

**Samir Ljajić**  
University of Novi Pazar  
Department of Economics

**Vladimir Kostić**  
University of Pristina  
Faculty of Economics  
Department of Economic Policy and  
Development, Kosovska Mitrovica

**Miroljub Nikolić**  
Academy of Technical and Artistic Applied  
Studies – Textile College of Applied  
Studies in Design, Technology and  
Management

# THE LEVEL OF DEVELOPMENT AND SIGNIFICANCE OF ENTREPRENEURSHIP AND SMES IN SERBIA AND SELECTED EU COUNTRIES FROM THE REGION

Razvijenost i značaj preduzetništva i MSP u Srbiji i  
izabranim zemljama EU iz okruženja

## Abstract

Starting from the role and importance of entrepreneurship and SMEs for economic growth and employment, the aim of this research is to explore the achieved level of development of entrepreneurship and SMEs in Serbia and selected EU countries from the region, based on the Global Entrepreneurship Index in 2018, and the development of SMEs in Serbia and selected EU countries from 2009 to 2017. The research on the development of SMEs was conducted through a comparative analysis of the performance of SMEs in the non-financial business sector in Serbia and five selected EU countries from 2009 to 2017, contribution of SMEs to the evolution – recovery and expansion of or decline in employment and value added in Serbia and selected EU member states from 2009 to 2017, as well as through analysis of SME development in Serbia and selected EU countries in 2009 and 2017 on the basis of the value of SME development index in the previously mentioned years. The obtained results served as the basis for assessing the effectiveness of the development policy, i.e., the policy aimed at encouraging the development of SMEs in Serbia in comparison with the reference EU countries from the region, and for making proposals for improving the existing and/or adopting a new SME development policy in Serbia.

**Keywords:** *entrepreneurship, SMEs, economic growth, employment, SME development policy.*

## Sažetak

Polazeći od uloge i značaja preduzetništva i MSP za ekonomski rast i zaposlenost, cilj ovog rada je da istraži dostignuti nivo razvijenosti preduzetništva i MSP u Srbiji i izabranim zemljama EU iz okruženja, na osnovu vrednosti Indeksa globalnog preduzetništva u 2018. godini i razvoja MSP u Srbiji i izabranim zemljama EU iz okruženja od 2009. do 2017. godine. Istraživanje razvijenosti MSP sprovede se kroz komparativnu analizu performansi MSP u nefinansijskom poslovnom sektoru u Srbiji i odabranim zemljama EU iz okruženja od 2009. do 2017. godine, analizu doprinosa MSP promeni – oporavku i rastu ili padu zaposlenosti i dodate vrednosti u Srbiji i izabranim zemljama EU od 2009. do 2017. godine, kao i kroz analizu razvijenosti MSP u Srbiji i izabranim zemljama EU u 2009. i 2017. godini na osnovu vrednosti Indeksa razvijenosti MSP u 2009 i 2017. godini. Dobijeni rezultati poslužiće kao osnova za ocenu uspešnosti razvojne, odnosno politike podsticanja razvoja MSP u Srbiji u poređenju sa referentnim zemljama EU iz okruženja i davanje predloga za unapređenje postojeće i/ili donošenje nove politike razvoja MSP u Srbiji.

**Ključne reči:** *preduzetništvo, MSP, ekonomski rast, zaposlenost, politika razvoja MSP.*

## Introduction

Small and medium-sized enterprises (SMEs) are important drivers of economic growth and employment around the world. The role of entrepreneurship has changed dramatically and fundamentally – it became an important factor for employment, economic development and international competitiveness in the global economy [8, p. 9]. Economic growth and employment are driven by not only large and well-established companies, but also by small and new enterprises [1]. SMEs and entrepreneurs serve as a catalyst for economic growth and employment [5]. Through successful innovation, SMEs increase revenue, create new consumer needs (new market niches) and satisfy the existing ones better, make connections and collaborate, thereby reducing the advantage of large companies resulting from the size of available resources and opportunities for achieving economies of scale [13, p. 247].

Bad situation concerning unemployment and slow economic growth forced economists to try to find a solution to this problem through entrepreneurship and self-employment [21, p. 48]. OECD survey from 2010 showed that “small and medium-sized enterprises absorb the workforce which is released during the decline in activity in other parts of the economy” [17, p. 24], and Lerner came to a conclusion that “in proportion to their size, small businesses create more jobs than large companies and have the advantage of creating radical innovations” [16]. Also, OECD experts say that “in the short and medium term, there is a real possibility to use policies that will contribute not only to raising productivity but also creating new jobs at the same time by encouraging entrepreneurship and innovation of small and medium-sized enterprises” [17, p. 25]. This is why it is not surprising that a large number of “researchers have recently focused on exploring the links between entrepreneurship and SMEs and economic growth and employment” [4]. Also, in an attempt to support SME development aiming to prompt economic growth and employment, many governments introduce an active development policy and extensive reforms to increase productivity, human capital and company level performance. Active SME policy comprises horizontal and targeted policies. Horizontal policies are designed to

improve the operational environment for all enterprises, such as regulatory simplification and improvement in the regulatory framework for access to finance. Targeted policies are related to specific segments of the enterprise population, such as innovative enterprises, start-ups or export-oriented enterprises [19, p. 18].

When it comes to entrepreneurship and SMEs, it should be emphasized that these are related, but not identical concepts. An entrepreneur is thought to be a person with a vision, capable of bringing a new idea to the market. Thus, in order to improve the general well-being, entrepreneurs are creating jobs, developing new solutions to problems, improving efficiency, and exchanging ideas globally [3, p. 5]. In this way, they connect invention and commercialization because invention without entrepreneurship remains in the university lab or R&D facility [3, p. 17]. Similarly, Carree and Thurik consider that entrepreneurs are the main drivers of the firm’s creation process in which young and small firms participate. However, the force of entrepreneurship at a level of a country, region or industry became a phenomenon of firm creation and turbulence [6]. So, from all the previously mentioned facts it can be deduced that the most important thing for entrepreneurs is innovation which creates jobs and generates economic growth [3, p. 17].

The development, role and importance of entrepreneurship and SMEs for economic growth and employment in the modern economy are current areas of theoretical and practical research of a large number of foreign and domestic authors and professional institutions. Accordingly, this paper examines the development and importance of entrepreneurship and SMEs in Serbia and five selected EU countries from the region. As it covers a complex field of research, the work consists of several research areas. In the first part, the description of the methodological approach and database is followed by the analysis of the level of development of entrepreneurship in Serbia and selected EU countries from the region based on the Global Entrepreneurship Index in 2018. In the second part, the research on the development of SMEs in Serbia and selected EU countries from 2009 to 2017 was conducted through comparative analysis of the performance of SMEs in the non-financial business sector (NFBS) in Serbia

and selected EU countries in the same period, and the contribution of SMEs to the evolution – recovery and expansion of or decline in employment and value added in Serbia and selected EU member states from 2009 to 2017, as well as the analysis of SME development in Serbia and selected EU countries in 2009 and 2017 on the basis of the value of SME development index in those years. The main goal of analyzing the defined areas is to evaluate the development and importance of SMEs for economic growth and employment and assess the success of such development, that is, the policy aimed at stimulating the development of entrepreneurship and SMEs in Serbia in comparison with the EU reference countries from the region, and to provide guidelines for improvement of the given policy with the aim of accelerating development of domestic economy by strengthening and developing domestic SMEs.

## Methodological approach and database

In recent years, researchers have attempted to create several entrepreneurial indicators; however, they have not been able to explain the complexity of entrepreneurship and its place in the development of the economy. To overcome this problem, starting from the understanding of entrepreneurship as a dynamic, institutionally embedded interaction between entrepreneurial perspective, potential and desires by individuals, which drives resource allocation through the creation and operation of new ventures [2, p. 479], the Global Entrepreneurship and Development Institute based in Washington created the Global Entrepreneurship Index as the first, and currently the only, complex measure of the national-level entrepreneurial ecosystem that reflects the miscellaneous nature of entrepreneurship [3, p. 43].

The Global Entrepreneurship Index (GEI) is a composite indicator of the entrepreneurial ecosystem conditions in a given country and it measures both the quality of entrepreneurship and the extent and depth of the supporting entrepreneurial ecosystem [3, p. 3]. GEI is composed of three characteristics or sub-indices: entrepreneurial attitudes, entrepreneurial abilities, and entrepreneurial aspirations, and covers 14 areas (pillars) of the entrepreneurial ecosystem [3, p. 13]. Each of them

contains an individual and an institutional variable that corresponds to the micro- and the macro-level aspects of entrepreneurship [3, p. 33]. In this paper, the development of entrepreneurship in Serbia and selected EU countries from the region is analyzed on the basis of the GEI value, since this index is “a starting point for discussion about improving entrepreneurial ecosystems, and is an important tool to help countries accurately assess and evaluate their ecosystem to create more jobs” [3, p. 16].

