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REGIONS OF SERBIA: DEVELOPMENT, INVESTMENT AND FOREIGN TRADE

Gojko Rikalović*

gojko.rikalovic@ekof.bg.ac.rs

Dejan Molnar*

dejan.molnar@ekof.bg.ac.rs

Abstract

The subject of this paper was the research of the basic development features of NUTS 2 level regions in Serbia during the period 2009-2018. The paper starts from the key indicators of the development picture of the Serbian NUTS 2 regions - the structure of regional GVA by industry, the level of regional labor productivity by sectors, regional coefficients of relative prices, etc. Particular attention is paid to analyzing the volume, dynamics, structure and effectiveness of investments in Serbian regions: investments in new fixed assets per capita, rates of realized new fixed investments, effectiveness of realized investments in new fixed assets and regional distribution of FDI. The foreign trade performances of Serbian regions were analyzed through selected relevant indicators - volume of trade in goods per capita, region's share in overall trade in goods, coefficients of elasticity of foreign trade.

Key words: Serbian NUTS 2 regions, development features, regional structure and effectiveness of investments, regional foreign trade.

JEL CLASSIFICATION: P25, R11, R12

* University of Belgrade – Faculty of Economics

INTRODUCTION

The territorial aspect of development is an indispensable determinant of the overall development picture of each country, including Serbia. An integrative approach to regional development starts from realization of economic, social, environmental and political sustainability. Regional inequalities are a phenomenon particularly pronounced in our country. They affect the competitiveness and the perspectives of the region's development sustainability. During the analyzed period 2009-2018. Serbia faced emphasized and growing regional disparities in almost all segments of economic and social development. This situation is the result of marginalizing this issue in the country's development policy, as well as of adapting and implementing inappropriate measures to mitigate regional inequalities in the previous period. Having in mind that the regional problem is of a structural and long-term nature, it is especially important to pay attention to the volume, territorial distribution and efficiency of investments. In this context, the regional distribution of investments is unfavorable, both domestic and foreign - more developed areas (Serbia - North) in the analyzed period attracted much more investments than less developed areas (Serbia - South). The territorial and sectoral distribution of realized new fixed investments significantly determines both the overall foreign trade performance of the regions and their participation in exports and imports. The structure of exports and the total foreign trade of Serbian regions is significantly conditioned by the volume, structure, main directions of influence and main and accompanying effects of both domestic and foreign direct investments.

1. KEY INDICATORS OF REGIONAL DEVELOPMENT

Considering the regional dimension of key macroeconomic indicators in Serbia over a ten-year period (2009-2018) may provide relevant insights into the importance of sustainable regional development for enhancing the efficiency and competitiveness of the national economy¹.

Throughout the period under review, the Belgrade region has a dominant position over other regions in Serbia: it generated, on average, almost 40% of Serbia's GDP, employed on average more than 1/3 of the country's total employees, this region absorbed over 43% of realized investments in new fixed assets, while the level of labor productivity in the Belgrade region was

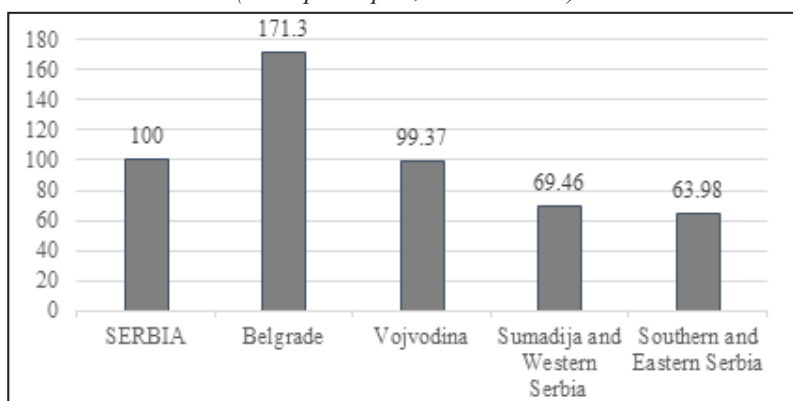
¹ For more details about necessity of reaffirmation of regional policy in Serbia see: Rikalović and Molnar (2018).

