 restaurants with Michelin stars.

Regarding medals, the Aleksandrovic winery was the winner of the 2015 competition in Slovenia and the Croatian national competition in the white wine category – *Sabatina 2016*. Also, this winery's wines have won some great and significant medals at *Decanter* in London, *Mundus Vini* in Germani, *AWC* in Vienna, competitions in Italy and Switzerland, whereas our wine *Rodoslov* has been included in the top 20 red wines in the Japanese market.

Arriving back in Serbia after visiting the wine regions in Europe and around the world, we can notice that the region of Šumadija is at least equal with the most prestigious world wine regions, if not more beautiful. The reason is that in Tuscany, besides the vine, there are only olives and olive oil. Here in Šumadija, apart from the vineyards there are orchards with apples, pears, plums, peaches, cherries and apricots. Nature has been extremely generous here, but, as it is widely known, what is missing is the spirit of entrepreneurship and knowledge. The ones who had the spirit of entrepreneurship, knowledge and ideas were put to sleep by the socialist system which ruined their development. (Aleksandrovic, B., The International Public Policy Centre, 2019: Let's make Šumadija Serbian Tuscany)

When, some 15 years ago, an idea arose that Šumadija to become Serbian Tuscany, there existed only one winery in the region, the *Aleksandrovic* winery. Afterwards, *Kraljevska* winery was established, and then, one after another, *Tarpos* in Arandjelovac, *DeLena* in Lipovac, etc. Today, there are fifteen active wineries and some in the making. In Šumadija there are around 20 and in five years there will certainly be around 30 wineries. So many things have changed in only 15 years. We should continue

in that direction and encourage people who like wine, winemaking, the ones who have their own land to plant vineyards, to create wineries, because time will come when it will be very profitable. For, wines are a country's ambassadors and one of the reasons for international tourists to visit.

When the *Aleksandrovic* winery was the only winery in this part of the Oplenac region, it had only a few hundred visitors per year. Now that there are 7 – 10 wineries, about 10,000 people pass through the *Aleksandrovic* winery. Nobody would set off from Belgrade to visit the region to see one winery, let alone from another country. But, when everybody talks about a wine region and the word is spread that one can see and taste different wines from different wineries, that there are restaurants and places to spend the night, visitors will certainly arrive from abroad to see what is happening there.

The mixture of tradition and modern technology is absolutely necessary and crucial. It is an essential symbiosis. Tradition is the base of a successful project, and modern technology is necessary for following trends. The experience should be the source of technology and some classical knowledge that should not be changed. On the other hand, one should not stick to them too much because they may be a good foundation, but also an obstacle. If we rely on that foundation and build on it, that is a precondition for a successful project nowadays.

## CONCLUSION

Chances for the placement of our indigenous wines into the demanding and oversaturated global wine market can be significantly improved if our wines are branded with a clear vision and goal. Quality and well-designed investment in communication with potential markets, especially branding, is the only way to success of our domestic products in the demanding international market. The principle already being used in the existing brands may also be used in branding our wines. Basically, the idea is very simple: it is wrong to cause confusion with the small country names in the Balkans, especially mentioning the breakup of Yugoslavia, border changes or names of the small countries which were formed then. What should be done is to gather all these countries into the Balkan region, that being famous internationally to some extent. Otherwise, someone might ask for the wine from Siberia instead of Serbia, but in the first stage of branding, even this kind of publicity may be significant.

Regarding the wines, what should be singled out are the ones made from the indigenous varieties, and in accordance with the different markets' demands. The labels should be noticeable and, if possible, to give all the

relevant information on the wine, including the instruction about the choice of grape vine variety and the region. The quality must be high and there must not be any oscillations. Any slackening in standard or quality may result in very bad consequences regarding market placement of new wine brands. Each wine bottle branded by Serbia or any Balkan country must be identical to the previous one. Nothing may be placed into the market if it does not belong there by its quality. Market branding and developing is a job done gradually and in the long run, and there is no other way to reach the goal. It is necessary to be rigorous in the choice of wine for the global market, because the national and regional wines represent much more than a bottle of quality drink. The authentic wines are the means to present this part of the world on the global scene, especially outside of context of national and political conflicts.

Wines made of the indigenous varieties with *minimum manipulation* have the greatest chance for success in the demanding market. Wines should be made in a fairly simple way (*catch the moment of sun in the bottle*), in a maximum transparent way, without large manipulations and complications, with a great deal of optimism and passionate faith in success of the whole project. Lack of strong faith in the identity and distinction of domestic wines is one of the main problems of the local wineries. Our indigenous grape varieties have very good quality, but there is a tendency of camouflaging it by excessive barrell usage, all with the aim of creating a *grand wine* which often reminds of another *famous wine*.

There is still a number of our unheard-of wine varieties in the global market, the ones probably with international potential. The indigenous wine variety *tamjanika* (*muscadine*), which was fully established in our region in the XV century, surely has this potential. Together with the old, indigenous variety *prokupac*, it can be a significant brand in our wine and gastronomical offer and a perfect opportunity for a creative appearance which, among other things, is manifested in the wine label and luxurious package.

A huge drawback in the development of our winery and viticulture is the cease of all planned activity from 1945 until 1990. The situation is changing easily. The wine culture arrived in Serbia after 2000, when the young people who worked in prestigious restaurants in the Western countries started returning to Serbia. At the same time with that trend, Serbian winemaking started developing, so the ancillary activities appeared, such as: magazines about wine, blogs, fairs, etc.

The state began helping with the investments into hotels, restaurants, specialized wine shops, wine fairs. A lot of things are missing: the infrastructure towards the wineries in wine regions, wine signage, wine routes, action towards branding Serbia as a wine destination, joint appearances at international fairs under the name of Serbia. The problem is



that we are still not recognized in Europe as a wine region, because it is not known that we have vineyards and wine, people don't often know where we are situated. The state should take action and work on this persistently, all within the national development strategy for the wine regions which will give wines with the label *Made in Serbia*.

## REZIME

### MARKETINŠKO POZICIONIRANJE I BRENDIRANJE SRPSKIH VINA

Svrha rada je postavljanje jasne vizije i cilja u procesu brendiranja srpskih vina na probirljivom međunarodnom tržištu. Vina proizvedena sa što manje enoloških intervencija i manipulacija, uz značajnu dozu vere i ubeđenja u kvalitet, su svakako dobra osnova za uspeh. Primenjen je metod komparacije sa vinogradarskom i vinarskom situacijom u Hrvatskoj. Najveće šanse za pozicioniranje na globalnom tržištu imaju vina od lokalnih i autohtonih sorti. Domaće vinske sorte tamjanika i prokupac mogu biti značajan brend u vinski-gastronomskoj ponudi Srbije i idealna prilika za kreativni nastup koji se mora pratiti elegantnom vinskom etiketom i luksuznom kutijom. Veoma dobar kvalitet naših autohtonih sorti grožđa često biva prikriven prekomernim barikiranjem i pokušajima stvaranja spektakularnog vina, čime se gubi na autentičnosti. Dosadašnji nedostaci pri brendiranju na zahtevnim i prilično zasićenim tržištima se mogu prevazići zajedničkom i planiranom akcijom, gde bi bilo poželjno grupisati sve zemlje u region Balkana, što je globalnim potrošačima već poznatiji pojam.

*Ključne reči:* brendiranje, vino, autohtone sorte, Srbija, globalno tržište, pozicioniranje, autentičnost, komparativna analiza

## REFERENCES

1. Aleksandrović, B. (2019). *Lets make Šumadija Serbian Tuscany*. The Center for International Public Policy, Available at: <http://cmjp.rs/b-aleksandrovic-napravimo-od-sumadije-srpsku-toskanu/> (15 November, 2021)
2. Andrew, J. (2019). The chance is in indigenous varieties. Wine&Fine, Available at: [http://www.vinoifino.rs/novosti/novost\\_intervencije\\_brisu\\_iz\\_vina\\_osecaj\\_teroara\\_vinski\\_magazin\\_vino\\_i\\_fino\\_888#.XU2UnxRIck4.facebook](http://www.vinoifino.rs/novosti/novost_intervencije_brisu_iz_vina_osecaj_teroara_vinski_magazin_vino_i_fino_888#.XU2UnxRIck4.facebook) (20 December, 2021)