Unlike entrepreneurship, which is a multidimensional phenomenon whose exact meaning is difficult to identify and measure, small and medium-sized enterprises (SMEs) have a simpler definition. Small and medium-sized enterprises are non-subsidiary, independent firms employing less than 250 employees; their turnover should not exceed EUR 50 million or the balance sheets of medium-sized enterprises should not exceed EUR 43 million [18, p. 17]. They consist of three different categories of enterprises – micro, small and medium-sized enterprises. The official European Commission’s (EC) definition of SMEs focuses on three different factors (level of employment, level of turnover, and size of the balance sheet) [10, p. 13]. Nonetheless, the SME data in this analysis are based only on the definition of employment, because the main source of data for this research was the Structural Business Statistics (SBS) database maintained by Eurostat. The SMEs in the non-financial business sector (NFBS) represent the main focus of this research, including all NACE (the statistical classification of economic activities in the European Community) sectors, with the exception of the following: Agriculture, Forestry and Fishing (section A), Financial and Insurance Activities (K), Public Administration and Defense; Compulsory Social Security (O), Education (P), Human Health and Social Work Activities (Q), Arts, Entertainment and Recreation (R), Other Service Activities (S), Activities of Households as Employers (T) and Activities of Extraterritorial Organizations and Bodies (U) [10, p. 13].

The SME development index is created in order to analyze the trend of the development of SMEs in Serbia and selected EU countries. This index is a complex economic indicator that enables comparative analysis and provides us with better insight into changing the entrepreneurial environment of SMEs. It is calculated on the basis of

business data and national accounts statistics (the so-called hard data) and is based on three economic parameters:

- a) Share of SMEs in total value added in the non-financial business sector,
- b) Share of SMEs in total employment in the non-financial business sector, and
- c) Share of high-tech manufacturing and knowledge-intensive services in TOTAL (manufacturing + services).

SME development index can be expressed as percentage and/or GDP per capita.

The SME development index used in this paper was modeled on the Index of SME Development introduced by the UNECE in 1999. The initial Index of SME Development is based on: the share of private ownership, share of SMEs in GDP, and share of SME labor force in the total labor force of a country [24, p. 9].

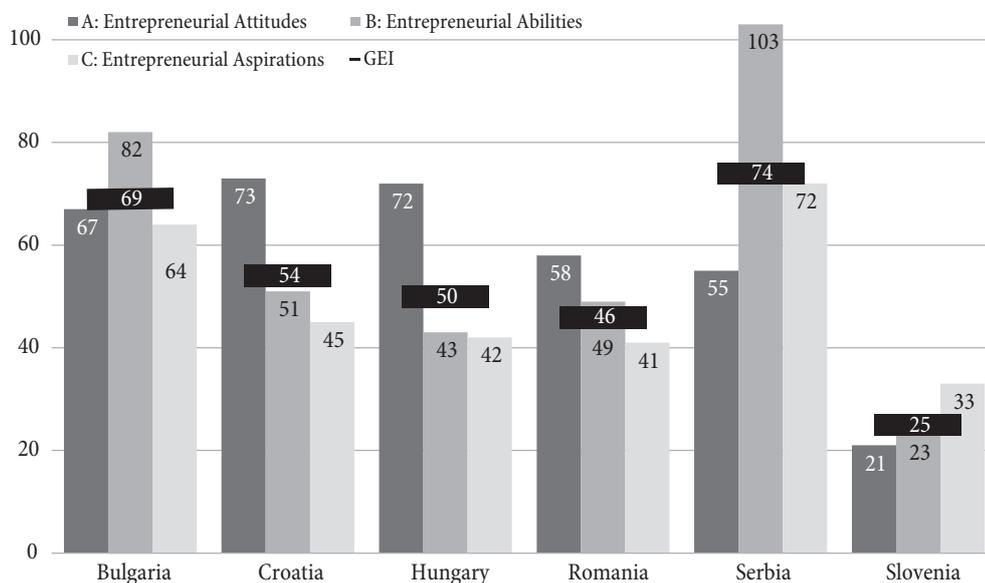
### The development of entrepreneurship in Serbia and selected EU countries in 2018

As regards the development of entrepreneurship in 2018, with the Global Entrepreneurship Index value of 0.264 (on a scale of 0 to 1) Serbia occupies the 74th place out of 137 analyzed countries and is ranked worse than the five selected member states of the European Union from the region (Bulgaria, Croatia, Hungary, Romania, and Slovenia).

Compared to the selected EU countries from the region, Serbia ranks relatively well with regard to the Entrepreneurial Attitudes sub-index (its ranking is only worse than the one of Slovenia which holds the 21st place out of 137 countries analyzed). Serbia finds itself in an unfavorable situation when it comes to the pillar that measures Entrepreneurial Aspirations (Serbia is 72nd out of 137 countries and is lagging behind other countries), while the worst situation is reflected in the pillar that measures Entrepreneurial Abilities, where Serbia holds the 103rd place out of 137 countries in the world, significantly lagging behind the rest of the EU countries from the region (for example, Slovenia is 23rd).

Compared to the EU countries from the region (with the exception of Slovenia), entrepreneurs in Serbia are better able to see business opportunities, beginners in business have better skills necessary to start a business and connect more extensively (Networking). The development of certain aspects of entrepreneurial ecosystems in Serbia, such as Cultural Support, Human Capital, Product and Process Innovation, and Risk Capital, is at an average level in comparison to the observed EU countries from the region, while the following areas in Serbia show the biggest weaknesses: Risk Acceptance, Opportunity Startup, Technology Absorption, Competition, High Growth and Internationalization.

Figure 1: Global Entrepreneurship Index in 2018 – ranking of Serbia and the selected EU member states



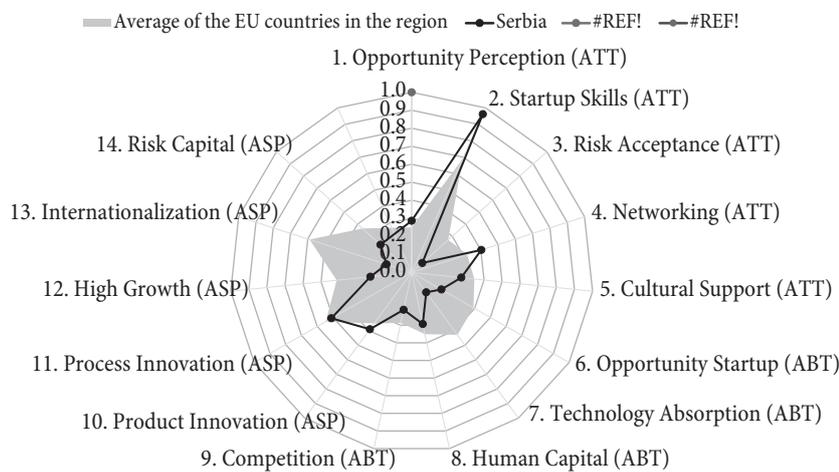
Source: Authors' own calculation and representation based on the GEI 2018 data.

**Table 1: Development of the basic elements of the Global Entrepreneurship Index in 2018 - the example of Serbia and selected EU member states (darker color denotes a higher level of development)**

	Opportunity Perception	Startup Skills	Risk Acceptance	Networking	Cultural Support	Opportunity Startup	Technology Absorption	Human Capital	Competition	Product Innovation	Process Innovation	High Growth	Internationalization	Risk Capital
Bulgaria														
Croatia														
Hungary														
Romania														
Serbia														
Slovenia														

Source: Authors' own calculation and representation based on the GEI 2018 data.

**Figure 2: Global Entrepreneurship Index 2018 – Serbia and the average of the EU countries in the region**



Source: Authors' own calculation and representation based on the GEI 2018 data.

The results of the previous research indicate that the positive attitude towards entrepreneurship in Serbia has not been sufficiently included in Entrepreneurial Aspirations, and that the major constraints on the development of entrepreneurship and SME sectors in Serbia are factors that determine Entrepreneurial Abilities.

The fact that domestic entrepreneurs are well aware of business opportunities, possess the necessary skills needed to start their business and are ready for networking, suggests that activities to promote entrepreneurship and the development of the non-financial support systems, especially in the field of formal (higher education) and informal (trainings for entrepreneurs) education, have been relatively successful, since they have greatly helped entrepreneurs, beginners and owners of already existing SMEs to make realistic estimates of business opportunities in the market, to develop their entrepreneurial and

managerial skills, as well as to recognize the importance and potential of networking – better linking of entrepreneurs among themselves and with other participants in the economy (for example: linking to clusters, linking with large companies in value chains, etc.) in order to improve their entrepreneurial activity.