20 index points above the Serbian average. When it comes to foreign trade of goods, it can be seen that the Belgrade region predominantly determines our country's total deficit (close to 94%). In addition to the Belgrade region, the Vojvodina region also has a deficit in foreign trade of goods. In contrast to these northern regions, the regions of Sumadija and Western Serbia and Southern and Eastern Serbia have a surplus in foreign trade and thus contribute to reducing Serbia's overall trade deficit.

Based on the presented data, it can be concluded that in Serbia there is a polarization of development according to the "north-south" principle, since Serbia - north (Belgrade and Vojvodina) compared to Serbia - south (Sumadija and Western Serbia and Southern and Eastern Serbia) during the observed period achieves almost twice more in share of GDP, employs 1.44 times more workers, absorbs 2.46 times more investment in new fixed assets and has above-average labor productivity. However, the fact that the foreign trade of Serbia - north generates the whole our trade deficit cannot be neglected.²

Graph 1 represents the position of each of the four NUTS 2 regions in relation to the Serbian average over the observed ten-year period. What is clear is that only the Belgrade region achieved a level of development above the national average during the observed period. At the same time, the Vojvodina region has slightly lower level of development than the average of Serbia, while the remaining two regions (Sumadija and Western Serbia and Southern and Eastern Serbia) are significantly behind in their development compared to our northern regions.

Graph 1. Average level of development of Serbian regions in the period 2009-2018 (GDP per capita, Serbia = 100)



Source: Rikalović and Molnar (2020), p. 139.

² The data below are the result of calculations made by the authors themselves, based on the sources which contain data for regional issues from Републички завод за статистику (Statistical Office of the Republic of Serbia - SORS).

The dispersion of GDP per capita between the NUTS 2 regions has increased, from 33% (in 2017) to 34% in 2018. At the same time, the per capita GDP dispersion between the NUTS 3 subregions increased from 37% to 38%³.

The following table (Table 1) gives an overview of the economic structure of regional economies and a comparative overview of the shares of individual sectors in gross value added (GVA⁴) in the period 2014- 2018.

Table 1: Structure of regional GVA by industry (in %), 2014-2018 average.

Total	Belgrade	Vojvodina	Sumadija and Western Serbia	Southern and Eastern Serbia
Agriculture, forestry and fisheries	1.53	14.2	12.89	10.89
Mining; Manufacturing industry; Electricity, gas, steam and air conditioning supply; Water supply; wastewater management, control of waste disposal processes and similar activities	16.35	32.23	31.29	32.03
Construction	5.87	3.22	4.11	3.76
Wholesale and retail trade; repair of motor vehicles and motorcycles; Transport and storage; Accommodation and food (catering) services	23.84	18.36	18.47	15.71
Information and communication	11.42	2.49	1.57	1.81
Financial and insurance activities	6.01	2.3	1.96	1.84

³ Републички завод за статистику 2020, p. 10.

⁴ For activities/sectors there are only GVA data available (instead of GDP).

Real estate business	9.59	9.03	10.91	10.69
Professional, scientific and technical activities; Administrative and support service activities	10.88	4.99	2.79	3.29
Public administration and defense; compulsory social security; Education; Health and social care	11.38	10.92	13.65	17.63
Art; entertainment and recreation; Other service activities; Household activity as an employer; the activity of households producing goods and services for their own use	3.12	2.26	2.36	2.34

Source: author's calculation based on data from Републички завод за статистику (Statistical Office of the Republic of Serbia - SORS).

The largest share in the Belgrade region's economy (close to 25%) has the grouping of wholesale and retail trade, repair of motor vehicles and motorcycles, transport and storage and accommodation and food services, followed by grouping of mining, manufacturing, electricity, gas, steam and air conditioning, water supply, wastewater management, waste management and similar activities (above 16%), while primary activities (agriculture, forestry and fisheries) account for just over 1.5%. In Vojvodina, grouping of mining and manufacturing industry, electricity, gas, steam and air conditioning supply, water supply, wastewater management, waste management and related activities is predominantly present (more than 32%), than the grouping of wholesale and retail trade, repair of motor vehicles and motorcycles, traffic and storage, accommodation and food (catering) services (almost 19%) and primary activities with close to 15%, while financial and insurance activities account for only 2.3% of GVA. It is interesting to note that the regions of Sumadija and Western Serbia and Southern and Eastern Serbia have similar economic structure to the region of Vojvodina to a large extent.