3. Babšek, M. *The chance is in indigenous varieties*. Wine Style (42), Available at: <https://winestyle.rs/2013/marko-babsek/> (25 December, 2021)
4. Brščić, K., Oplanić, M., & Miladinović, N. (2010). Promocija u funkciji razvoja vinarskog sektora u Istri. *Agronomski glasnik*, 4-5, 277-288. [in English: Brščić, K., Oplanić, M., & Miladinović, N. (2010). Promotion as a Tool of Development of Wine Sector in Istria Region. *Agronomy journal*, 4-5, 277-288.].
5. Cvjetković, M., & Ilić, D. (2015). Kvalitet u funkciji unapređenja konkurentnosti domaćih preduzeća. *Ekonomski izazovi*, 4, (7), 48-63. [in English: Cvjetković, M., & Ilić, D. (2015). Quality in the function of improving competitiveness of domestic enterprises. *Economic Challenges*, 4, (7), 48-63.].
6. Denda, S., & Denda, B. (2016). Proizvodnja i robna razmena grožđa i vina: stanje u svetu i Srbiji (šumadijski region). *Agroekonomika*, 45 (70), 81-93. [in English: Denda, S., & Denda, B. (2016). Production and foreign trade of grapes and wine: situation in the world and Serbia (Šumadija region). *Agroeconomics*, 45 (70), 81-93.]
7. Dogan, B., & Gokovali, U. (2012). Geographical indications: the aspects of rural development and marketing through the traditional products. *Procedia-Social and Behavioral Sciences*, 62, 761–765. doi: [doi.org/10.1016/j.sbspro.2012.09.128](https://doi.org/10.1016/j.sbspro.2012.09.128)
8. Erdelji, T., & Lajko, B. (2015). Strategija razvoja vojvođanskog vinarstva u globalnoj ekonomskoj sferi. *Anali Ekonomskog fakulteta u Subotici*, 51 (34), 289-308. [in English: Erdelji, T., & Lajko, B. (2015). The Development Strategy of the Wine Industry of Vojvodina in the Global Economic Sphere. *The Annals of the Faculty of Economics in Subotica*, 51 (34), 289-308.]
9. Jakšić, D., Ivanišević, D., Đokić, V., & Brbaklić-Tepavac, M. (2015). *Vinski atlas*. Republički Zavod za statistiku, Beograd. [in English: Jakšić, D., Ivanišević, D., Đokić, V., & Brbaklić-Tepavac, M. (2015). *Vine atlas*. The Statistical Office of the Republic of Serbia, Belgrade].
10. Jević, J., Čerović, S., Jević, G., & Čavlin, M. (2019). Accessible tourism as the factor in creating the image of Serbian wineries as a segment of agritourism supply. *Economics of Agriculture*, 66 (4), 1157-1171. doi: <https://doi.org/10.5937/ekoPolj1904157J>
11. Jovanovic, D., Bela, M., & Andjelkovic, A. (2015). Vinarije i putevi vina kao sredstvo za razvoj agroturizma u Srbiji. *Turističko poslovanje*, 15, 87-93. doi: [10.5937/TurPos1515087J](https://doi.org/10.5937/TurPos1515087J) [in English: Jovanovic, D., Bela, M., & Andjelkovic, A. (2015). Wineries and wine routes as a tool for the development of agritourism in Serbia.

- Business of Tourism*, 15, 87-93.].
12. Kuzmanović, M. & Makajić-Nikolić, D. (2020). Heterogeneity of Serbian consumers preferences for local wines: Discrete choice analysis, *Economics of Agriculture* 1/20: 37-54. doi: 10.5937/ekoPolj2001037K
  13. Pivac, T. (2012). *Vinski turizam Vojvodine*, monografija, Prirodno-matematički fakultet, Novi Sad. [in English: Pivac, T. (2012). *Wine Tourism of Vojvodina*, monograph, Faculty of Sciences, Novi Sad].
  14. Pivac, T., Đuranović, T., & Košić, K. (2015). Značaj vinskih manifestacija za turizam Vojvodine. *Agroekonomika*, 44 (67), 51-56. [in English: Pivac, T., Đuranović, T., & Košić, K. (2015). The Importance of Wine Events for Tourism in Vojvodina. *Agroeconomics*, 44 (67), 51-56.].
  15. Prodanović, R., Brkić, I., Škrbić, S., Đurić, K., & Bošković, J. (2020). Strengthening the capacity of the wine sector in the service of sustainable rural development of the Republic of Serbia, *Journal of Agronomy, Technology and Engineering Management*, 3 (5), 489-498.
  16. Sladić, N. *The Label - Business card wine*, Wine Style (8), Available at: <https://winestyle.rs/2010/etiketa-vizit-karta-vina/> (15 July, 2021)
  17. The Research and Publishing Center Demostat, Available at: <http://www.demostat.rs> (15 June, 2021)
  18. The Statistical Office of the Republic of Serbia, Available at: <http://www.stat.gov.rs> (10 May, 2021)
  19. Vlahović, B., Puškarić, A., & Užar, D. (2017). Savremeni trendovi na tržištu vina. Poljoprivredni fakultet, Novi Sad. [in English: Vlahović, B., Puškarić, A., & Užar, D. (2017). Contemporary trends in the wine market. Faculty of Agriculture, Novi Sad].

UDK: 316.342.6(497.113)

POSLOVNA EKONOMIJA  
BUSINESS ECONOMICS

Godina XVI

Broj 2

Str 72 – 91

doi: 10.5937/poseko22-41982

Scientific Review Article

**Jelena Jovanović, PhD student<sup>1</sup>**

Faculty of Business Economics,  
Educons University, Serbia

**Ivica Nikolić, Phd, Full Professor<sup>2</sup>**

Faculty of Pedagogy  
Educons University, Serbia

**Violeta Petković, Phd, Associate Professor<sup>3</sup>**

Faculty of Pedagogy,  
Educons University, Serbia

## **SOCIO-ECONOMIC ANALYSIS OF THE QUALITY OF LIFE OF THE ROMANI POPULATION IN THE REGION OF THE AUTONOMOUS PROVINCE OF VOJVODINA**

**ABSTRACT:** The subject of this paper is a social economic analysis of the quality of life of the Romani population in the region of the Autonomous Province of Vojvodina. Life on the 'edge of poverty', often endangering basic human needs and postulates worthy of a man of the 21st century, represents an imperative to a wide social community to include all its resources, so that the Roma have a dignified life and an equal status with other members of society. Seen from a sociological aspect, the concept of quality of life provides information on satisfaction with one's life and the degree of adequate functioning in the environment.

In a theoretical sense, the position of each individual in society is influenced by some factors, which also apply to the Romani

---

<sup>1</sup> jelena\_jovanovich@yahoo.com

<sup>2</sup> violeta.petkovic@gmail.com

<sup>3</sup> profilov@gmail.com

population. In order to establish someone's position in society, it is necessary to define criteria, which can be also called influencing factors. During the research, the principles of PEST analysis were used, with predefined political, economic, sociological-cultural, and technological criteria, i.e. factors, based on which the current position of the Roma was tested, and, the hypothetical ones, were projected on the quality of their life in the future.

The general goal of this research is to improve the position of the Romani community in AP Vojvodina, observed from the point of view of the economic and social status that affects the quality of life (subjective and objective factors and others). The specific goal of the research presented in the paper is the valuation of subjective and objective factors and their direct influence on the quality of the lives of Roma. The research sample population is represented by members of the Romani community who live in the territory of AP Vojvodina.

*Key words:* social, economic, analysis, quality of life, factors

## INTRODUCTION

The characteristics and lifestyle of the Roma, according to many behavioural criteria, are similar everywhere in the world and they face the same problems. Quality of life is first and foremost a psychological category that does not automatically result from the satisfaction of some basic needs, but from the entire psychological structure of an individual in interaction with his physical and social environment. From a psychological perspective, quality of life provides information about a person's feelings, as well as her interactions with others. The core of the research problem is the identification of the influencing factors on the position of Roma in society in the Autonomous Province of Vojvodina (APV), with the hypothetical view that by the valorisation of the basic factors and their application, the position of members of the Romani community in APV would be significantly improved.

The Millennium development priorities are directed at raising awareness of all aspects of development that are crucial and go beyond economic growth itself, in order to mobilize governments around the world to action and activities dedicated to social status and well-being, health, and a secure environment, and in that direction to the further planned development of the Romani population.

Throughout their history, the Roma have gone through difficult periods with the culmination of Nazism, which took many victims at the world level, and the Roma, along with the Jews, were specially treated as beings of an "inferior race". The tradition and customs of the Roma as a nomadic people made their position even more difficult, and settling in the countries was subject to obstacles and humiliation from the majority population in those countries.

For this reason, it should not be surprising the Roma need for proving themselves and making an effort to fit into the lifestyle of the nation-state where they live, work, and found families.

### **IMPACT OF CHANGES ON THE QUALITY OF LIFE**

When we look around us, changes are happening everywhere. Science in general is most often concerned with scientific and technological revolutions, with a note that the older the society and the more developed the science, the bigger, stronger, and more impactful the changes are on individuals and the operations of economic entities and society as a whole (Nikolic, 2016, p. 66).

