



MIGRATION, LABOR MARKET AND ECONOMIC DEVELOPMENT: ANALYSIS OF THE REGION OF SOUTH AND EASTERN SERBIA INDICATORS

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Abstract: : *Local economic development is a multidimensional concept that includes aspects of the use of natural resources, labor, capital and investments, as well as the capacities of local institutions in order to stimulate economic growth at the regional level, or the level of districts and municipalities. The aim of this paper is to provide an overview of data that could be used to analyze the indicators of the Region of South and East Serbia in the context of migration, changes in labor market and indicators of economic activity. The impact of migrations on the population was analyzed, and the results indicate that migrations are one of the important factors of the demographic devastation of the Region of South and East Serbia. Using the relevant methods of statistical analysis, the authors carried out a comparative analysis of the statistical regions of the Republic of Serbia in order to determine the differences in the average cause and rate of unemployment and positioning the Region of South and East Serbia in relation to other regions. Also, based on data from structural business statistics, an analysis of the performance of the economy of the Region of South and East Serbia was carried out.*

Keywords: *demographic devastation, (un) employment, average earnings, economic activity.*

JEL classification: *R11, J31, C40.*

1. Introduction

The population and its structures have great significance for the volume, structure and pace of the process of production and consumption. The total number of inhabitants, its economic, demographic and other characteristics determine the scope and structure of

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social needs that are historically conditioned, and they, for their part, under the influence of changes in various structures of the population (old, educational, etc.), are again initiating the whole process of social production. Therefore, the population is linked to the economic and social life of a country, because it is the source of the most important factor of production – labor force.

Labor force as an economically active part of the population is the most important factor in the production process in all types of society, regardless of the changes that are going on in the course of history. The labor force as the driving factor of overall development is determined by the total number of inhabitants of a country which makes a demographic framework for its formation, and its demographic, economic, social and other characteristics determine the total work and intellectual potential.

2. Development indicators of the South and Eastern Serbia region

The region of South and Eastern Serbia is an integral part of the Republic of Serbia, both from the geographical and the statistical and administrative aspects. It was originally envisaged that the region of the statistical region of South and East Serbia consists of two statistical regions - the Southern region and the Eastern region. At the beginning of 2010, the idea of reducing the number of statistical regions prevailed, and the reason for this was unevenness in the number of inhabitants in the regions based on the first proposal. According to the new proposal, Serbia is divided into five statistical regions, and the region's unification is done by merging the Western and Central regions and the Eastern and Southern regions. Namely, in the Republic of Serbia, according to the current statistical division there are five statistical regions: Vojvodina, Belgrade, Sumadija and Western Serbia, South and Eastern Serbia and Kosovo and Metohija. These regions are at the NUTS2 level according to the *Nomenclature of Territorial Units for Statistics*- NUTS of the European Union and they are grouped into two more NUTS1 units, Serbia-North and Serbia-South. The northern part consists of the Belgrade region and the region of Vojvodina, while the southern part consists of the region of Sumadija and Western Serbia, the region of South and East Serbia and the region of Kosovo and Metohija. The regions are further divided into areas, cities and municipalities.

According to the 2011 census, Serbia-north and Serbia-South had approximately the same number of inhabitants (3.6 million inhabitants), however, compared to the previous census period, the total population decreased. The decrease in the number of inhabitants in Serbia-South was four times higher (-338 thousand) than in Serbia-north (-86 thousand). If we look at the twentieth-year period, the differences in population movements are getting even more drastic, bearing in mind that at that time the functional entity Serbia-South had more than half a million inhabitants more than the functional entity Serbia-North (Penev & Marinkovic, 2012).

If the situation is analyzed according to statistical regions, the number of inhabitants according to the last census ranged from 1.6 million (South and Eastern Serbia and Belgrade) to 2 million (Sumadija and Western Serbia), with a significant difference when considering population movements by regions compared to the previous census. The number of inhabitants of the Belgrade region is increased by 34 thousand, while in the other statistical

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regions there is a decrease in the number of inhabitants (there is no data for the Region of Kosovo and Metohija).

The largest decrease was recorded in the Region of South and East Serbia (170 thousand), while in the remaining two statistical regions the decrease was less intense. Negative tendencies in the movement of the total population are also present in the lower territorial-administrative units where the negative population growth rate was achieved in 23 of the 25 districts, while the increase in population was recorded only in the territory of the City of Belgrade and in the South Bačka District (Penev & Marinkovic, 2012).