### The development of SMEs in Serbia and selected EU countries from 2009 to 2017

Comparative analysis of the performance of SMEs in the non-financial business sector in Serbia and selected EU countries from 2009 to 2017

In 2017, 315,307 SMEs (almost all Serbia's NFBS enterprises – 99.8%) operated in the Serbian non-financial business sector. These companies employed 808,299 workers (two-

**Table 2: Values of the Global Entrepreneurship Index of Serbia and selected countries from the region in 2018**

	Bulgaria	Croatia	Hungary	Romania	Serbia	Slovenia	Average
GEI	0.278	0.340	0.364	0.382	0.264	0.538	0.361
<b>A: Entrepreneurial Attitudes</b>	<b>0.288</b>	<b>0.273</b>	<b>0.276</b>	<b>0.322</b>	<b>0.324</b>	<b>0.544</b>	<b>0.338</b>
1. Opportunity Perception	0.143	0.181	0.286	0.254	0.287	0.349	0.250
2. Startup Skills	0.513	0.764	0.338	0.563	0.962	1.000	0.690
3. Risk Acceptance	0.189	0.102	0.167	0.243	0.078	0.843	0.270
4. Networking	0.440	0.252	0.309	0.192	0.402	0.331	0.321
5. Cultural Support	0.262	0.269	0.321	0.451	0.275	0.504	0.347
<b>B: Entrepreneurial Abilities</b>	<b>0.246</b>	<b>0.333</b>	<b>0.375</b>	<b>0.348</b>	<b>0.198</b>	<b>0.550</b>	<b>0.342</b>
6. Opportunity Startup	0.299	0.476	0.476	0.310	0.190	0.604	0.393
7. Technology Absorption	0.273	0.527	0.428	0.461	0.136	0.744	0.428
8. Human Capital	0.232	0.191	0.475	0.412	0.293	0.500	0.351
9. Competition	0.207	0.299	0.241	0.274	0.212	0.485	0.286
<b>C: Entrepreneurial Aspirations</b>	<b>0.300</b>	<b>0.415</b>	<b>0.441</b>	<b>0.476</b>	<b>0.271</b>	<b>0.521</b>	<b>0.404</b>
10. Product Innovation	0.204	0.200	0.360	0.470	0.391	0.480	0.351
11. Process Innovation	0.594	0.591	0.429	0.344	0.509	0.806	0.546
12. High Growth	0.268	0.484	0.572	0.506	0.228	0.427	0.414
13. Internationalization	0.325	0.899	0.749	0.675	0.145	0.747	0.590
14. Risk Capital	0.223	0.350	0.374	0.675	0.230	0.333	0.364

Source: Authors' own calculation and representation based on the GEI 2018 data.

**Table 3: Number of SMEs in the non-financial business sector in Serbia and selected EU countries in 2017 and their employment and value added**

	Bulgaria	Croatia	Hungary	Romania	Serbia	Slovenia
<b>Enterprises</b>						
Number (in 000)	337	149	558	481	315	142
Share (in %)	99.8	99.7	99.8	99.7	99.8	99.8
SME density	55	42	67	29	54	81
<b>Employment</b>						
Number (in 000)	1,487	696	1,884	2,701	808	441
Share (in %)	75.4	68.1	68.8	65.8	65.1	73.4
<i>Average employment per enterprise</i>	<i>4.4</i>	<i>4.7</i>	<i>3.4</i>	<i>5.6</i>	<i>2.6</i>	<i>3.1</i>
<b>Value added</b>						
Value in € (in billions)	16.8	14.2	33.5	33.9	10.2	14.6
Share (in %)	65.2	60.8	53.7	51.3	55.6	65.1
<i>Value added/Number of enterprises (in 000)</i>	<i>49.7</i>	<i>95.2</i>	<i>60.0</i>	<i>70.4</i>	<i>32.3</i>	<i>102.7</i>
<i>Productivity (in 000)</i>	<i>11.3</i>	<i>20.5</i>	<i>17.8</i>	<i>12.5</i>	<i>12.6</i>	<i>34.1</i>

Source: Authors' calculations based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

thirds of total employment – 65.1%) and created 10.2 billion, slightly less than three-fifths (55.6%) of the value added generated by the non-financial business sector.

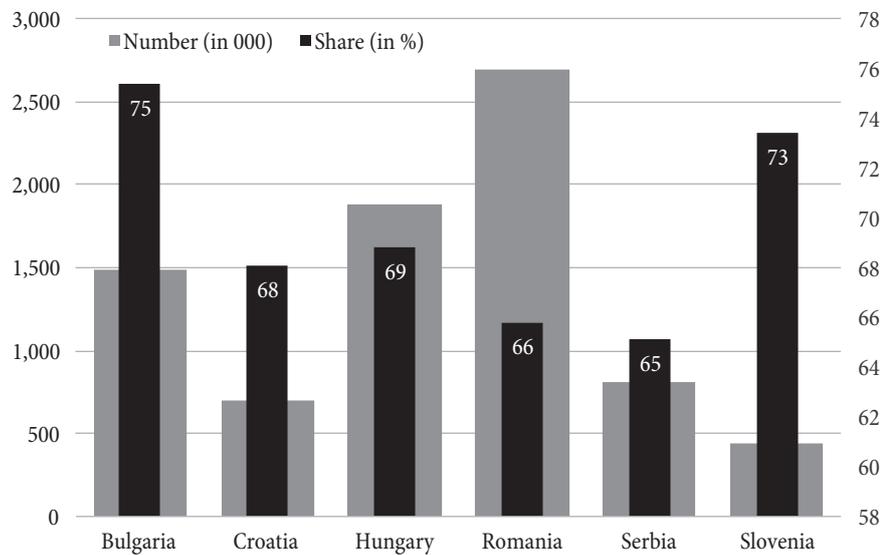
In Serbia, there are twice as many SMEs compared to Slovenia and Croatia, but fewer than in Bulgaria, Romania and Hungary. SME density (number of SMEs per 1,000 inhabitants) in Serbia is higher than in Romania and Croatia, roughly the same as in Bulgaria, but it is significantly lagging behind Hungary and Slovenia.

Compared to SMEs from Serbia, SMEs from Romania, Hungary and Bulgaria employ more workers, while SMEs from Serbia employ more workers than those from Croatia

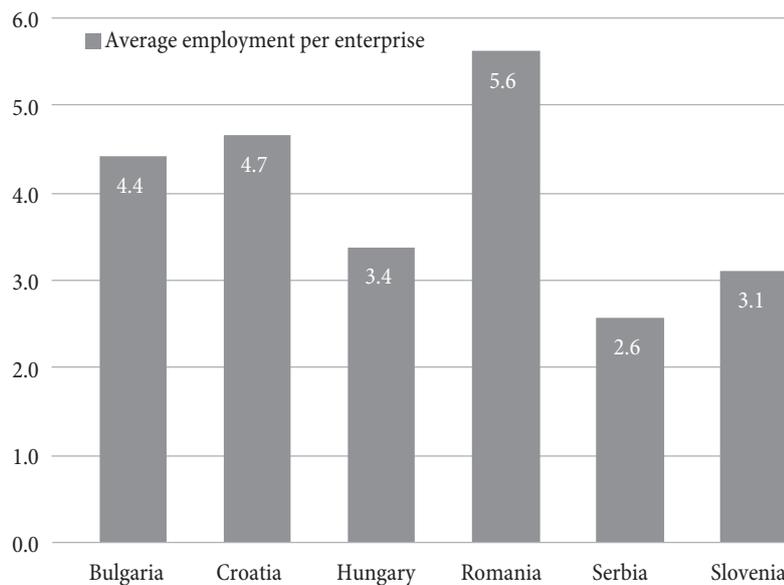
and almost twice as much as SMEs from Slovenia. However, when looking at the number of workers per enterprise, SMEs from Serbia have lower employment than SMEs from Romania, Croatia, Bulgaria, Slovenia and Hungary. Also, SMEs from Serbia contribute less to employment in the non-financial business sector in 2017 compared to SMEs from other EU countries from the region, which points to smaller importance of SMEs in Serbia in terms of employment compared to other countries observed.