It is noted that these are the primary activities (agriculture, forestry and fisheries) with the smallest share in the Belgrade region (1.53%), and the largest in the Vojvodina region (14.2%). Mining, manufacturing and other activities in the same group are twice as low in the Belgrade region compared to each of the other three regions. The share of information and communication activities in GVA in the Belgrade region is significantly higher than their share in Vojvodina (4.6 times), Sumadija and Western Serbia (7.3 times) and Southern and Eastern Serbia (6.3 times). The share of financial and insurance activities is lower in Vojvodina (2.6 times), in Sumadija and Western Serbia (3.1 times) and in Southern and Eastern Serbia (3.3 times) compared to the Belgrade region.

Using a comparative analysis of the regional structure of employment by activities in the five-year considered period (2014-2018) and the relative importance of certain sectors in regional employment, some more relevant knowledge about features of structure of regional economies can be obtained. The relative importance of certain groups of activities in the structure of employees in the Belgrade region is similar to their position in the structure of the GVA, except that in this case, with a significant share, the state administration and defense and other activities from that group (24.43%) appear, as well as professional, scientific and technical activities and other activities in this group (15.22%). In this respect, the situation is similar in the Vojvodina region. In the case of Sumadija and Western Serbia, it is observed that by their share (25.16%) in the total number of employed group of trade, transport and other activities exceeds its share in GVA, and that in this region there is a high representation of the state administration, defense and other activities from this group (23.6%), as well as a much lower representation (1.35%) of primary activities in relation to their relative position in GVA. In that sense, almost the same refers to the region of Southern and Eastern Serbia. It is important to note that in comparison with other regions, the percentage of employees in primary activities is the largest in Vojvodina, while in Belgrade it is in the professional, scientific, technical and other activities from that group and the smallest percentage is in the mining, manufacturing and other activities of that group⁵.

Labor productivity levels are higher in the northern and lower in the southern regions of Serbia. Namely, labor productivity in Belgrade and Vojvodina is ahead of the national average, while in the area of Sumadija and

⁵ Source: author's calculation based on data from Републички завод за статистику.

Western Serbia and Southern and Eastern Serbia it lags behind the mentioned indicator. The following table (Table 2) presents the levels of regional labor productivity by activities in the five-year period (2014-2018):

Table 2: Level of regional labor productivity, by sectors, average 2014-2018 (Serbia = 100)

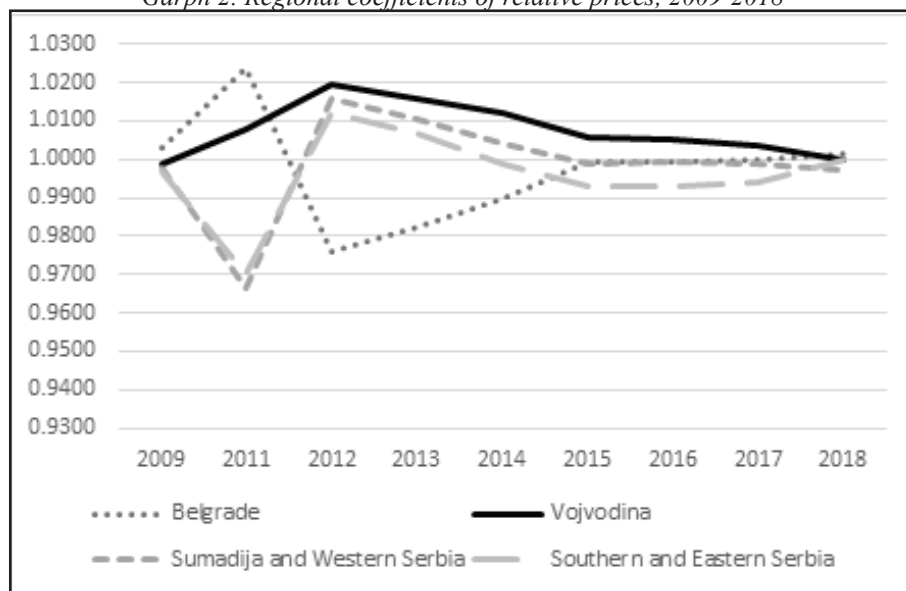
Total	Belgrade	Vojvodina	Sumadija and Western Serbia	Southern and Eastern Serbia
Agriculture, forestry and fisheries	53.20	77.32	178.60	154.89
Mining; Manufacturing industry; Electricity, gas, steam and air conditioning supply; Water supply; wastewater management, control of waste disposal processes and similar activities	137.76	114.53	79.20	78.11
Construction	131.33	84.42	75.07	79.04
Wholesale and retail trade; repair of motor vehicles and motorcycles; Transport and storage; Accommodation and food (catering) services	125.75	95.57	80.76	71.77
Information and communication	129.20	55.47	54.39	51.83
Financial and insurance activities	117.90	79.70	75.80	74.14
Real estate business	70.66	106.35	154.88	186.09
Professional, scientific and technical activities; Administrative and support service activities	111.22	97.20	70.75	72.08
Public administration and defense; compulsory social security; Education; Health and social care	101.93	97.26	96.08	104.37
Art; entertainment and recreation; Other service activities; Household activity as an employer; the activity of households producing goods and services for their own use	120.11	95.49	83.12	78.98