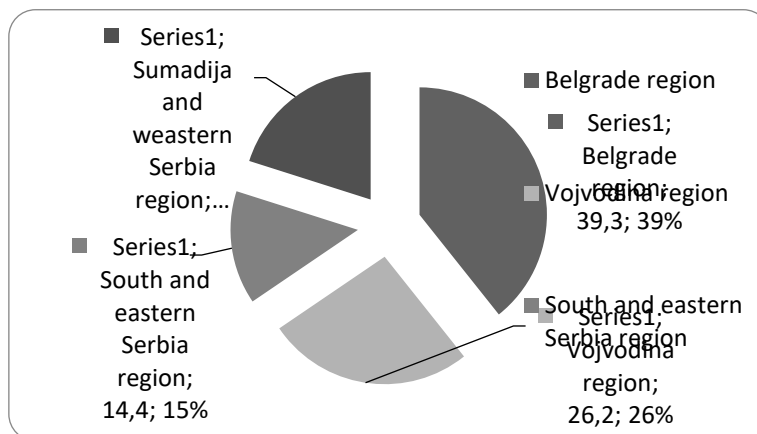
Table 1. Selected indicators of economic development by regions

Indicator	Region			
	Belgrade	Vojvodina	South and eastern Serbia	Sumadija and western Serbia
Area	3.234	21.614	26.248	26.493
Population	1.679.895	1.891.701	1.551.604	1.972.183
% of the population aged 65 and over	17,84	17,86	19,29	19,87
% of the population younger than 20	19,2	19,59	20,42	18,98
Number of settlements	157	467	1973	2112
Population density	519	88	59	74
Activity rate	65,4	62,3	61,9	64,5
Unemployment rate	18,9	16,9	19,7	17,8
Region contributes to GDP RS	39,3%	26,2%	14,3%	20,0%
GDP <i>per capita</i> (in thousands)	947	561	411	374

Source: Statistical Office of the Republic of Serbia, Statistical Yearbook 2016.

A comparative overview of the data on the regions shows a significant difference in the surface, with the Belgrade region nearly seven times smaller than the Region of Vojvodina, about eight times smaller than the Region of South and East Serbia and the Sumadija and Western Serbia Region. Consequently, the largest population density is in the Belgrade region. However, if one analyzes the participation of each of the statistical regions in the realized value of gross domestic product, the dominance of the Belgrade region can be noticed.

Figure 1. Region contributes to GDP of the Republic of Serbia in 2015



Source: Author's preview

With a unique combination of high quality, high availability and cost-effectiveness, the Serbian labor force is considered a strong driver of business performance. The trends in the number of employees in the Republic of Serbia and regions in the period 2014-2016 are shown in the following table.

Table 2. Number of employees in Republic of Serbia and by regions

Territory	Employed			Unemployed		
	2014	2015	2016	2014	2015	2016
Republic of Serbia	1.845.494	1.995.883	2.009.785	741.906	724.096	700.947
Belgrade region	623.541	672.098	669.845	107.041	105.724	104.132
Vojvodina region	474.619	508.381	511.313	184.279	174.854	160.557
South and eastern Serbia region	325.849	342.910	353.237	192.773	185.926	180.847
Šumadija and western Serbia region	421.485	472.565	475.397	239.528	236.516	233.275

Source: Serbian Business Registers Agency, <http://www.apr.gov.rs/>

The table shows that the number of employees in all regions is constantly increasing. The number of employees is the largest in the Belgrade region, and the smallest in the region of South and East Serbia.

The number of unemployed, on the other hand, is in constant decline. The smallest number of unemployed are in Belgrade, while the largest number of unemployed are in the Region of Sumadija and Western Serbia. Relative indicators of the dynamics of the number

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of employees and the number of unemployed in the observed period in the table in the table.

Table 3. Changes in the number of employees and unemployed in the period 2014-2016.