Even though there are a lot of SMEs in Serbia employing more workers than SMEs from Slovenia and Croatia, SMEs from Serbia create lower value added

**Figure 4: Number and participation of employees from SMEs in NFBS employment in Serbia and selected EU countries**



**Figure 5: Average employment per SME in NFBS in Serbia and selected EU countries**

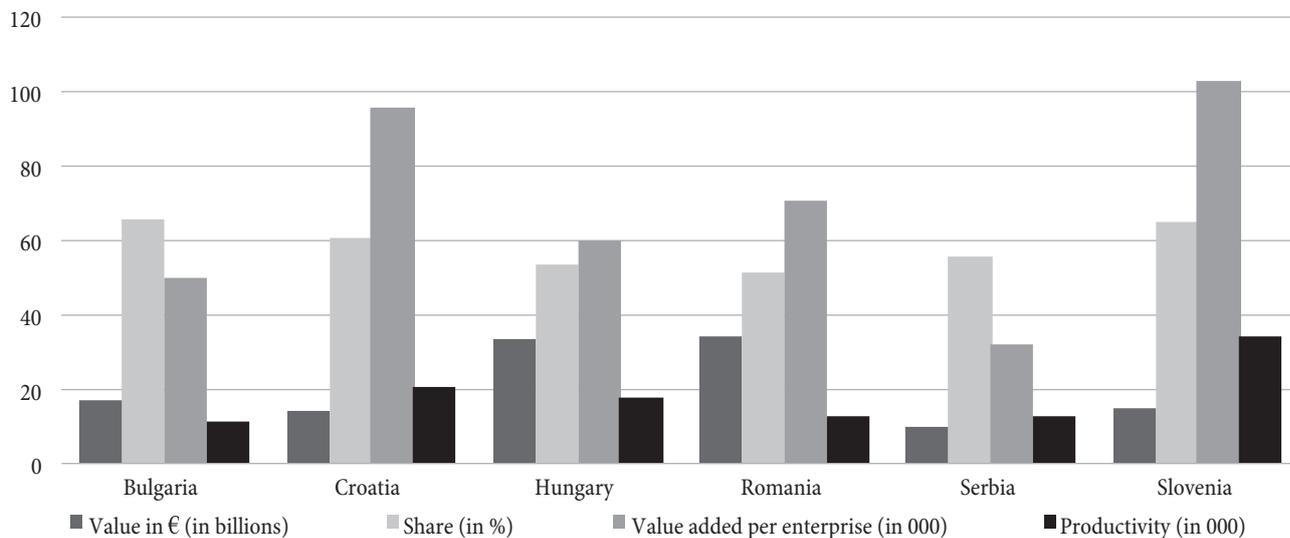


Source: Authors' own and representations based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

compared to SMEs from the observed EU member states in the region. We see a more favorable situation in SME participation in the creation of value added in the non-financial business sector, since SMEs from Serbia have a higher share than SMEs from Romania and Hungary, but lower than SMEs from Croatia, Slovenia and Bulgaria. Furthermore, SMEs from Serbia are more productive (value added/employment) than SMEs from Bulgaria and Romania, although they have lower productivity than SMEs from Hungary, Croatia and Slovenia.

A significant indicator of the development of SMEs is their knowledge or technology intensities. Therefore, there is a great policy interest in encouraging SMEs to become more innovative, due to the fact that many of them are in sectors characterized by either low knowledge or technology intensities [10, p. 19]. In Serbia, as well as in the selected EU countries, less than one-third of SMEs, in terms of the number of SMEs in the non-financial business sector, and less than one-fourth of SMEs, in terms of employment and value added in the non-financial business sector, were

**Figure 6: Value added, participation, value added per enterprise and productivity of SMEs from the non-financial business sector in Serbia and selected EU countries from the region**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

**Table 4: Distribution of SMEs from Serbia and selected EU countries in terms of value added, employment and number of enterprises across sectors of different knowledge and technology intensities**

		High-tech industries		Medium-tech industries		Low-tech industries		Knowledge-intensive services		Less knowledge-intensive services		TOTAL manufacturing + services	
		value	%	value	%	value	%	value	%	value	%	value	%
Number of enterprises (in 000)	Bulgaria	0.5	0.1	12	3.8	20	6.3	60	18.9	224	70.9	316	100
	Croatia	0.6	0.4	9	7.0	10	8.0	31	23.6	79	60.9	130	100
	Hungary	1.5	0.3	23	4.8	26	5.3	174	36.0	260	53.7	485	100
	Romania	1.1	0.3	19	4.5	33	7.9	90	21.3	278	66.1	421	100
	Serbia	1.4	0.5	19	6.8	35	12.1	60	21.0	171	59.7	287	100
	Slovenia	0.4	0.3	10	8.6	9	7.9	44	36.1	57	47.1	121	100
Employment (in 000)	Bulgaria	8	0.6	95	10.0	235	17.6	200	14.9	760	56.8	1,299	100
	Croatia	3	0.5	78	13.3	84	14.4	103	17.5	319	54.3	588	100
	Hungary	13	0.8	205	12.5	169	10.2	373	22.7	886	53.8	1,646	100
	Romania	15	0.6	245	10.6	422	18.3	382	16.5	1,245	53.9	2,310	100
	Serbia	7	1.0	89	12.5	143	20.1	110	15.5	364	51.0	713	100
	Slovenia	4	1.0	75	20.3	40	10.8	86	23.0	167	44.8	372	100
Value added (in billion €)	Bulgaria	0.2	1.3	1.7	11.8	1.7	12.0	2.8	20.2	7.7	54.7	14.0	100
	Croatia	0.1	0.7	1.7	14.1	1.2	10.5	2.6	21.8	6.3	53.0	11.9	100
	Hungary	0.3	1.2	4.5	15.4	2.4	8.3	6.4	21.8	15.5	53.3	29.2	100
	Romania	0.3	1.0	3.3	11.7	2.9	10.2	5.3	18.9	16.4	58.2	28.2	100
	Serbia	0.1	1.3	1.2	13.8	1.3	14.4	1.8	20.4	4.5	50.1	8.9	100
	Slovenia	0.2	1.3	3.0	24.0	1.2	9.5	2.8	22.0	5.5	43.2	12.6	100

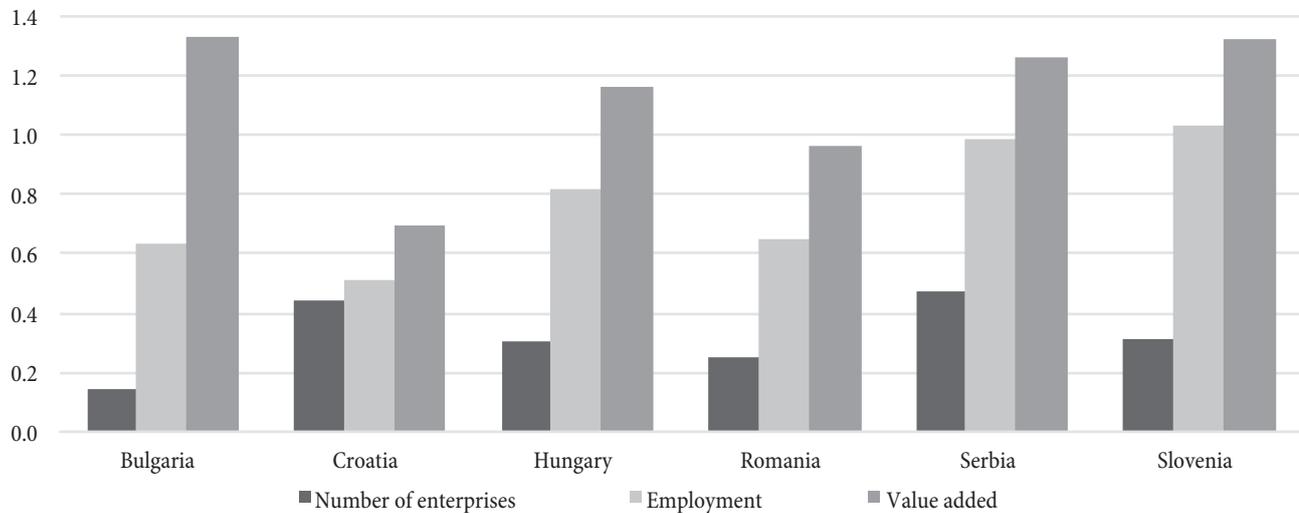
Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

active either in the knowledge-intensive service industries or in the high-tech manufacturing industries.