Source: author's calculation based on data from Републички завод за статистику (Statistical Office of the Republic of Serbia - SORS).

It can be seen that the labor productivity in the Belgrade region in the primary and real estate activities group is significantly behind the national average, and especially in the regions in the Serbia-south area, but in all other groups of activities it is significantly ahead of both the national average and other regions. It is also interesting that the Vojvodina region exceeds the national average in only two activity groups (mining, manufacturing...; real estate business) in labor productivity, but it lags significantly behind the level of labor productivity in primary activities (agriculture, forestry and fisheries) and real estate business compared to the regions of Sumadija and Western Serbia and Southern and Eastern Serbia. The highest level of labor productivity regarding the national average in the regions of Sumadija and Western Serbia and Southern and Eastern Serbia is reached in primary activities (178.6 and 154.89, respectively) and in real estate business (154.88 and 186.09, respectively), and lowest in information and communication (54.39 and 51.83, respectively).

It is also important to analyze the regional coefficients of relative prices in our country. Graph 2 was constructed for this purpose. It provides the chance to look at the relative positions of individual regional economies in the market, as well as their changes over a ten-year period (2009-2018). As seen, at the beginning of the period (2009) only Belgrade's economy had a favorable market position, while the other three regional economies were at a disadvantage in the market. However, given the average coefficients of relative prices for the period 2011- 2018, only Vojvodina's economy is in a favorable market position, while now Belgrade's economy, along with regional economies in the Serbia-south region, is in an unfavorable market position. It is interesting that in the next seven years (2011, 2012,... 2017), the Vojvodina region has the best market position, while the Belgrade economy from 2012 to 2017 has an unfavorable position on the market. The economy of the Sumadija and Western Serbia region, however, has a good market position from 2012 to 2014, and then its position on the market deteriorates by the end of the observed period. Favorable market position for the region of Southern and Eastern Serbia is present only during 2012 and 2013.

Garph 2. Regional coefficients of relative prices, 2009-2018



Note: author's personal calculation on the basis of data of the Statistical Office of the Republic of Serbia (SORS). Constant prices in 2010.

The annual changes in the market positions of regional economies and the trend of these changes can be more clearly seen with the help of the following table (Table 3):

Table 3. Level of regional coefficients of relative prices

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Chain indices (previous year=100)									
Belgrade		99.70	102.35	95.34	100.69	100.75	100.95	100.00	100.07	100.14
Vojvodina		100.11	100.76	101.20	99.61	99.64	99.34	99.99	99.84	99.59
Sumadija and Western Serbia		100.22	96.63	105.11	99.48	99.39	99.46	100.02	99.98	99.84
Southern and Eastern Serbia		100.32	97.01	104.30	99.49	99.22	99.44	99.98	100.12	100.58
	Base indices (average of the period=100)									
Belgrade	100.55	100.25	102.61	97.83	98.50	99.24	100.18	100.18	100.26	100.40
Vojvodina	99.21	99.33	100.08	101.28	100.88	100.52	99.87	99.85	99.70	99.28

Sumadija and Western Serbia	99.89	100.11	96.74	101.69	101.16	100.54	100.00	100.02	100.01	99.85
Southern and Eastern Serbia	100.03	100.36	97.36	101.54	101.03	100.24	99.67	99.65	99.77	100.35