Territory	Employed			Unemployed		
	2015	2016	2016/2014	2015	2016	2016/2014
Republic of Serbia	8.15%	0.70%	8.90%	-2.40%	-3.20%	-5.52%
Belgrade region	7.79%	-0.34%	7.43%	-1.23%	-1.51%	-2.72%
Vojvodina region	7.11%	0.58%	7.73%	-5.11%	-8.18%	-12.87%
South and eastern Serbia region	5.24%	3.01%	8.41%	-3.55%	-2.73%	-6.19%
Šumadija and western Serbia region	12.12%	0.60%	12.79%	-1.26%	-1.37%	-2.61%

Source: Author's calculation

According to relative indicators, the largest increase in the number of employees was recorded in the region of Sumadija and Western Serbia (12.79%), while the least relative increase in the number refers to the Belgrade region (7.43%), in the observed period. The number of employees in 2016, compared to 2014, had increased by 8.41%.

When we observe the dynamics of the number of unemployed, it can be noticed that in the observed period the number of unemployed reduction was the highest in the region of Vojvodina (-12.87%). The smallest decrease in the number of unemployed was recorded in the region of Sumadija and Western Serbia (-2.61%), where the largest increase in the number of employees was registered. The number of unemployed in the region of South and East Serbia in 2016, compared to 2014, fell by 6.19% year-on-year, which is higher than average in republic.

High unemployment is the biggest problem for the economy of our country. The use of the work contingent is expressed through the activity rate of the population. In addition, the following table shows the employment and unemployment rates by regions in 2016.

Table 4. Indicators of population activity in 2016.

Territory	Activity rate	Employment rate	Unemployment rate
Republic of Serbia	51.4	42.2	17.9
South and eastern Serbia region	49.5	40.1	19
Belgrade region	52.3	42.2	19.3
Vojvodina region	50.2	41.7	16.9

Šumadija and western Serbia region	53.4	44.4	16.9
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Source: Statistical Office of the Republic of Serbia, Labor force survey

As can be seen from the table, the activity rate, as an indicator of the utilization of the work contingent, is the lowest in the region of South and East Serbia (49.5%). Despite this increase in the number of employees, the employment rate is also the lowest in this region (40.1%). The highest employment rate is the region of Sumadija and Western Serbia (44.4%). In this region there is also the lowest unemployment rate (16.9%).

According to the data of the Statistical Office of the Republic of Serbia, the number of inhabitants in the Republic of Serbia is in constant decline. In all regions, except in the Belgrade region, the number of inhabitants is also reduced. In addition to the negative natural increase, the reasons for such tendencies in the number of inhabitants are also internal migration. Their volume in 2016 is given in Table 5.

Table 5. Internal migration by regions in the Republic of Serbia

	Imigrated				Emigrated				Migration balance
	Total	From diferent district	From the other municipality within the same district	From another settlement within the same city / municipality	Total	To another District	To another city / municipality within the same district	To another settlement within the same municipality	
Republic of Serbia	125682	47931	48395	29356	125682	47931	48395	29356	0
Serbia-north	78931	29476	38812	10643	72585	23130	38812	10643	6346
Belgrade region	50971	16086	31561	3324	44467	9582	31561	3324	6504
Vojvodina region	27960	13390	7251	7319	28118	13548	7251	7319	-158
Serbia-south	46751	18455	9583	18713	53097	24801	9583	18713	-6346
Šumadia and	27446	9946	4842	12658	30922	13422	4842	12658	-3476

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western Serbia									
South and eastern Serbia region	19305	8509	4741	6055	22175	11379	4741	6055	-2870

Source: Statistical Office of the Republic of Serbia

During 2016, 125,682 persons changed their residence, ie permanently moved from one place to another (settlement) of the Republic of Serbia. It can be noted that within the four regions of the Republic of Serbia, only the Belgrade region in 2016 had a positive migration balance. Observed by economic activity, 54% of migrants are dependent persons, 37% are active persons, while the share of persons with personal income is 9%. The average age of a person who changed their place of residence is 34.4 years (for men 34.8 years and for women 34.1 years).

The population that changes the place of residence is, accordingly, the working population. The key reason is the possibility of employment and the amount of earnings. For this reason, a summary of average earnings by regions in the period 2014-2016 is given in Table 6.