In terms of technology intensities of SMEs, Serbia's position is relatively favorable compared to other EU countries from the region. Although in Hungary there is a larger number of high-tech SMEs in comparison to Serbia, the participation of high-tech industries in Serbia, including manufacturing and services, is higher compared to other

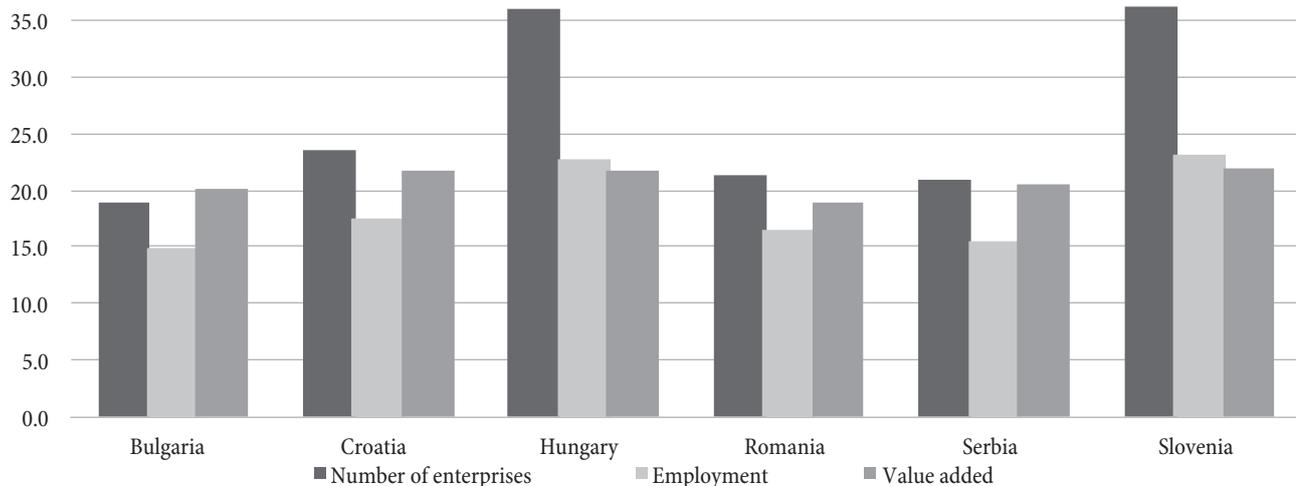
EU countries from the region. The situation is similar in terms of employment. Although high-tech SMEs from Romania, Hungary and Bulgaria employ more workers than SMEs from Serbia, the participation of SMEs operating in high-tech industries in total (manufacturing + services) employment of SMEs in Serbia is above all selected EU countries from the region, with the exception of Slovenia behind which it is only slightly lagging. However, when it

**Figure 7: Distribution of non-financial business sector SMEs from Serbia and selected EU countries across sectors of high-tech industries in 2017**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

**Figure 8: Distribution of non-financial business sector SMEs from Serbia and selected EU countries across sectors of knowledge-intensive services in 2017**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

comes to value added, the situation is significantly more unfavorable for Serbia. High-tech SMEs from Serbia generate higher value added only in relation to high-tech SMEs from Croatia. Serbia has a higher share of SMEs operating in high-tech industries in total (manufacturing + services) value added of SMEs compared to SMEs from Croatia, Romania and Hungary, while it significantly lags behind the high-tech SMEs from Slovenia and Bulgaria.

In Serbia, there is a larger number of SMEs from the sectors of knowledge-intensive services in relation to Croatia, Slovenia and Bulgaria (fewer than in Romania and Hungary), but the participation of these knowledge-intensive SMEs in the total (manufacturing + services)

number of SMEs in Serbia is lower than in the observed EU countries from the region, except in Bulgaria. The situation is similar in terms of employment, as SMEs from the sector of knowledge-intensive services in Serbia employ more workers than the knowledge-intensive SMEs from Slovenia and Croatia, but the participation of these knowledge-intensive SMEs in the total (manufacturing + services) number is only higher than in Bulgaria. In contrast to the number of enterprises and employment, SMEs from the sectors of knowledge-intensive services from Serbia create the lowest value added in relation to SMEs from the five observed EU countries from the region, although the participation of these knowledge-intensive

SMEs in the total (manufacturing + services) number of SMEs in Serbia is above the one in Romania and Bulgaria.

The previous comparative analysis of the basic indicators of the business of SMEs from Serbia and five selected EU countries from the region indicates that, although in Serbia there is a relatively large number of SMEs in the sectors of high-tech industries and knowledge-intensive services, these SMEs are less important in terms of employment and economically weaker compared to similar companies from the observed EU countries from the region, which further points to a lower level of SME development in Serbia compared to the observed countries.

In the period from 2009 to 2017, the number of SMEs in Serbia significantly increased only in 2016 and 2017, the result of which was that in 2017 there were more than 36 thousand SMEs from the non-financial business sector more than in 2009. Unlike SMEs, the number of large companies was relatively stable over the whole period,

although it dropped below the level from 2009. The year of 2017 saw a somewhat significant increase, although this growth was not enough to compensate for the decline at the beginning of the economic crisis.

Employment trends in Serbia within the non-financial business sector in the 2009-2017 period vary considerably in relation to the trends in the number of enterprises and value added. Almost throughout the whole observed period, employment within the non-financial business sector was below the level of 2009, with a greater decline in SMEs compared to large enterprises. The turnover in big companies came about only in 2016 and 2017 when the number of employees exceeded the level of 2009, and in SMEs the number of employees exceeded the level of 2009 only in 2017 – the number of employees in SMEs in 2017 was bigger by 12 thousand compared to 2009, which increase was by three thousand lower than the increase in the number of employees in large enterprises.

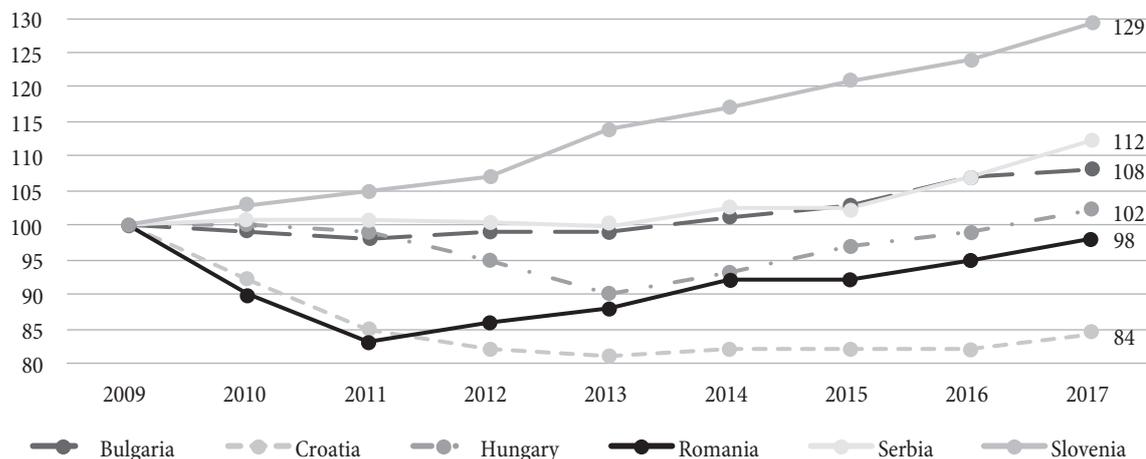
**Table 5: Relative development of the number of enterprises, employment and gross value added (in current prices) with regard to size of enterprises in the non-financial business sector in Serbia from 2009 to 2017**

		2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of enterprises	SMEs	100	101	101	100	100	103	102	107	112
	Large enterprises	100	95	94	95	93	93	93	94	98
Employment	SMEs	100	93	91	90	89	88	93	97	102
	Large enterprises	100	94	96	96	95	95	96	101	104
Value added	SMEs	100	101	112	109	116	110	106	123	134
	Large enterprises	100	95	103	103	102	105	110	119	132



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

**Figure 9: Trend in the number of SMEs in Serbia and selected EU countries in the non-financial business sector (2009=100)**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

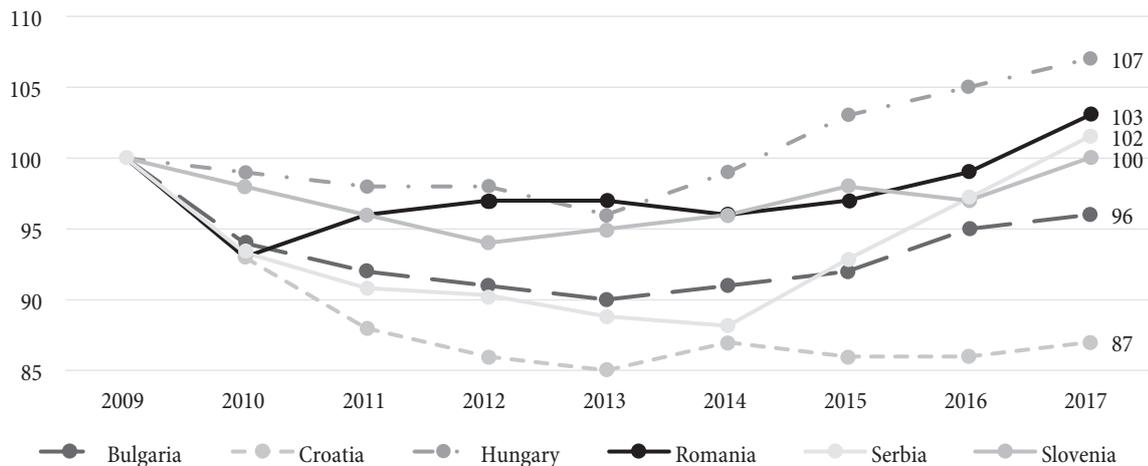
The trend of the value added provides the best opportunities for Serbia, since in the observed period it shows a significant increase in both SMEs and large enterprises, this growth being slightly higher in SMEs. Unlike large companies, which showed a drop in value added in 2010 below the level of 2009, in SMEs value added in all observed years was above the 2009 level.