The goal of any change is progress, whether personal or corporate. Changes are a daily occurrence, and in the business ambiance, changes bring prosperity and sustainable development of the organization. "Practice shows that it is most difficult to make changes in conditions of a high level of stability, high salaries and satisfactory living and working conditions, because "comfort" often puts you to sleep, which leads to the subjects of change trying to make the comfort last as long as possible" (Radosavljevic, Radosavljevic, 2012, p. 90). Analysis of the environment is of great importance for the acceptance and management of changes. In addition to the analysis of the general environment, it is necessary to analyse the external and internal environment, available resources, the labour market, culture and attitudes, the level of education from the aspect of the level of expertise and necessary knowledge, and additional elements of change.

Internal and external analysis of the Romani community was carried out on the basis of a SWOT analysis. The analysis of strengths and weaknesses gives a picture of the internal situation of the Romani community, and the analysis of opportunities and threats, of the environment in which the Romani community coexists. Doing a SWOT analysis raises the question of how some weaknesses related to the economic and social status of the Romani community, or threats from the environment, can be turned into strengths and opportunities that the Romani community can use for its own development. The analysis of the environment was performed on the basis of a PESTEL

analysis. Determining strategic priorities and key areas of action means making a decision about what needs to be achieved based on an overview of the current situation and the vision, that is, the projection of future changes.

The analysis of the position of the Roma, whether it is SWOT or PESTEL, in addition to environmental, legal, and economic issues, also deals with the daily problems of the overall quality of life of the Romani population with a special emphasis on areas such as education, employment, human and minority rights, discrimination and the availability of equal conditions on the labour market, minor's marriages as a form of crime in the field of human trafficking, entrepreneurial business with an emphasis on female and social entrepreneurship and the employment of highly educated Roma, many of whom have doctorates. It is important to note and point out the problem that many Roma do not declare themselves as a Romani national minority exactly for the reason that, due to stereotypes, prejudices, and long-standing ingrained intolerance towards them, they are denied many rights that belong to them by law. It is much easier for them to "tacitly bypass" their minority affiliation and thus acquire the conditions for a better and improved quality of life and work. This is one of the fundamental problems and reasons why the official data on the number of Roma do not agree in statistics and in the literature dealing with the problems of the Romani community.

Existing social attitudes can represent either an advantage or a threat to the strategy of sustainable development of the Romani community. The technological environment does not only refer to technology in the sense of computers and management systems but also to the overall communal, road, and other infrastructure that will improve the conditions and quality of life of members of the Romani population within the community. The strategy of sustainable development of the Romani community can be affected by technological changes, in the sense that it remains excluded from the contemporary trends of society, which is tried to be solved by the Strategy and the Agenda as the fundamental documents on the basis of which the Council of the National Community plans its activities and work in the field.

### **Quality of life as an economic and social aspect of living**

The Social Progress Imperative defines social progress as “the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential”. Improving the quality of life is a complex task, and the effort to measure progress so far has simply not created a clear enough picture of what a successful society looks like (see more on <https://www.socialprogress.org/>).

In recent years, more and more attention has been paid to the assessment of the quality of life. The quality-of-life results from the satisfaction of basic needs, but also from the entire psychological structure of the individual in interaction with his physical and social environment. Assessing the quality of life is a complex process, and for this reason, it is based on numerous indicators that differ between countries on a global level (Jokovic et al, 2017, pp. 90-94).

According to Haas (1999, pp. 215-220), "the quality of life is a multidimensional assessment of the circumstances of an individual's life as they exist at that moment and are presented in the context of the culture in which they live and the values they hold. These are usually subjective feelings of well-being, such as physical, psychological, social, and spiritual dimensions. In certain conditions, objective indicators can supplement or serve individuals who are incapable of subjective perceptions to assess the quality of life".

According to Schalock (2000, pp. 116-127), "quality of life is a concept that reflects the desired living conditions of an individual related to eight main dimensions of his life: emotional well-being, interpersonal relationships, material well-being, personal development, physical well-being, self-actualization, place in society and rights".

According to Testa (1996) defined "quality of life, or more precisely, 'health-related quality of life', indicates the physical, psychological, and social dimensions of health, seen as special areas that are influenced by the experience, beliefs, expectations, and perception of the individual. Each of these domains can be measured in two dimensions: objective evaluations of functioning or health status and subjective - perception of health" (Davern, Cummins, 2006, pp. 1-7).

According to Meeberg (1993), "quality of life is a feeling of overall satisfaction with life, determined by the mental readiness of the individual whose life is valued. Other people from the environment must agree that the individual's life circumstances are not threatened and that they adequately serve his needs" (Mandzuk, McMillan, 2005, pp. 12-18).

According to Lane, "quality of life is properly defined through the relationship between subjective or person-based elements and a set of objective circumstances. The subjective elements of a high quality of life include a feeling of prosperity and well-being, progress in personal development, and dignified life. The objective element is understood through circumstances that present a favourable chance for exploitation by people living their lives" (Christoph, Noll, 2003, pp. 521-546).

According to the Quality-of-Life Group of the World Health Organization (1995, pp. 1403-1409), the quality of life definition implies a "personal view and perception of living from the aspect of culture, value



indicators, tendencies, opportunities that are provided in the future, standard of living and interests".

The indicators are divided into three broad dimensions of social progress: basic human needs, basic well-being, and opportunities. Within each dimension, there are four components that further divide the indicators into thematic categories. A closer selection of indicators allows for a detailed analysis of the specific foundations of social progress in each country, and broader index categories help to better understand global and regional trends (see more on <https://www.socialprogress.org/>). In the past, economic indicators and an approach based on objective social indicators were used to define and measure the quality of life (Ilic et al, 2010, pp. 52-60).

"The basic dimensions related to the quality of life, according to different authors, are diverse, but most of them refer to (URL):

- a) health;
- b) bodily and physical well-being;
- c) emotional and psychological well-being;
- d) material well-being;
- e) environment;
- f) feeling of belonging to the community."

**Health and health care:** Numerous indicators are monitored in the field of health, of which the following are specially monitored in relation to the Romani population: the length of life of Roma, i.e., the ratio of mortality to birth rate, the percentage of infant mortality, but also during the first years of life; whether non-discriminatory access to healthcare services same as to the majority population is provided; determinants related to general health such as obesity, smoking, and others. When talking about health care of Roma, one of the frequent reasons why Roma do not use health care (except in emergencies) is the rude, unfriendly, and repulsive attitude of medical workers. The Roma's low knowledge of their rights related to their health and lack of knowledge of procedures for accessing health services is usually the "reason" for such behaviour by medical workers. Roma come to health centres without health insurance, without a chosen doctor, without a certified health card, and therefore fail to gain access to health care. Medical workers do not have time to adequately explain to each person the reason why they cannot get the health service they are looking for, but simply refuse them, and the Roma perceive this refusal as discrimination. Roma tend to avoid situations in which they are discriminated against and the main reason why many curable diseases among Roma become chronic and leave lasting consequences on their health is late intervention.

Emotional and psychological well-being, material well-being, and environment are related to **leisure and social interactions**, which means time

spent outside of activities related to productivity, which is reflected in happiness and life satisfaction.

Interactions related to social life are considered capital in the field of social action and are of special and exceptional importance for society as a whole, but also, for individual members of the Romani community. Social interactions that are frequent are related to a better life, health, greater chances when looking for a job, business activities, and better efficiency and productivity in performing daily jobs and tasks. Reliance on community members and belonging to the community are also important indicators of measuring the quality of life.

**Education:** According to research, the Roma represent one of the largest and most vulnerable minorities in Europe (there are between 8 and 12 million Roma worldwide), and what is characteristic is that in Europe, the Roma remain excluded from many areas of society, i.e., many rights are denied to them deprived and as if they were destined for a life of poverty. It is generally known that the Roma face numerous problems, among which access to quality education is particularly important.

As the main problems related to education, citizens of the Republic of Serbia and members of the Romani national community identified: the unavailability of schools and quality education, especially in rural areas, the low quality of education in primary and secondary schools, the disconnection between educational programs and the needs of the labour market, the high cost of university education, the lack of quality lifelong learning programs, as well as the insufficiently successful implementation of inclusive education.

According to Gavovic and Timotijevic (2012), the analysis of the quality of life includes the areas: political and social environment - political stability, crime rate, rule of law, etc; economic environment - stability of the economy, banking services, etc; sociocultural environment - censorship, restrictions on personal freedom; health and sanitary environment - availability of medical services and medicines, infectious diseases, sewage, waste, air pollution, etc; schools and education - the standard of schools, availability of schools and education; public services and transport - electricity, water, public transport, traffic jams; free time - restaurants, theatres, cinemas, sports and more; consumer goods - availability of food, clothing, cars, etc; home - houses and apartments, appliances, furniture, maintenance, and natural environment - climate, history of natural disasters, pollution, etc. Also, according to Gavovic and Timotijevic (2012), "safety is the factor that is highlighted as the most important and that requires the most improvement. In order for a city to be attractive for living in, it must, first of all, provide a sense of safety and security and have well-organized communal services and enterprises. The list of other factors that influence the attractiveness of a certain city includes the cost of living, public transport, roads and parking, environmental protection,

and access to health services. This is followed by schools and educational institutions, parks, and recreation areas, as well as childcare facilities. Economic insecurity, the level of pollution, and security are the three main areas of concern".