Table 6. Average earnings by regions

Territory	2014	2015	2016
Republic of Serbia	44,530	44,432	46,097
	-	-0.22%	3.75%
South and eastern Serbia region	38,270	38,088	39,959
	-	-0.48%	4.91%
Belgrade region	55,429	55,551	57,717
	-	0.22%	3.90%
Vojvodina region	43,092	43,050	44,646
	-	-0.10%	3.71%
Šumadija and western Serbia region	37,504	38,066	38,315
	-	1.50%	0.65%

Source: Serbian Business Registers Agency, <http://www.apr.gov.rs/>

According to the data shown in Table 6, average earnings are the highest in the Belgrade region, and the lowest in the region of Šumadija and Western Serbia. The region of Šumadija and Western Serbia is at the same time the region with the largest negative difference between the number of people who left this territory and the number who came to this territory (-3476). So, it is reasonable to conclude that the amount of earnings is a key reason for internal migration.

Table 7. Deviations of average earnings in the regions from the republic average

Region	2014	2015	2016
South and eastern Serbia	-14.06%	-14.28%	-13.32%
Belgrade	24.48%	25.02%	25.21%
Vojvodina	-3.23%	-3.11%	-3.15%
Šumadija and western Serbia	-15.78%	-14.33%	-16.88%

Source: Author's calculation

The region of South and East Serbia also has a negative migration balance (-2870). If earnings are viewed as a key reason for internal migration, earnings in this region in 2016 were 13.32% below the national average (Table 7). In the region of Šumadija and Western Serbia, the earnings were 16.88% lower in the same period than the average of the Republic. Only in the region of Belgrade average salary was 25.21% higher compared to the average of the Republic of Serbia.

Table 8. Deviations of average earnings in the region of South and eastern Serbia from other regions

Region	2014	2015	2016
Belgrade	-30.96%	-31.44%	-30.77%
Vojvodina	-11.19%	-11.53%	-10.50%
Šumadija and western Serbia	2.04%	0.06%	4.29%

Source: Author's calculation

Special attention is paid to the region of South and East of Serbia, which is reason because the ratio of salaries in this region is shown in relation to other regions in the Republic of Serbia. According to the results from Table 8, the average wages in this region are 30.77% lower than in the wages in the Belgrade region and 10.50% lower than in the region of Vojvodina. The only region in which the average wages are lower is Šumadija and Western Serbia, and at the same time, in this region, the highest employment rate is recorded. It can be concluded that in this region, the majority of people are employed in low-wage jobs.

3. Conclusion

According to the analyzed indicators, the region of South East Serbia is one of the least developed regions in Serbia. The only bright spot in the analysis is the increase in the number of employees in this region, which is at the level of the republican average. In addition, the decrease in the number of unemployed in this region is higher than the national average. However, earnings in this region represent a limiting development factor.

In order to achieve sustainable economic growth as a guarantee of the well-being of the population and the development of the region, it is recommended that it be necessary

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to focus on several key areas: the education system, which should create high quality human capital, that is, competitive workers; the labor market, improving productivity of the economy through constant support to innovations and the adoption of technological changes.

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MIGRACIJE, TRŽIŠTE RADA I EKONOMSKI RAZVOJ: ANALIZA POKAZATELJA REGIONA JUŽNE I ISTOČNE SRBIJE

Apstrakt: Lokalni ekonomski razvoj je multidimenzionalni koncept koji obuhvata aspekte korišćenja prirodnih resursa, radne snage, kapitala i investicija, ali kapacitete lokalnih institucija u cilju podsticanja ekonomskog rasta na regionalnom nivou, ili nivou okruga i opština. Cilj ovog rada je da pruži pregled podataka kojim bi se mogla izvršiti analiza pokazatelja Regiona Južne i Istočne Srbije u kontekstu migracija, promena na tržišta rada i pokazatelja ekonomske aktivnosti. Analiziran je uticaj migracija na broj stanovnika, a rezultati ukazuju na to da migracije predstavljaju jedan od značajnih faktora demografske devastacije Regiona Južne i Istočne Srbije. Koristeći relevantne metode statističke analize, autori su izvršili komparativnu analizu statističkih regiona Republike Srbije u cilju utvrđivanja razlika u prosečnoj zaradi i stopi nezaposlenosti, te pozicioniranje Regiona Južne i Istočne Srbije u odnosu na ostale regione. Takođe, na osnovu podataka strukturnih poslovnih statistika, izvršena je analiza performansi privrede Regiona Južne i Istočne Srbije.

Ključne reči: demografska devastacija, (ne)zaposlenost, prosečna zarada, privredna aktivnost.

JEL klasifikacija: R11, J31, C40.