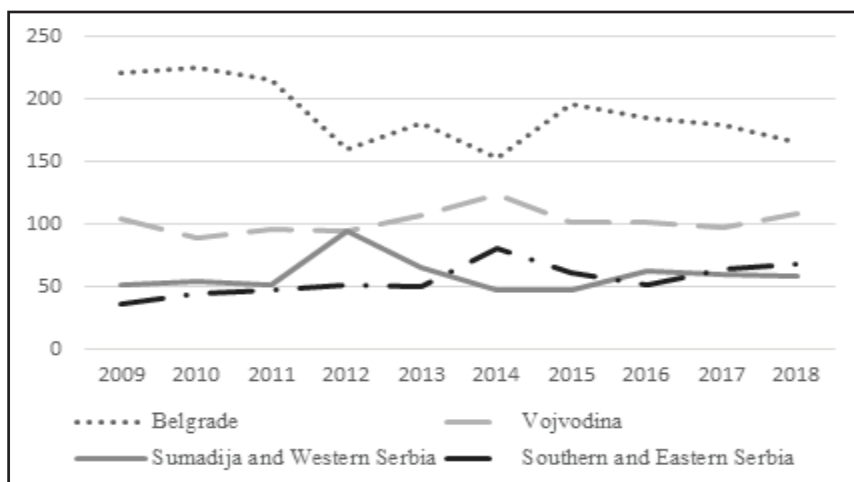
Note: author's calculation

The relative market positions of the economies of our NUTS 2 regions are significantly determined by the changes in the prices of the goods and services they create, as well as by their different production structures.

2. INVESTMENT FEATURES

The development characteristics of our regions are, to a significant degree, determined, inter alia, by the amount of investment per capita. Realized new fixed investments per capita in Serbia during the period 2009-2018 were, in average, about 617 euros. Besides this, by this indicator, the Belgrade region, followed by the Vojvodina region, was significantly ahead, while the other two regions were significantly below the average. The following graph (Graph 3) shows the positions of the regions in relation to the republic average of realized investments in new fixed assets per capita:

Graph 3. Investments in new fixed assets per capita, level index (Serbia = 100), by region



Note: graphical representation based on author's calculations based on data from Републички завод за статистику, (Statistical Office of the Republic of Serbia - SORS).

During the analyzed period, in average, more than two fifths (43.72%) of total realized new fixed investments were spent on the Belgrade region, over one quarter (27.4%) came to the Vojvodina region, while the Sumadija and Western Serbia region and the region Southern and Eastern Serbia were significantly less represented (16.57% and 12.3%, respectively). The structure of realized investments in new fixed assets in the Belgrade region is dominated by information and communications, professional, scientific, innovation and technical activities, electricity, gas and steam supply, public administration and compulsory social security, transport and storage and wholesale and retail trade and repair of motor vehicles. The mentioned investments in the region of Vojvodina are dominated by the manufacturing industry with a share of about 1/3 and mining with more than a tenth. The representation of manufacturing in realized investments in new fixed assets in the region of Sumadija and Western Serbia is close to half, while in the region of Southern and Eastern Serbia it is slightly more than 2/5⁶.

Important information on the amount of regional new fixed investment rates and their changes over the observed period (2009-2018) can be obtained by looking at Table 4:

Table 4. Realized new fixed investment rates (in %), 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average 2009-2018
Belgrade	16.03	16.23	16.56	14.61	12.06	9.35	12.87	12.43	12.27	13.01	13.54
Vojvodina	14.30	11.84	12.83	14.53	11.99	12.25	11.23	11.46	11.29	15.13	12.69
Sumadija and Western Serbia	9.39	10.02	10.27	21.68	11.04	6.81	7.42	10.02	10.02	11.71	10.84
Southern and Eastern Serbia	7.59	8.96	10.03	12.63	9.19	12.82	10.79	9.33	11.58	14.14	10.71

Note: authors' calculations on the database from Републички завод за статистику (Statistical Office of the Republic of Serbia - SORS).

* The investment rate was calculated as the share of realized new investments in new fixed assets in gross domestic product.

⁶ Note: all data are the result of calculations by the authors themselves on the basis: Републички завод за статистику (Statistical Office of the Republic of Serbia - SORS)

On average, the regions of Serbia-north recorded slightly higher investment rates (by about 2.5 percentage points) compared to the regions of Serbia-south. At the same time, the rate of new fixed investments in the Belgrade region ranges from 9.35% to 16.56%, and in Vojvodina from 11.23% to 15.13% during the observed period. In the region of Sumadija and Western Serbia, the mentioned investment rate was really high (21.68%) in 2012, and then reached its minimum (6.81%) in 2014. Regarding the region of Southern and Eastern Serbia, the rate of new fixed investments ranges from 7.59% (2009) to 14.14% (2018).