**Standard of living:** In relation to the entire population, the standard of living of the Roma is extremely low, and the marginal social position of Roma is the main generator of their poor standard of living. The integration of Roma into contemporary social trends, the division of labour, and culture can be seen as a process of passive adaptation, i.e., assuming roles that have already been determined for them: external through the marginalization by global society and internal through the reproduction of the Romani community's lifestyle.

According to Basic (2013, pp. 1-32), "the life problems of Roma should be solved by suppressing and eliminating structural poverty through the design, adoption, and development of a participatory, dynamic, cooperative integrative model in which the state and its services help poor Romani men and women to reach a certain level of living standards. At the same time, it is necessary to implement training and empowerment programs for poor Romani families to independently maintain that or achieve a higher level of standards".

When it comes to the sociological-cultural, demographic, and social characteristics of the Romani community based on the number and share in the total population of members of the Romani national community in Serbia, the Roma represent a relevant community, and their social, economic and cultural position has an impact on the demographic characteristics and their position in society. The data speak of different numbers of Roma from census to census, which cannot be explained by demographic data. According to Mitrovic (1996, p. 19), "research shows that the ethnic origin is most often hidden by Roma who are educated and who have left the typical Roma environment and who have integrated into the broader social community". The national 'awakening' and ethnic emancipation of the Roma in recent decades has caused an increasingly clear emphasis on the Romani origin and an increasingly frequent declaration of belonging to the Romani national community at the population census.

According to Basic (2011, p. 11), "the identity of the Roma is in constant change, and the early migrations from the prehistoric times directed them towards cultures that were often not favourable to the newcomers, i.e., encounters with different cultural influences caused the Roma to change their religion, language, customs, habits".

**Romani language:** When looking at the Roma as a national minority whose status is recognized, it can be pointed out that they are not on the map since Romani has not yet met the necessary criteria for mapping as an official language in relation to the percentage of members of the Romani community in the majority of places. Roma generally adapt to another culture, confession,

and accept the language of the environment in which they live. It can be said that the mother tongue is one of the most recognizable signs of national identity that can be used to study the composition of the population.

**The analysis of strengths and weaknesses** gives a picture of the inner situation of Romani settlements, and the analysis of opportunities and threats, of the environment in which the Romani settlement coexists. Doing a SWOT analysis raises the question of how to turn some weaknesses of Romani settlements or threats from the environment into strengths and opportunities that the Romani settlement can use for its own development. In the SWOT analysis, strengths and weaknesses are defined clearly and simply, while unclear and insufficiently defined areas are avoided.

The ecological analysis that is carried out in Romani settlements is directly related to the state of the environment in which the residents of Romani settlements live and work and involves monitoring data on the state of air, water, soil, elements of biodiversity and the relationship to natural resources that make up the living ambiance of the Romani community and similarly. Life in Roma settlements has its strengths: low housing costs, togetherness, good mutual knowledge, environmental awareness, connection with compatriots in other settlements and mobility within the state, even between states, and the collection of secondary raw materials as an additional source of employment.

*Figure 1. - SWOT analysis of the place and role of the Romani community in AP Vojvodina*

Opportunities	Threats
<ul style="list-style-type: none"> <li>✓ Expansion of the urban part of the settlement;</li> <li>✓ Serbia's involvement in the Roma Decade and the resulting affirmative policies in the area of housing,</li> <li>✓ Schooling and education,</li> <li>✓ Female and social entrepreneurship</li> <li>✓ Employment</li> <li>✓ Health care for the Roma population,</li> </ul>	<ul style="list-style-type: none"> <li>✓ The country's poor economic situation due to the pandemic crisis and the war in Ukraine,</li> <li>✓ Weak implementation of international conventions,</li> <li>✓ Weak institutional mechanisms for improving the position of Roma,</li> <li>✓ Poor intersectoral cooperation,</li> <li>✓ Extreme right-wing groups,</li> <li>✓ Implementation of the legislative legal framework</li> </ul>

<ul style="list-style-type: none"> <li>✓ Developed institutional mechanisms for improving the position of Roma,</li> <li>✓ national "awakening" and ethnic emancipation of the Roma,</li> <li>✓ The existence of domestic and international funds to support programs and projects for Roma,</li> <li>✓ Allocation of funds for the improvement of the position of Roma by the republican, provincial, and local authorities,</li> <li>✓ Adoption of National strategies, policies, and agendas for the period 2015-2030.</li> </ul>	<p>of recycling without recognizing the work and experiences of Roma in recycling itself.</p>
<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>✓ Low housing costs,</li> <li>✓ Community and good mutual knowledge of the inhabitants of the settlement,</li> <li>✓ Lower average age,</li> <li>✓ Ecological conscience,</li> <li>✓ Access to garbage dumps,</li> <li>✓ Connection with other settlements,</li> <li>✓ Mobility within the state and interstates.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Unfavourable communal infrastructure (electrification, water supply, road infrastructure, access to educational institutions),</li> <li>✓ A lower standard of living than neighbouring countries,</li> <li>✓ Poverty,</li> <li>✓ Poor health,</li> <li>✓ Lower educational status compared to the majority population,</li> <li>✓ Lower work status regardless of the level of education,</li> <li>✓ Bad image in the environment, presence of prejudice, and marginalization,</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Inertia of the inhabitants of Romani settlements in the struggle to improve the standard of living,</li> <li>✓ Emigration of educated and employed people from the Romani settlement,</li> <li>✓ Handling hazardous waste.</li> </ul>
--	--

Prepared on the basis of the source: Jovanovic, J, 2014, p. 45 (graduate thesis)

### **Subjective and objective indicators of measuring the quality of life**

"Some authors believe that the quality of one's own life is measured by subjective criteria, while others say that the assessment of the quality of an individual's life largely depends on individual temperament or the need to combine objective and subjective aspects of the quality of life, given that these factors are correlated" (Gavovic, Timotijevic, 2012).

"The subjective measurement of the quality of life is based on the measurement of the psychological state of individuals in terms of values, attitudes, beliefs, aspirations, satisfaction, and happiness. Subjective indicators reveal an individual assessment of the objective state of the environment and one's own life (URL), considering that an individual as a person can best determine for himself the degree of his happiness and satisfaction with life as a whole or parts of life" (Cummins, 1996, pp. 302-303).

"The way in which objective indicators are recognized and interpreted indicates training in the understanding of value principles and the application of objective indicators in relation to the impact on experiencing well-being" (Ilic and others, 2010, pp. 52-60).

"An objective approach in measuring the quality of life, as indicators measures events that are different, which strive to make a conclusion about the quality of life based on the characteristics of individuals and their living conditions" (URL), such as e.g. gross domestic product and other economic measures that have long been considered the main indicators of the well-being of a country. These measures only provide information about material well-being, and not about other important elements of society (Slavuj, 2012, pp. 73-92). The objective indicators of the quality of life refer to the objective characteristics of individuals, to economic measures, among which it is particularly necessary to emphasize the role of the gross domestic product, but also to other economic measures related to the area of housing, exposure to

crime, employment which has already been discussed, education, accessibility to entrepreneurial activities and others.

According to Jankovic, the Commissioner for the Protection of Equality (2012, p. 11), “the interconnection of anti-discrimination measures and measures for the social inclusion of Romani men and women and the realization of rights in the field of education, employment, housing, and health care is particularly emphasized in the Strasbourg Declaration on the Roma”. According to the data provided in the Strategy for improving the position of Roma in the Republic of Serbia, the characteristic of the socio-economic position of the majority of Roma is a very low level of economic independence, followed by high unemployment and the exclusion of Roma from the institutions of the public system.

### **The question of employment, the labour market, and the availability of certain types of employability**

The problem of unemployment is generally a common problem in Serbia. The issue of employment is of crucial importance for improving the quality of life of the Romani community. Unemployment brings with it a number of negative economic, social, social-psychological, and demographic consequences. In conditions when entire regions are facing the problems of unemployment, falling living standards and consumption, as well as minimal economic growth, electronic business requires new personnel structure that has computer literacy and changes in the education system, digitization, and global phenomena of population migration, it is necessary to the problem of economic analysis of the labour market and the problem of unemployment is aligned with the needs of the economic structure, on the basis of which it is necessary to model the strategy and public policy that leads to the welfare state and modern economic development.