The number of SMEs in the 2009-2017 period increased the most in Slovenia and Serbia, followed by Bulgaria and Hungary, while it decreased in Romania and Croatia. Regarding the number of SMEs, the most favorable situation is in Slovenia where the growth in the number of SMEs was recorded throughout the period, and the most unfavorable situation is in Croatia, where the number of SMEs was significantly below the 2009 level during the entire observed period.

In the 2009-2017 period, employment in SMEs in Serbia and the observed EU countries from the region first declined and it was not until the end of that period that the majority of countries saw its growth. In 2017, compared to 2009, employment in SMEs in Hungary, Romania and Serbia increased to the level of 2009, while in Bulgaria, and especially in Croatia, there was a significant decline in employment in SMEs.

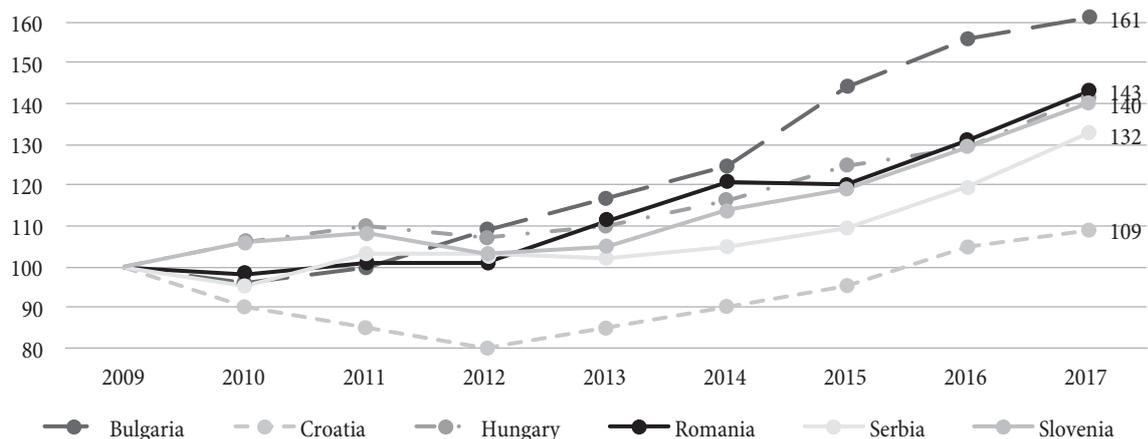
In contrast to the trends in the number of SMEs and employment, in the 2009-2017 period value added grew steadily, with a minor deviation, in all observed countries. In 2017, compared to 2009, value added increased in Bulgaria, Romania, Hungary and Slovenia, to a lesser extent in Serbia, while the most modest increase was achieved by Croatia, which saw the only drop in value added during this period.

**Figure 10: Evolution of SME employment in Serbia and selected EU countries in the non-financial business sector (2009=100)**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

**Figure 11: Evolution of SME value added in Serbia and selected EU countries in the non-financial business sector (2009=100)**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

Taking everything into consideration, different trends in the basic SME performance indicators (number of enterprises, employment and value added) were recorded in the six observed countries (Serbia and EU countries from the region) in the period from 2009 to 2017. Cumulative growth in the number of SMEs, SME employment and SME value added from 2009 to 2017 was realized only by SMEs from Hungary and Serbia. Despite the fact that, during the same period, the number of SMEs in Romania dropped, employment and value added increased. In Bulgaria and Slovenia, the growth in the number of SMEs and value added created by them was accompanied by a decline in employment, which led to a significant production increase in these SMEs. SMEs in Croatia face the most unfavorable situation, because the number of SMEs, employment and value added suffered a decline, which is why structural adjustment resulted in establishing a significantly lower level of development of SMEs in 2017 compared to 2009.

In some of the observed countries, in the 2009-2017 period SMEs in the non-financial business sector recorded better performance in relation to large enterprises (e.g. in Slovenia and Bulgaria), while in other countries large enterprises performed better (e.g. in Hungary and Romania). In Serbia SMEs achieved better results in terms of company growth, but lower growth in terms of employment and value added. In Croatia large companies managed to recover well from the impact of the crisis in 2017 and to get closer to the 2009 level in terms of the number of enterprises and

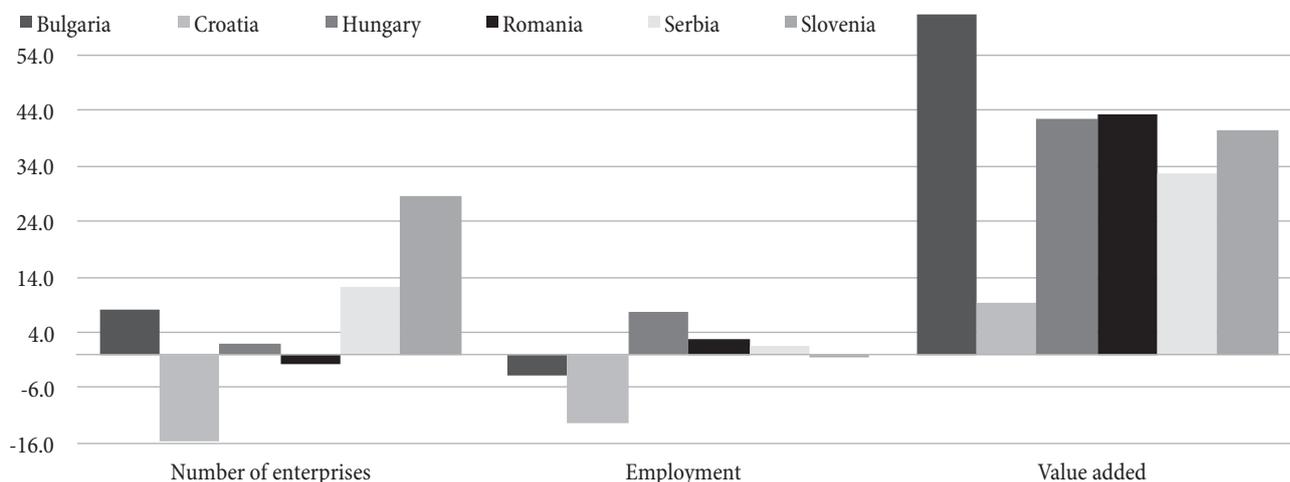
employment, while SMEs managed to create a higher level of value added compared to 2009. Starting from the previously obtained results, we go on to investigate how much SMEs have really contributed to the growth of employment and value added in the non-financial business sector in Serbia and the observed EU countries from the region.

**Contribution of SMEs to the evolution – recovery and expansion of or decline in employment and value added in Serbia and selected EU member states from 2009 to 2017**

SMEs played their part concerning the growth of value added in the non-financial business sector in Serbia and selected EU countries from 2009 to 2017. They accounted for 55% of the total increase in value added in the non-financial business sector in Serbia. This contribution was greater than the one made by SMEs from Romania (48%) and Hungary (51%) and significantly lower than the contribution of SMEs from Croatia (108% due to the fall in the value added of large companies), Bulgaria (70%) and Slovenia (67%).

The picture of the contribution of SMEs to employment is more complex. In Serbian economy, SMEs accounted for 45% of the total employment growth in the non-financial business sector from 2009 to 2017. Such contribution was more modest only than the contribution of SMEs from Romania (49%) and greater than the contribution of SMEs

**Figure 12: Cumulative increase in the number of SMEs, value added of and employment in SMEs from 2009 to 2017 in Serbia and selected EU countries**



Source: Authors' own calculation and representation based on data from the Eurostat, Statistical Office of the Republic of Serbia and DIW Econ.