In addition to the volume and investment rate, for regional development their effective use is of utmost importance. The following table (Table 5) provides relevant information on the average values of the marginal capital coefficient of the Serbian economy and its NUTS 2 regions in 2009-2018:

Table 5: Effectiveness of realized investments in new fixed assets in the period 2009-2018

	Marginal capital coefficient (k_m) ⁷	Level k_m (Serbia=100)
SERBIA	4.82	100
Belgrade	4.44	92.14
Vojvodina	4.80	99.54
Sumadija and Western Serbia	6.28	130.37
Southern and Eastern Serbia	4.75	98.63

Note: author's calculation.

It can be seen that the efficiency is the highest in the Belgrade region, while it is the lowest in the region of Sumadija and Western Serbia. In addition, the marginal coefficients of the Vojvodina and Southern and Eastern Serbia regions are close to the national average. Also, it should be noted that the level

⁷ It is about a simultaneous marginal capital coefficient. In its calculation, data on realized investments in new fixed assets and gross domestic product, expressed in real amounts (constant 2010 prices), were used. Regional deflators calculated by the authors were used to determine the real volumes reported.

of marginal capital coefficient of the Sumadija and Western Serbia region is 30 index points above the whole, while in contrast, the Belgrade region has about 7.8 index points below the average.

At this point, it is necessary to point out the distribution of foreign direct investments (FDI) throughout the NUTS 2 regions of our country during the transition period (2001-2016), which is provided in Table 6:

Table 6. Regional distribution of FDI (by value and by number of realized projects), period 2001-2016

	Number of FDI projects		Value of FDI projects (in million euro)	
	number	share	value	share
Belgrade	74	17%	11.439	45%
Vojvodina	221	52%	9.359	37%
Sumadija and Western Serbia	72	17%	2.513	10%
Southern and Eastern Serbia	57	13%	2.024	8%
TOTAL	424	100%	25.335	100%

Source: author's calculation on the NUTS 3 level database given in: Миљковић 2019, p. 222.

It is observed that FDI are mostly distributed to the Belgrade region (as much as 45%) and the Vojvodina region (37%), and to a much lesser extent directed to the Serbia-south regions (Sumadija and Western Serbia - 10%, Southern and Eastern Serbia - 8%). This kind of regional distribution of FDI testifies that foreign capital was primarily driven by its profit interests, that is, it went where it could expect the highest return, not where it would be desirable for us in order to reduce regional inequalities. Therefore, the question of justification of giving high subsidies to attract them arises.

3. CHARACTERISTICS OF FOREIGN TRADE

The territorial and sectoral distribution of realized new fixed investments significantly determines both the overall foreign trade performance of the regions and their participation in exports and imports in the period 2009-2018.

Table 7. Some important indicators of regional foreign trade in goods, average in 2009-2018.

2009-2018 Average	Belgrade	Vojvodina	Sumadija and Western Serbia	Southern and Eastern Serbia
Export per capita, eur	1612	1959	1412	1106
Import per capita, eur	4290	2395	1236	1003
Volume of trade in goods per capita, eur	5902	4354	2675	2110
Balance of trade in goods per capita, eur	-2.678	-436	149	103
Region's share in overall export (in %)	24.61	34.02	25.51	15.84
Region's share in overall import (in %)	45.27	28.84	15.82	9.98
Region's share in overall trade in goods (in %)	36.82	30.96	19.78	12.38
Coverage of imports by exports (in %)	36.77	80.51	108.18	107.97
Exchange ratio coefficient	0.54	1.18	1.61	1.59
Coefficient of elasticity of export	2.40	2.73	4.77	2.94
Coefficient of elasticity of imports	1.46	1.99	3.36	1.57
Coefficient of elasticity of foreign trade	1.70	2.29	4.02	2.23
Coefficient of investment elasticity of exports	2.94	1.97	1.24	0.86
Coefficient of investment elasticity of imports	1.79	1.43	0.87	0.46
Coefficient of investment elasticity of trade	2.08	1.65	1.04	0.65

Notes:

- authors' calculation based on: Републички завод за статистику, and www.nbs.rs for the average dinar exchange rate;
- the growth rates used in the calculations were calculated as the arithmetic averages of the annual growth rates of the respective aggregates expressed in euros over the ten-year period 2009-2018.