The economic theory under unemployment implies "the forced free time of a person who wants to find a job, (...) an unwanted phenomenon, both for individuals and for companies" (URL). Unemployment affects society in general, and individuals affect in a particularly negative way the quality of life, social and psychological effects and consequences for health, financial consequences, and the like. The causes of unemployment are also complex and a consequence of the low level of education, overpopulation, underdevelopment of infrastructure, underdevelopment and imperfection of the market, low productivity, immobility of the workforce, and the like.

Many authors dealing with economic analyses believe that it is necessary to create flexible labour markets that would help to solve the problem of the constant and high unemployment rates. Roma in Serbia face multiple problems, among which difficult access to the labour market stands

out. The Romani family is characterized by early marriages, a large number of children, and an extended family in which patriarchal customs prevail. One of the possible solutions to such a situation for the Romani population is to create an environment that will be stimulating for the development of Romani entrepreneurship. In Serbia, about 50% of Roma live in 573 Romani settlements. In the total population of Serbia in 2011, women predominate (out of 7,186,862 inhabitants, women make up 3,687,686 or 51.3%), while men predominate in the Romani population (out of 147,604 Roma, men are 75,042 or 51.0%). When looking at the rates of masculinity by age, it can be concluded that in the population of Serbia there is an excess of the male population between the ages of 35 and 39 and then there is a tendency of decreasing rates of masculinity, and the largest excess of women is registered among the old population (Radovanovic, Knezevic, 2014, p. 62).

The majority of the members of the Roma community are employed in collecting secondary raw materials or maintaining hygiene, which is an additional problem for educated young Roma, considering that the National Employment Service mostly offers them similar jobs or jobs in that branch. The insufficient number of employed Roma in state and public enterprises is evident. More than half of the Roma population in Serbia belongs to the age group that can make the most work contribution, however, 70% of Roma have never worked. When it comes to Romani women, the number of unemployed is even four times higher (Steiner et al, 2003). When it comes to the employment of the Romani population, it is mostly short-term and usually, the Roma do work that does not require any qualifications. That is why their earnings are significantly lower than the majority of the population. The Romani population mostly works informally, hired by friends and neighbours (21%), while 12% get a permanent job, and 10% are engaged in selling goods on the market. Among Roma who participated in the research, 10% received social assistance and that was their only income (Steiner et al, 2003).

Within the framework of neoliberalism, Romani men and women are given jobs and jobs that are difficult and socially devalued, the consequences of which are very dehumanizing. The entire Romani community is also publicly stigmatized, for example, collectors of secondary raw materials, street cleaners, and the like. If we look at the type of unemployment where the Roma as a national minority, it can be pointed out that the first type would be structural unemployment, given that it is caused by major changes in the economy, due to which workers who are left without a job, and given insufficient education and lack of competence conditioned by technological achievements and the growing knowledge economy, they have to look for work in other branches, which often requires them to retrain or receive additional training and finish at least elementary school, or it requires necessary to move (migration), which is unacceptable to their traditional



upbringing and attachment to certain places. The number of members of national minorities, primarily Roma, in the state, public sector, and even in the private sector is negligible, and the number of successful Romani entrepreneurs could be 'counted on the fingers'.

The low economic engagement of young Roma is an important factor in the age structure of the Romani population as in the majority population, where example it can be stated that the percentage of dependents in the Romani population is 60%, and in the majority population around 37%. The majority of Roma are not covered by programs within the employment system, their work is not legally economically active, and they are mostly considered unemployed.

If they do get a job, it's the hardest unskilled job and the lowest paid. This kind of attitude towards the members of the Romani community has lifelong implications and the impossibility of a decent life, and employment, not to mention advancement.

Based on the research by Knezevic (2010), the level and structure of the education of the Romani population are conditioned by its position in society and cultural specificities. The low educational profile is contributed by economic misery and a partially rooted understanding that they don't even need school, as well as an ineffective state apparatus that does not recognize the problem or solve it slowly and inefficiently. Also, this way of defining the problem of unemployment leads to a connection with education and the need to network institutions that will generally work to solve this problem. Entrepreneurial business is a chance to employ a large number of unemployed persons.

It is necessary to mention the importance of social entrepreneurship as a chance for employment and education of Roma, especially in the field of female entrepreneurship. The Romani community will succeed in quality development if, during a certain period, its development is higher than average. This is possible only by raising the awareness and knowledge of not only the Romani population about themselves and their importance and opportunities in modern society but also the awareness and knowledge of the entire society about the Roma, their culture, history, needs, similarities and differences, as well as the development of empathy and goodwill to all integrate together and contribute to a better tomorrow, which is the main goal of the document Transforming Our World: Agenda for Sustainable Development until 2030. The poverty of members of the Romani community is reflected in the fact that they are unemployed because they are poor and without a school education, and they are poor because they are unemployed or perform poorly paid jobs. Most Romani families live only on humanitarian and social aid and struggle for daily survival. Most of these 'invisible citizens' live in difficult living conditions (Jaksic, Basic, 2002). In addition, there is

discrimination during employment, as well as low quality of employment - poor working conditions, low income, and the like.

## CONCLUSION

Taking into account the fact that the Roma have a low educational level and are not economically empowered enough, it can be assumed that their position will not significantly improve in the future. A new generation of young Roma will be created who will not be ready to meet the challenges of the new society. The majority of Roma are not covered by programs within the employment system, their work is not legally economically active, and they are mostly considered unemployed. If they do get a job, it's the hardest unskilled job and the lowest paid. The incomes that Roma earns are mainly from the following occupations: seasonal work, illegal work, collection of secondary raw materials, help from relatives from abroad, and social assistance from the state. The reason for the unfavourable position in the labour market is primarily the low level of education and discrimination by employers.

State services that deal with employment do not keep records of the employment of Roma. There are no funds for the development of entrepreneurship among Roma in any of the institutions of the system. Donations from international organizations that our country received to reduce poverty and improve the employment of the Romani population are not enough. Collecting secondary raw materials is one of the occupations that Roma most often do at low prices. That is why the state should systematically solve the problem of collecting secondary raw materials that Roma deal with and introduce it into legal flows. Collecting secondary raw materials is one of the occupations that Roma most often do at low prices. That is why the state should systematically solve the problem of collecting secondary raw materials that Roma deal with, and introduce it into legal flows. Due to all of the above, we can expect greater migration of Roma to the countries of the European Union with the aim of better economic stability.

The position of the Romani community in the APV is below any average level in relation to members of other communities and national minorities who live there. The application of influential factors, such as: political, economic, sociological-cultural, and technological, by the wider social community, above all the state apparatus, would significantly increase the quality of life of Roma in Vojvodina, which would significantly affect their wider integration in society. Particularly expected are the results of the influence of the level of education of members of the Romani population, which gives as a final result

the possibility of their permanent employment, constant material income, and therefore a better quality of life.

In the absence of serious financial assistance and permanent employment for adult members of Romani families, which are significant for a large number of Romani families who are unable to provide their children with clothing, money for snacks, or a monthly ticket for transportation to school, this problem still exists until the adoption of a new Strategy in which measures will be better implemented and their implementation enabled.

## **RESUME**

It can be summarized that the Roma, as a minority people living in Serbia, encounter a series of obstacles and problems important for the analysis of the quality of life of Serbian citizens in their daily life: from discrimination; threats to basic human rights related to employment and the educational process; through the impossibility of adequate accommodation and solving the housing issue. According to the data provided in the Strategy for improving the position of the Roma in the Republic of Serbia, the characteristics of the socio-economic position of the majority of Roma indicate a very low degree of economic independence, followed by high unemployment and the exclusion of Roma from the institutions of the public system.

Due to the low rate of economic activity of the majority of Roma, there is socio-economic backwardness, political barriers to employment, and other demographic characteristics. On the other hand, for the first time after a long series of years of neglecting the needs of the Roma community, important steps were taken on the way to solving the problem by adopting strategies that offer solutions with clearly defined deadlines and entities responsible for implementing the planned projects. International organizations are also involved in their implementation: through their non-governmental organizations, as well as through official institutions, and the assistance they provide has several aspects of expression: advisory, financial and legal assistance.

The educational and working structure of the Roma is primarily influenced by socio-economic relations, educational composition, and work status, which are also related to the age and gender of the Roma. Considering the low quality of life of the Romani population, it is necessary to make a comprehensive analysis of the migration of the Romani population in search of a better life and to make a series of measures and strategic solutions that will stimulate them to stay in Vojvodina, that is, Serbia. Of course, the gross domestic product affects the quality of life not only of members of the Romani population but also of members of the majority nation.

Tradition, which is repeatedly emphasized as a characteristic of the Roma population, can be seen in another way as “an insurmountable obstacle to their inclusion, without a realistic analysis of the problem”.

**REZIME**  
**DRUŠTVENO-EKONOMSKA ANALIZA KVALITETA ŽIVOTA**  
**ROMSKOG STANOVNIŠTVA U AUTONOMNOJ POKRAJINI**  
**VOJVODINI**

Predmet ovog rada je socijalno-ekonomska analiza kvaliteta života romske populacije u AP Vojvodini. Život na „ivici siromaštva“, često ugrožavajući osnovne ljudske potrebe i postulate dostojne čoveka 21. veka, predstavlja imperativ širokoj društvenoj zajednici da uključi sve svoje resurse, kako bi Romi imali dostojanstven život i ravnopravan status kod ostalih članova društva. Posmatrano sa sociološkog aspekta, koncept kvaliteta života daje informaciju o zadovoljstvu svojim životom i stepenu adekvatnog funkcionisanja u okruženju.

U teorijskom smislu, na položaj svakog pojedinca u društvu utiču neki faktori, koji se odnose i na romsku populaciju. Da bi se utvrdio nečiji položaj u društvu, potrebno je definisati kriterijume, koji se mogu nazvati i faktorima uticaja. Tokom istraživanja korišćeni su principi PEST analize, sa unapred definisanim političkim, ekonomskim, sociološko-kulturološkim i tehnološkim kriterijumima, odnosno faktorima na osnovu kojih je testiran trenutni položaj Roma, a hipotetički projektovani na kvalitet njihovog života u budućnosti.

Opšti cilj ovog istraživanja je unapređenje položaja romske zajednice u AP Vojvodini, posmatrano sa stanovišta ekonomskog i socijalnog statusa koji utiče na kvalitet života (subjektivni i objektivni faktori i drugo). Specifičan cilj istraživanja predstavljenog u radu je vrednovanje subjektivnih i objektivnih faktora i njihovog direktnog uticaja na kvalitet života Roma. Populaciju uzorka istraživanja predstavljaju pripadnici romske zajednice koji žive na teritoriji AP Vojvodine.

*Ključne reči:* društveni, ekonomski, analiza, kvalitet života, faktori

## REFERENCES

1. Basic, G: (2013). *Romi u Republici Srbiji: izazovi diskriminacije* /Roma in Republic of Serbia: Challenges of Discrimination/. Report of the Minority Rights Group Europe (MRGE), March 2021, pp. 1-32.
2. Basic, G: (2011). *Politička akcija Romski pokret i promene* /Political Action Romani Movement and Changes/. Belgrade: Cigoja, p. 11.
3. Davern, M, Cummins R.A: (2006). *Is Life Dissatisfaction the Opposite of Life Satisfaction?*. Australian Journal of Psychology, 58(1), pp. 1-7.
4. Haas, B.K: (1999). *Clarification and Integration of Similar Quality of Life Concepts*. Image: Journal of Nursing Scholarship, 31(3), pp. 215-220.
5. Christoph, B., Noll, H.H: (2003). *Subjective Well-Being in the European Union During the 90s*. Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement, Springer, 64(3), pp. 521-546.
6. Ilic, I, Milic, I, Arandjelovic, M: (2010). *Procjena kvaliteta života-sadašnji pristupi* /Assessing Quality of Life - Current Approaches/. Akta Medika Medianae, 49(4), pp. 52–60.
7. Jaksic, B, Basic, G: (2002). *Romska naselja, uslovi života i mogućnosti integracije Roma u Srbiji: Rezultati socijalnog istraživanja* / Romani Settlements, Living Conditions and Possibilities of the integration of Roma in Serbia: Results of Social Research/. Belgrade: Centre for Research on Ethnicity.
8. Jankovic, B: (2021). *Percepcija romske zajednice o diskriminaciji* /The Romani Community's Perception of Discrimination/. Commissioner for the Protection of Equality (The promotion and press was supported by the Ministry for Economic Cooperation and Development of the Federal Republic of Germany through the project: Inclusion of Roma and other marginalized groups in Serbia). Belgrade, p. 11.
9. Jokovic, S, Pavlovic, J, Hadzivukovic, N, Djevic, R, Vilotic, S: (2017). *Metode ispitivanja i pokazatelji kvaliteta života* /Test Methods and Quality of Life Indicators/. University of East Sarajevo: Faculty of Medicine, Foca, pp. 90-94.
10. Jovanovic, J: (2014). *Održivi razvoj romskih zajednica u AP Vojvodini* /Sustainable Development of Romani Communities in AP Vojvodina/. Graduation thesis, Novi Sad: Faculty of Management.
11. Jovanovic, J: (2016). *Razvoj romske zajednice u AP Vojvodini u svetlu Agende održivog razvoja 2030* /The development of the Roma community in AP Vojvodina in the light of the 2030 Sustainable Development Agenda/. Union University - Nikola Tesla Belgrade, Faculty of Management Sremski Karlovci.

12. Knezevic, A: (2010). *Romi (Cigani) u Beogradu* /Roma (Gypsies) in Belgrade/. Belgrade: Faculty of Geography, University of Belgrade, pp. 1-114.
13. Mandzuk L.L, McMillan D.E: (2005). *A concept Analyses of Quality of Life*. Journal of Orthopaedic Nursing, 9(1), pp. 12-18.
14. Mitrovic, A: (1996). *Položaj Roma u društvu*, Položaj manjina u SR Jugoslaviji /The position of Roma in society, the position of minorities in FR Yugoslavia/. Belgrade: SANU - Department of Social Sciences, book 19.
15. Nikolic, I: (2016). *Strategijski menadžment* /Strategic Management/. SSremenska Kamenica: Edukons University, Faculty of Business Economics, Novi Sad, p. 66.
16. Radosavljevic, M, Radosavljevic, Z: (2012). *Upravljanje promenama* /Change management/. Belgrade: Faculty of Education B.Sc. lawyer and B.Sc. economist for management personnel, p. 90.
17. Radovanovic, S, Knezevic, A: (2014). *Romi u Srbiji – Popis stanovništva, domaćinstava i stanova 2011. godine u Republici Srbiji* /Roma in Serbia - Census of Population, Households and Apartments in 2011 in the Republic of Serbia/. Belgrade: Republic Institute for Statistics of the Republic of Serbia, p. 62.
18. Schalock, R.L: (2000). *Three Decades of Quality of Life. Focus on Autism and Other Developmental Disabilities*. 15(2), pp. 116-127.
19. Electronic sources
20. Steiner, A, Martonakova, H, Guziova, Z: (2003). *Vodič za dobro upravljanje u oblasti životne sredine* / The Environmental Good Governance Guide/. Belgrade: The United Nations Development Programme Serbia and Montenegro Country Office. Available at: <https://dokumen.tips/documents/steiner-vodic-za-dobro-upravljanje-u-oblasti-zivotne-sredine.html?page=1>.
21. The WHOQOL, Group.: (1995). The World Health Organization Quality of Life Assessment (WHOQOL): Position Paper From the World Health Organization. Social Science and Medicine, 41(10), str. 1403-1409. Available at: <https://pubmed.ncbi.nlm.nih.gov/8560308/>.
22. [www.iserbia.rs](http://www.iserbia.rs).
23. Global Index: Overview, Available at: <https://www.socialprogress.org/index/global>.
24. <https://core.ac.uk/>.
25. Ilic, I, Milic I, Arandjelovic, M (2010): *Procena kvaliteta života - sadašnji pristupi* /Assessing Quality of Life - Current Approaches/. Akta Medika Medianae, 49(4), pp. 52–60, Available at:

- [https://publisher.medfak.ni.ac.rs/AMM\\_1/amm-stari/2010-html/4-broj/52-60%20Ivana%20Ilic-Procena%20kvaliteta%20zivota....pdf](https://publisher.medfak.ni.ac.rs/AMM_1/amm-stari/2010-html/4-broj/52-60%20Ivana%20Ilic-Procena%20kvaliteta%20zivota....pdf).
26. Cummins R.A.: (1996). *The domains of life satisfaction: An attempt to order chaos*, Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement, 1996, vol. 38, issue 3, pp. 303-328. Available at: <https://link.springer.com/article/10.1007/BF00292050>.
  27. <https://fzs.sum.ba/>.
  28. Slavuj, L: (2012). *Objektivni i subjektivni pokazatelji u istraživanju koncepta kvaliteta života* /Objective and subjective indicators in the research of the concept of quality of life/. Geoadria, 17(1), 2012, pp. 73–92. Available at: <https://hrcak.srce.hr/84976>.
  29. Gavović, B, Timotijević, S (2012): *Kvalitet društva i kvalitet života* / Quality of Society and Quality of Life/. Available at: <https://kvalitet.org.rs/images/radovi/kvalitet%20društva%20i%20kvalitet%20života%20-%20bosko%20gavovic%20i%20stanislava%20timotijevic.pdf>