It is obvious that during this period the Vojvodina region achieved an average export value of over 3.7 billion euros, which is 1.4 times more than in the Belgrade region, 1.3 times more than Sumadija and Western Serbia and 2.1 times more than in the region of Southern and Eastern Serbia, accounting for more than a third (34.0%) of Serbia's total exports. In contrast to that, the Belgrade region dominated by imports: its imports average is about 7.2

billion euros, about 1.6 times more than Vojvodina, close to 2.9 times that of Sumadija and Western Serbia and 4.5 times more than in Southern and Eastern Serbia. Therefore, the Belgrade region dominates Serbia's imports with a share of 45.3%. The aforementioned findings on the regional distribution of our country's exports and imports also indicate that the Belgrade region is the leader in overall foreign trade in goods (by 36.8%; by EUR 5,902 per capita), but also in the overall trade deficit (by 96.3%; by 2,678 euro per capita). It turns out that the volume of export per capita in the Belgrade region is about 1/5 lower than in Vojvodina, although it is higher in relation to the same indicator in the regions of Serbia-south. Imports per capita in the Belgrade region exceed the same indicator by about 1.8 times compared the Vojvodina region, that is, in the regions of Sumadija and Western Serbia and Southern and Eastern Serbia by about 3.4 and 4.3 times, respectively. What follows is that the coverage of imports by exports in the Belgrade region is only 36.8%, and in Vojvodina significantly higher - 80.5%. It is important to note here that since exports are higher than imports in the Serbia-south regions, the coverage of imports by exports is greater than 100%. Belgrade region stands out in comparison to other regions, also in that its share in total exports reaches only about 54% of its share in our country's imports, while it is quite the opposite for the Vojvodina region, where it is 1.18 times higher, in the Sumadija and Western Serbia region, where it is 1.61 times higher, and in Southern and Eastern Serbia region where it is 1.59 times higher than the share in total imports.

Very significant data about the foreign trade performance of our NUTS 2 regions can be obtained on the basis of the coefficients of elasticity of exports, imports and total foreign trade in goods. Namely, the coefficient of elasticity of export (obtained as a quotient of export growth rate and GDP growth rate) indicates the export capacity of the regional economy: in the Belgrade region, export growth of 2.4% is achieved by one percent of GDP growth, in the Vojvodina region it is 2,73%, in the region of Sumadija and Western Serbia with 4.77% and in the region of Southern and Eastern Serbia with 2.94%. It is interesting to note that the export capacity of the economies of our southern NUTS 2 regions is at a higher level than the regions of Serbia-north. The coefficient of elasticity of imports (obtained as a quotient of the import growth rate and the GDP growth rate) informs the degree of import dependence of the regional economy: in the Belgrade region, one-percent GDP growth was conditioned by the import growth of 1.46%, in the Vojvodina region of 1.99%,

in the region of Sumadija and Western Serbia of 3.36% and in the region of Southern and Eastern Serbia of 1.57%. It can be observed that the growth of the economies of the regions of Sumadija and Western Serbia and Vojvodina is much more determined by the growth of imports than in other regions. The coefficient of elasticity of foreign trade (obtained as a quotient of foreign trade growth rate and GDP growth rate) speaks about the relative importance of foreign trade bonds of regional economies for their economic growth: in the Belgrade region, one percent of GDP growth was accompanied by a growth in total trade of 1.7%, in the Vojvodina region of 2.29%, in the region of Sumadija and Western Serbia of 4.02% and in the region of Southern and Eastern Serbia of 2.23%. It is obvious that the importance of total foreign trade for economic growth is most pronounced in the region of Sumadija and Western Serbia compared to other regions.