## **PREGLED RECENZENATA**

**Prof. dr Miroslava Filipović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Nikola Gradojević**

University of Guelph, Department of Economics and Finance, Canada

**Prof. dr Petar Veselinović**

Ekonomski fakultet, Univerziteta u Kragujevcu

**Prof dr Olja Munitlak-Ivanović**

Univerzitet u Novom Sadu, Prirodno matematički fakultet, Departman za Geografiju, turizam i hotelijerstvo

**Prof. dr Marko Malović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Dragan Golubović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Rajko Radović**

Fakultet poslovne ekonomije Bijeljina, Univerziteta Istočno Sarajevo, Bosna i Hercegovina

**Prof. dr Jurica Pavičić**

Ekonomski fakultet, Sveučilište u Zagrebu, Republika Hrvatska

**Prof. dr Slobodan Morača, vanredni profesor**

Fakultet tehničkih nauka, Univerzitet u Novom Sadu

**Prof. dr Slobodanka Markov**

Prirodno matematički fakultet, Univerzitet u Novom Sadu

**Prof. dr Ljubinko Jovanović**

Fakultet ekološke poljoprivrede, Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Milica Andevski**

Filozofski fakultet, Univerzitet u Novom Sadu



**Prof. dr Marina Blagojević Hjuson (Hughson)**

Institut za kriminološka i sociološka istraživanja, Beograd

**Prof. dr Milan Nešić**

Fakultet za sport i turizam Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Zoran Milošević**

Slobomir P Univerziteta, Bijeljina, Republika Srpska, BiH Fakultet za ekonomiju i menadžment

**Prof. dr Slađana Čabrilo, vanredni profesor**

I-Shou University, Department of International Business Administration, Kaohsiung, Taiwan (R.O.C.)

**Prof. dr Aleksandar Prnjat, vanredni profesor**

Alfa univerzitet Beograd

**Prof. dr Mišo Kulić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Radoje Brković**

Pravni fakultet, Univerziteta u Kragujevcu

**Prof. dr Milenko Dželetović, vanredni profesor**

Fakultet bezbednosti, Univerziteta u Beogradu

**Prof. dr Jova Miloradić, vanredni profesor**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Ivica Nikolić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Marko Jeločnik, istraživač saradnik,**

Institut za ekonomiku poljoprivrede, Beograd

**Prof. dr Vladimir Zakić, vanredni profesor**

Poljoprivredni fakultet Beograd, Univerzitet Beograd

**Prof. dr Leposava Grubić Nešić**

Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Vladimir Đaković, vanredni profesor**

Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Branislav Mašić**

Ekonomski fakultet Pale Univerzitet Istočno Sarajevo, BiH

**Prof. dr Plamen Patev**

I-Shou University, International College, Department of International Finance,  
Kaohsiung, Taiwan

**Prof. dr Shailender Singh**

I-Shou University, International College, Department of International Finance,  
Kaohsiung, Taiwan

**Prof. dr Dejan Jakšić**

Ekonomski fakultet Subotica, Univerzitet u Novom Sadu

**Prof. dr Zoran Đokić, vanredni profesor**

Fakultet za sport i turizam Univerziteta Edukons u Sremskoj Kamenici - Novom  
Sadu

**Prof. dr Aleksandar Gračanac**

Fakultet za poslovno industrijski menadžment Univerzitet Union Beograd

**Prof. dr Guych Nuryyev**

I-Shou University, International College, Department of International Finance,  
Kaohsiung, Taiwan

**Prof. dr Đurica Acin, emeritus**

Fakultet za uslužni biznis Univerziteta Edukons u Sremskoj Kamenici - Novom  
Sadu

**Doc. dr Jelena Jotić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom  
Sadu

**Prof. dr Irena Stanišić, profesor strukovnih studija**

Visoka škola strukovnih studija za vaspitače, Kruševac

**Doc. dr Biljana Dodić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom  
Sadu

**Doc. dr Iva Škrbić**

Fakultet za sport i turizam Univerziteta Edukons u Sremskoj Kamenici - Novom  
Sadu

**Doc. dr Ivana Volić**

Fakultet za sport i turizam Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Diona Đurđević**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Jelena Tadić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Mirjana Dokmanović, vanredni profesor**

Institut društvenih nauka

**Prof. dr Aleksandra L Tosovic-Stevanovic vanredni profesor**

Fakultet za poslovne studije, Univerzitet Megatrend, Beograd

**Prof. dr Dragica Tomka**

Fakultet za sport i turizam Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Tatjana Pivac**

Prirodno matematički fakultet - Univerzitet u Novom Sadu

**Prof. dr Sonja Bunčić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Mirjana Radovanović, vanredni profesor**

Fakultet za zaštitu životne sredine Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Tamara Kliček**

I-Shou University, Department of Tourism and Hospitality, Kaohsiung, Taiwan

**Prof. dr Milan M. Gašović, vanredni profesor**

Univerzitet Singidunum, Beograd, Fakultet za fizičku kulturu i menadžment u sportu

**Prof. dr Dragan Mrkšić**

Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Duško Tomić, vanredni profesor**

Fakultet za inženjerski menadžment –katedra bezbednosti

**Doc. dr Milica Solarević**

Departmanu za geografiju, turizam i hotelijerstvo, Prirodno-matematičkog fakulteta, Univerziteta u Novom Sadu

**Doc. dr Tijana Savić Tot**

Fakultet za menadžment, Sremski Karlovci, Univerzitet Union Nikola Tesla, Beograd

**Doc. dr Pavle Parnicki**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Tijana Đurković Marić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Jelica Eremić Đodić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Branislav Radnović, vanredni profesor**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Sanja Filipović, vanredni profesor**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Andrea Andrejević Panić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Jurij Bajec**

Ekonomski fakultet, Univerzitet u Beogradu

**Prof. dr Nebojša Žarković**

Fakultet za poslovne studije, Univerzitet Megatrend

**Prof. dr Biljana Jovković, vanredni profesor**

Ekonomski fakultet Univerzitet u Kragujevcu

**Prof. dr Jelena Borocki, vanredni profesor**

Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Sanjin Ivanović, vanredni professor**  
Poljoprivredni fakultet Zemun, Univerzitet Beograd

**Prof. dr Ranko Mujović**  
Pravni fakultet Podgorica, Univerzitet Crne Gore

**Prof. dr Svetlana Mihić**  
Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Olja Arsenijević, vanredni profesor**  
Fakultet za poslovne studije i pravo, Univerziteta „Union – Nikola

**Prof. dr Aleksandar Kupusinac, vanredni profesor**  
Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Vilmoš Tot, vanredni profesor**  
Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Miro Sokić,**  
Dunav osiguranje

**Prof. dr Đorđe Ćosić, vanredni profesor**  
Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Nebojša Ralević**  
Fakultet tehničkih nauka - Univerzitet u Novom Sadu

**Prof. dr Predrag Dimitrijević**  
Pravni fakultet, Univerzitet u Nišu

**Doc. dr Slavica Dinić**  
Fakultet za primenjenu bezbednost Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Dunja Prokić**  
Fakultet zaštite životne sredine, Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Marija Aleksandrović**  
Visoka škola strukovnih studija za obrazovanje vaspitača  
Mihailo Palov, Vršac

**Doc. dr Ivana Berić**  
Fakulteta za projektni i inovacioni menadžment, Beograd

**Doc. dr Milan Mihajlović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Nikola Ćurčić,**

Univerzitet Union Nikola Tesla, Beograd, Fakultet za menadžment, Novi Sad

**dr Radenko Marić, vanredni profesor**

Ekonomski fakultet u Subotici, Univerzitet u Novom Sadu

**dr Beraha Isidora, naučni saradnik**

Institut ekonomskih nauka, Beograd

**Prof. dr Bela Muhi**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**dr Srđan Milošević, vanredni profesor**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Siniša Domazet, vanredni profesor**

Fakultet za primenjenu bezbednost Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Ljiljana Kontić, vanredni profesor**

Univerzitet Union, Fakultet za pravne i poslovne studije, Novi Sad

**Prof. dr Jelena Vemić Đurković, vanredni profesor**

Fakultet za primenjenu bezbednost Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Dragica M. Stojanović,**

Univerzitet Megatrend, Fakultet za civilno vazduhoplovstvo, Beograd

**Doc. dr Dražen Marić**

Ekonomski fakultet u Subotici, Univerzitet u Novom Sadu

**Doc. dr Simonida Vukadinović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Doc. dr Andrea Okanović**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

**Prof. dr Violeta Domanović, vanredni profesor**

Ekonomski fakultet, Univerziteta u Kragujevcu

**Doc. dr Jelena Ješić**

Fakultet poslovne ekonomije Univerziteta Edukons u Sremskoj Kamenici - Novom Sadu

## **TEHNIČKO UPUTSTVO**

Radovi za objavljivanje u naučnom časopisu „Poslovna ekonomija“, dostavljaju se na **engleskom jeziku. Dužina radova ograničava se na 16 stranica A4 formata.**

**Imena autora i koautora** pišu se slovima veličine 12pt, Bold, centrirani uz levu marginu (Align Left), zatim Ime, Srednje slovo (ukoliko je moguće), Prezime, zvanje (videti detaljnije u primeru koji se nalazi ispod uputstva);

Nakon imena autora odnosno koautora, unosi se fusnota (podesiti opciju iz glavnog menija Insert/Reference/Footnote u prozoru Footnote and Endnote podešavanja: Footnotes: Bottom of page, Number format: 1,2,3..., Start at: 1, Numbering: Continuous, Apply changes to: Whole document) u fusnoti koja će se pojaviti u dnu strane uneti e-mail adresu autora odnosno koautora, i nakon fusnote upisati zvanje autora odnosno koautora;

Ispod imena autora odnosno koautora uneti naziv institucije, ustanove, fakulteta i sedište u kojoj je autor odnosno koautor zaposlen (veličina slova 12pt Regular);

**Naslov rada** se piše veličinom slova 14 pt Bold, sva slova velika, centriran uz levu marginu (Align Left). Ukoliko je rad deo nekog istraživačkog projekta, nakon naslova unosi se fusnota u obliku zvezdice (\*) iz glavnog menija Insert/Reference/Footnote u prozoru Footnote and Endnote podešavanja Custom mark: \*, Numbering: Restart each Page) u fusnoti koja će se pojaviti u dnu strane uneti osnovne informacije o projektu - naziv projekta, oznaku, naziv institucije iz koje se finansira itd;

Nakon naslova ide naslov **ABSTRACT** (samo ova reč Times New Roman, veličina slova 12 pt, Bold i sva slova velika), veličina slova 12pt (Regular) koji treba da sadrži 100-250 reči, ne koristi se prored u tekstu (podesiti opciju iz glavnog menija Format/Paragraph/ u prozoru Indents and Spacing podešavanja: Before Opt, After Opt, Line Spacing Single), sve redove u tekstu ne samo prvi red, uvući 0,5pt. Redovi u tekstu se završavaju isto toliko pre desne margine (podešavanje se može izvršiti na lenjiru (Ruler) na kome se graničnici i sa jedne i sa druge strane pomere po pet podeoka ka sredini ili iz glavnog menija File/Page Setup u prozoru Margins podešavanja Left, Right);

Nakon dela ABSTRACT stoji naslov *Key words* (samo ovaj naslov stoji Italic), ostale reči Font Times New Roman, veličina slova 12pt Regular. Broj ključnih reči ne može biti veći od 10, njihova učestalost upotrebe u tekstu trebalo bi da bude što veća.

Nakon Ključne reči ide sam tekst naučnog rada;

**Osnovni tekst** Font Times New Roman, veličina slova 12pt Justfy tekst poravnat sa obe margine; iz glavnog menija File/Page Setup u prozoru Margins podešavanja Top: 1“, Bottom: 1“, Left: 1“, Right: 1“; ne koristi se prored u tekstu (podesiti opciju iz glavnog menija Format/Paragraph/ u prozoru Indents and Spacing podešavanja: Before 0pt, After 0pt, Line Spacing Single), prvi red svakog paragrafa kao i naslovi pojedinih delova rada uvlače se ili pritiskom na taster TAB na tastaturi ili se podesi u glavnom meniju Format/Paragraph/podešavanje Indentation: First Line podesiti na 0,5“; Posle naslova ostavlja se jedan red prazan, dok se na kraju određenog dela teksta a pre sledećeg naslova ostavljaju dva prazna reda a pre podnaslova ostavlja jedan prazan red;

**NASLOVI** su Times New Roman, veličina slova 12pt, Bold, centrirano uz levu marginu (Align Left), sva slova velika i uvučeni ili pritiskom na taster TAB na tastaturi ili se podesi u glavnom meniju Format/ Paragraph/ podešavanje Indentation: First Line podesiti na 0,5;

**Podnaslovi** su Times New Roman, veličina slova 12pt, Bold, centrirano uz levu marginu (Align Left), samo prvo slovo veliko i uvučeni ili pritiskom na taster TAB na tastaturi ili se podesi u glavnom meniju Format/Paragraph/ podešavanje Indentation: First Line podesiti na 0,5;

**Navođenje u tekstu** rada označavaju se u zagradama gde su zarezi razdvojeni prezime autora, godina izdanja, stranica na kojoj se nalazi citiran tekst; npr (Petrović, 2004., str. 56) ili ukoliko ima više autora (Petrović i dr., 2005, str. 74); (APA) – citatni stil

**Fusnote ISKLJUČIVO** iz glavnog menija Insert/Reference/Footnote u prozoru Footnote and Endnote podešavanja: Footnotes: Bottom of page, Number format: 1,2,3..., Start at: 1, Numbering: Continuous, Apply changes to: Whole document, ukoliko se primeni ovakav način označavanja, početna fusnota će biti e-mail adrese autora, odnosno koautora ukoliko ih ima, a zatim će se u tekstu kontinuirano po brojevima ređati fusnote. Fusnote su Times New Roman, veličina slova 10pt i sadrže komentare dela teksta, dopunska objašnjenja, naznake o korišćenim izvorima itd;

**Slike i Tabele** numerišu se rednim brojevima kontinuirano kroz čitav tekst (Slika 1., Slika 2. itd). Neophodno je da nakon Slika 1. (Italic) povlakom u produžetku stoji naziv slike (Regular) (Slika 1. – Sposobnosti pregovarača). Ispod slike centrirano po sredini (Center) mora da se navede izvor odakle je slika preuzeta ili ukoliko je u pitanju originalan prikaz autora da se to naznači (Izvor – Lovreta i dr., 2010., str 78 ili Izvor – Autor). Isti slučaj je i sa Tabelama. Slike i tabele ukoliko ih ima u radu poželjno je da se dostave i odvojeno od rada u nekom od sledećih formata (jpg, pdf, xls...).



**REZIME** je deo na srpskom jeziku koji se nalazi na kraju rada odnosno posle zaključka a pre literature. Naslov je centriran po sredini (Center) Times New Roman, veličina slova 12pt, Bold, sva slova velika. Pored naslova REZIME sadrži i prevod naziva rada na SRPSKI jezik. REZIME predstavlja prevod Sažetka zajedno sa ključnim rečima na srpski jezik. veličina slova 12pt (Regular),

Deo **REFERENCES** sledi nakon dela na srpskom jeziku (REZIME). Spisak naslova u ovom delu ređa se po abecednom redu, gde svaki izvor treba da je označen rednim brojem. **U spisku literature treba da se nalaze samo nazivi** (knjiga, radova, monografija, internet izvora....) **dela koji su citirani u samom radu i to prema APA citatnom stilu**

**Knjige:** navodi se redom Prezime autora, prvo slovo Imena autora, (godina izdavanja) naziv dela kurzivom (Italic), izdavač, mesto izdavanja,

Primer:

1. Vasiljević, M., (2007) *Pravo i zaštita investitora*, Pravo i privreda, Beograd.

**Članak u časopisu:** prezime autora ispisano u punoj formi, ime autora skraćeno (inicijal), (godina) naslov poglavlja ili članka, (Italic) naslov knjige ili zbornika radova italikom (kurzivom), izdavač, mesto izdavanja, broj izdanja, broj strane.

Primer:

Starović, B., (1992) Pogled na pravo i ostvarivanje prava Evropskih zajednica, Pravo, teorija i praksa, Pravo, Novi Sad, br. 8-10, str. 34-41..

**Izvori sa Interneta:** prezime autora ispisano u punoj formi, ime autora skraćeno (inicijal), (godina) naslov rada ili članka italikom (kurzivom), broj izdanja, internet adresa,

Primer:

Kotler, F., (1998) *How to create, win and dominate markets*, Vol. 1.,  
[//www.amazon.com/ Kotler-Marketing-Create-Dominate-Markets/](http://www.amazon.com/Kotler-Marketing-Create-Dominate-Markets/),

CIP -Каталогизација у публикацији  
Народна библиотека Србије, Београд  
33

ПОСЛОВНА економија: часопис за пословну  
економију, предузетништво и финансије=  
Business economics: Magazine for business  
Economics, entrepreneurship and finance/  
Главни и одговорни уредник Марко Маловић.-  
Год.1, бр. 1 (2007)-. - Сремска Каменица  
(Војводе Путника 87) : Универзитет Едуконс, Факултет  
Пословне економије,  
2007-.-24 цм. –  
Полугодишње

ISSN 1820/6859 = Пословна економија  
COBISS.SR-ID 146187532