The coefficient of investment elasticity of exports (obtained as a quotient of the export growth rate and the growth rate of fixed investments) shows the export capacity (capacity, potential) of new fixed investments in the regional economy: one percent investment growth resulted in 2.94% of export growth in the Belgrade region, as opposed to the region Southern and Eastern Serbia, where it resulted in only 0.86% of export growth. The coefficient of investment elasticity of imports (obtained as a quotient of the import growth rate and the growth rate of fixed investments) expresses the import orientation of new fixed investments in the regional economy: while the one-percent investment growth in our southern NUTS 2 regions (Sumadija and Western Serbia and Southern and Eastern Serbia) implied an increase in imports of 0.87% and 0.46% respectively, in the Belgrade region it required an increase in imports of as much as 1.79% and in Vojvodina of 1.43%. The coefficient of investment elasticity of trade (obtained as a quotient of the trade growth rate and the growth rate of fixed investments) shows the degree of foreign trade orientation of new fixed investments: one percent growth of investments was followed in the Belgrade region by the growth of foreign trade of 2.08% and in Vojvodina of 1.65 % and 1.04% and 0.65% in the regions of Sumadija and Western Serbia and Southern and Eastern Serbia, respectively.

It can be concluded that a serious rethinking of the volume, structure, main directions of influence and main and accompanying effects of both domestic and foreign direct investments on balancing our foreign trade is necessary, especially given their regional distribution and consequences on the exports structure of the regions.

CONCLUSION

It is known that the competitiveness of a national economy is significantly determined by its regional characteristics of development, investments and foreign trade. Previous analyzes testify that in Serbia there is a polarization of development according to the „north-south“ principle, since Serbia - north (Belgrade and Vojvodina) compared to Serbia - south (Sumadija and Western Serbia and Southern and Eastern Serbia) during the observed period achieves almost twice more in share of GDP, employs 1.44 times more workers, absorbs 2.46 times more investment in new fixed assets and has above-average labor productivity. The development characteristics of our regions are, to a significant degree, determined by the amount of investment per capita - by this indicator, the Belgrade region, followed by the Vojvodina region, was significantly ahead, while the other two regions in south were significantly below the average. During the analyzed period (2009-2018), in average, more than two fifths of total realized new fixed investments were spent on the Belgrade region, over one quarter came to the Vojvodina region, while the Sumadija and Western Serbia region and the region Southern and Eastern Serbia were significantly less represented. Further, the results show that the efficiency of investments is the highest in the Belgrade region, while it is the lowest in the region of Sumadija and Western Serbia. Regional distribution of FDI is as follows: Belgrade region (as much as 45%) and the Vojvodina region (37%), and to a much lesser extent directed to the Serbia-south regions (Sumadija and Western Serbia - 10%, Southern and Eastern Serbia - 8%).

The territorial and sectoral distribution of realized new fixed investments significantly determines both the overall foreign trade performance of the regions as their participation in exports and imports. The conducted research showed that the importance of total foreign trade for economic growth is most pronounced in the region of Sumadija and Western Serbia compared to other regions and that export capacity of the economies of our southern NUTS 2 regions is at a higher level than the regions of Serbia-north. We found also that import dependence of economic growth of the regions of Sumadija and Western Serbia and Vojvodina is higher than in other regions.

Monitoring the development, investment and foreign trade performances of Serbia's regions will become increasingly important, bearing in mind future developments in the field of European integration and the implementation of the „Open Balkans“ regional cooperation initiative.

REGIONI SRBIJE: RAZVOJ, INVESTICIJE I TRGOVINSKA RAZMENA

Rezime

Predmet ovog rada bilo je istraživanje osnovnih razvojnih karakteristika NUTS 2 regiona u Srbiji tokom perioda 2009-2018. godina. U radu se polazi od ključnih indikatora razvojne slike NUTS 2 regiona Srbije – strukture regionalne bruto dodate vrednosti (BDV) po delatnostima, nivoa regionalne produktivnosti rada po sektorima, regionalnih koeficijenata relativnih cena i dr. Posebna pažnja je posvećena analizi obima, dinamike, strukture i efektivnosti investicija u regionima Srbije: ulaganjima u nova osnovna sredstva po glavi stanovnika, stopi realizovanih novih investicija u osnovna sredstva, efektivnosti realizovanih investicija u nova osnovna sredstva i regionalnoj distribuciji SDI. Spoljnotrgovinske performanse regiona Srbije analizirane su kroz odabrane relevantne indikatore - obim robne razmene po glavi stanovnika, učešće regiona u ukupnoj robnoj razmeni, koeficijenti elastičnosti spoljnotrgovinske razmene.

Ključne reči: NUTS 2 regiona u Srbiji, karakteristike razvoja, regionalna struktura i efektivnost investicija, regionalna spoljna trgovina.

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