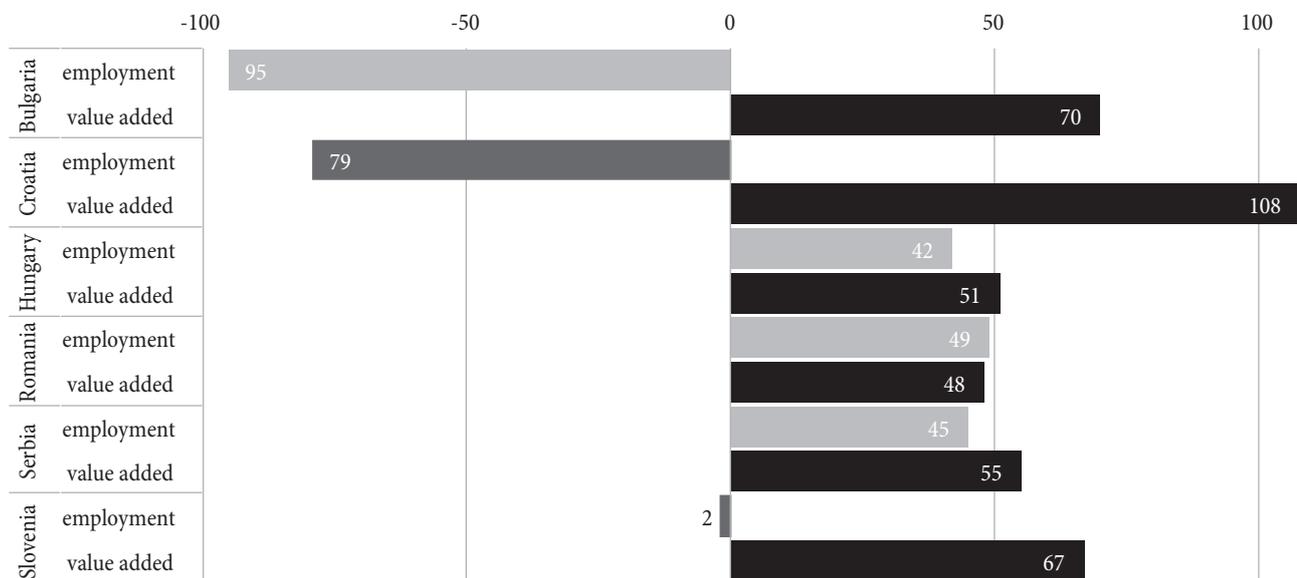
from Hungary (42%). On the other hand, in Bulgaria and Croatia SMEs accounted for 95% and 79% of total employment in the non-financial business sector from 2009 to 2017, respectively.

In order to further analyze the contribution of SMEs to the recovery from recession in Serbia and selected EU countries in 2009, we performed an analysis that compares the proportion of the change in gross value added (and employment) from 2009 to 2017 accounted for by SMEs in the NFBS to the NFBS SME share of the economy-wide gross value added (employment) in 2009.

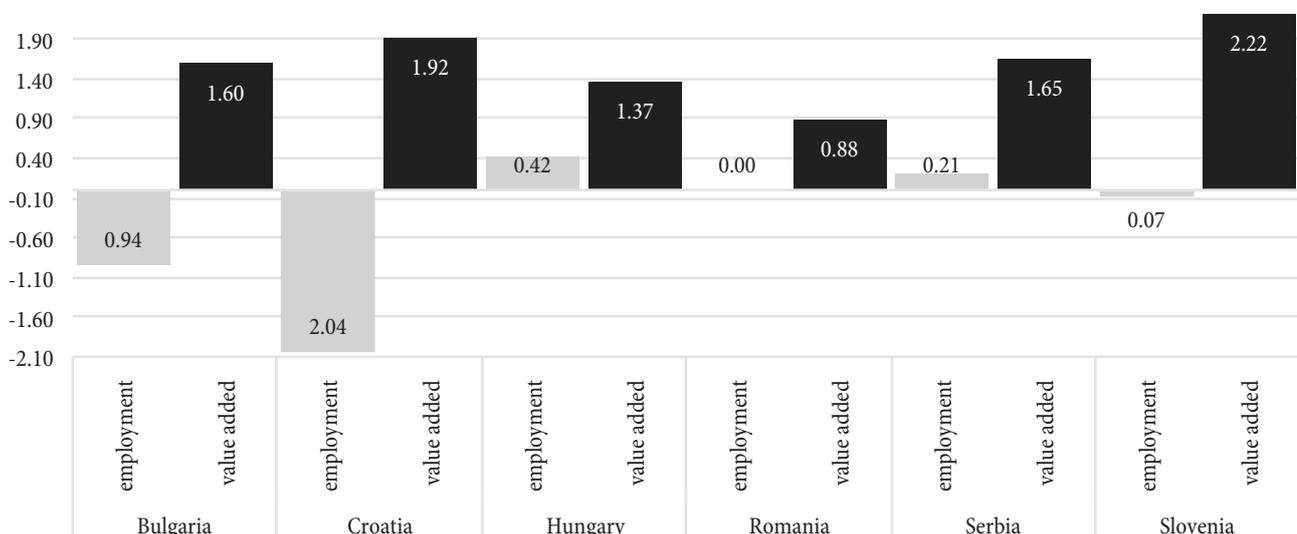
SMEs in Serbia contributed 65% more than expected to the recovery of value added based on their share of gross value added in 2009, which was greater than the contribution made by SMEs from Romania (-12% less than expected), Hungary (+37% more than expected) and Bulgaria (+60%), and lower than the contributions made by SMEs from Croatia (+92%) and Slovenia (+122%).

A significantly less favorable situation appears concerning the analysis of the contribution of SMEs in the NFBS to recovery of employment across the economy, because only Hungarian and Serbian economies show

**Figure 13: Share of the increase/decrease in employment and value added in the non-financial business sector accounted for by SMEs from 2009 to 2017**



**Figure 14: Contribution of SMEs in the NFBS to recovery and subsequent expansion (or decline) in economic-wide gross employment and value added from 2009 to 2017 – value of contribution**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

an increase in employment in NFBS SMEs and overall economy from 2009 to 2017.

At the level of Serbian economy, SMEs in the NFBS contributed 79% less to the recovery of employment in the overall economy than would have been expected on the basis of their share of employment in the economy in 2009. SMEs from Hungary recorded better results than the ones from Serbia, although they also contributed 58% less than expected. Bulgaria, Croatia and Slovenia showed a decline both in SME employment in the NFBS and in the economy as a whole over the 2009-2017 period. Bulgaria and Slovenia show a smaller SME contribution to the overall decline than would have been expected on the basis of their share of total employment in 2009, while Croatia shows much greater contribution to overall job decline than expected.

**Table 6: Contribution of SMEs in the NFBS to the recovery and subsequent expansion (or decline) in economy-wide gross employment and value added from 2009 to 2017 in Serbia and selected EU member states**

State	Employment	Value added
Bulgaria	NO*	YES
Croatia	YES*	YES
Hungary	NO	YES
Romania	Not applicable	NO
Serbia	NO	YES
Slovenia	NO*	YES

Notes: 'Not applicable' means that the SME and economy-wide indicators (value or employment) did not move in the same direction over the 2009-2017 period.

\*Contribution of SMEs to decline.

Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

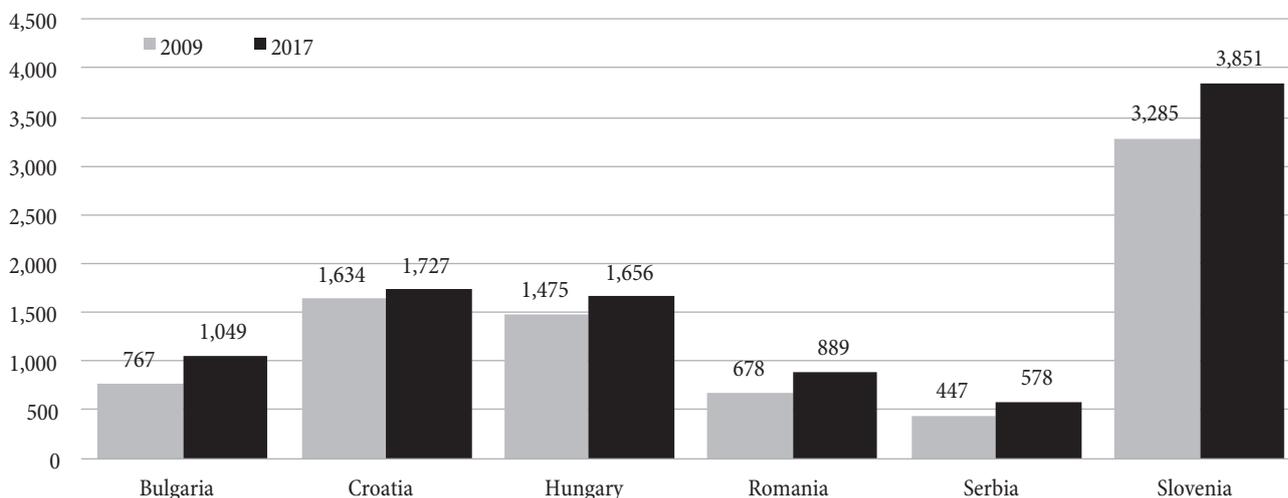
**SME development in Serbia and selected EU countries in 2009 and 2017**

Compared to 2009, SMEs continued to develop in all observed countries, but with different dynamics. The highest growth in the value of the SME development index was recorded in Slovenia, which not only retained the leading position among the countries observed, but also significantly improved the already high level of development and quality of SME business, which put it in a group of the most developed economies based on their growth in the development of entrepreneurship.

The lowest growth in the value of the SME development index compared to the observed countries was recorded in Croatia. Although according to the values of the SME development index in 2017, Croatia maintained the second position it had occupied in 2009, the slower growth in the value of the index, i.e., in the development of SMEs compared to the other countries observed, led to a decrease in the difference between the development of SMEs in Croatia and other observed countries, that is, the increase in the number of SMEs lagging behind in Croatia in relation to Slovenia.

Although Serbia recorded a higher growth in the value of the SME development index compared to Croatia in the 2017-2019 period, it was lower than in all other countries observed, indicating slow development of SMEs in Serbia and further increasing the gap in the development of SMEs in Serbia compared to other EU countries from the region (except Croatia).

**Figure 15: SME development index in selected countries in 2009 and 2017, per capita**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

## Discussion of results and conclusion

Based on the analysis of the Global Entrepreneurship Index for 2018, the results of the research on the development of entrepreneurship in Serbia and selected EU countries unambiguously indicate that Serbia is lagging behind the selected EU countries from the region, although there are some areas, such as Entrepreneurial Attitudes, where Serbia made significant progress. This assessment coincides with the assessment of the experts from the Global Entrepreneurship and Development Institute who find that “some countries, including Serbia, should have higher levels of entrepreneurship, as implied by their development trend lines, and more efficient use of entrepreneurial resources” [3, p. 36], as well as with the assessment of domestic experts that “in Serbia the wave of recession has stopped the growth of entrepreneurship sector and positive trends in transitional recovery” [15, p. 100].

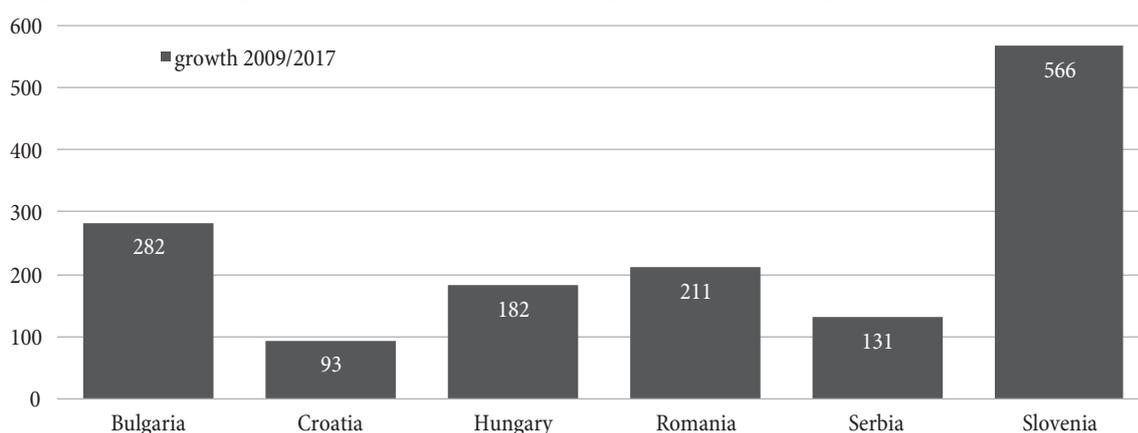
The previous assessment of the development of entrepreneurship in Serbia is fully compatible with the results of the analysis of the development of SMEs in Serbia and selected EU countries from 2009 to 2017. The results of comparative analysis concerning the performance of SMEs in the non-financial business sector in Serbia and selected EU countries from 2009 to 2017 show that there is a relatively large number of SMEs in Serbia that employ a significant number of workers and create a significant amount of value added. However, the performance indicators of the company’s business activity indicate that SMEs from

Serbia have lower performance than SMEs from most of the observed EU countries from the region, especially in relation to those from Slovenia, Hungary and Croatia. An even more unfavorable situation is encountered when it comes to technology/knowledge intensities of domestic SMEs in relation to SMEs from selected countries in the region. Domestic SMEs from high-tech industries and knowledge-intensive services are less important in terms of employment and economically weaker in relation to similar companies from the observed EU countries from the region, which further points to a lower level of SME development in Serbia compared to the observed countries.

Also, the results of the SME evolution analysis in the 2009-2017 period, in terms of the number of enterprises, employment and value added in the non-financial business sector, as well as the contribution of SMEs to expansion of or decline in employment and value added, in Serbia and selected EU member states, although not always unambiguous, show a lower contribution of domestic SMEs to the recovery and expansion of the economy from 2009 to 2017 in terms of employment and value added in relation to most of the observed EU countries from the region. They also show disproportionate results relative to their importance in the economy, especially in terms of employment.

However, in order to obtain completely clear results regarding the level and trend of development of SMEs in Serbian economy and selected EU countries, a complex indicator of the development of SMEs, called SME development index, was constructed, integrating

**Figure 16: The change in the value of the SME development index per capita in the 2009-2017 period**



Source: Authors' own calculation and representation based on the data from Eurostat, the Statistical Office of the Republic of Serbia and DIW Econ.

important factors of development and importance of SMEs in the observed economies. The obtained values of the SME development indicators show that SMEs from Serbia are less developed and develop more slowly compared to all other EU countries from the region (except Croatia), which points not only to the slow development of SMEs in Serbia, but also to further widening of the gap between the development of SMEs in Serbia and other EU countries from the region (except Croatia). Based on the previous results, the general conclusion is that, in the 2009-2017 period, SMEs contributed to the recovery of the domestic economy, but that contribution was lower than it would have been expected on the basis of the relative importance that SMEs have in the domestic economy and the contribution of SMEs in the majority of EU countries from the region.

Lower degree of development and slower growth of SMEs in Serbia in relation to the EU member states from the region are the result of a simultaneous impact of a number of factors. The speed and quality of SME development in Serbia depends to a large extent on general business conditions and the quality of business environment (e.g. the EC study states that “the business environment in Serbia is still hampered by a number of challenges, including the costly, unpredictable and non-transparent system of parafiscal charges; red tape; and difficult access to finance, especially for SMEs” [9]), the development of entrepreneurial infrastructure and culture and, in particular, the efficiency of the system of financial and non-financial incentives for the development of new, innovative companies. According to the factors that affect the speed and quality of SME development, the obtained results unambiguously show low efficiency of the existing SME development policy and the economy of Serbia as a whole. Therefore, the question is raised regarding justification of the continuation of implementation of the existing economic development policy and, within it, the SME development policy based on the Strategy of Supporting the Development of Small and Medium enterprises, Entrepreneurship and Competitiveness for the Period from 2015 to 2020. The slow pace of the development of entrepreneurship and SMEs in Serbia points to the need for a significant redefinition of the existing and/or adoption of a new SME development

strategy and policy in order to accelerate the dynamics and increase the quality of SME sector development in Serbia, thus reducing the lagging of SMEs and the overall economy behind EU countries in general. The aim of such redefinition/adoption is to enable taking into consideration the recommendation of OECD experts, which indicates that “government action should focus on improving the general operational environment and introduce targeted measures mainly to address coordination and market failures” [19, p. 18]. In case of Serbia, this would include implementation of the following individual activities in the upcoming period:

- Increase awareness of SMEs of the programs available for export promotion,
- Design supplier development programs,
- Conduct strong and comprehensive monitoring and evaluation using specific measures and key performance indicators to conduct long-term impact assessments of programs,
- Develop programs that promote e-commerce [20, pp. 871-872],
- Develop incentive mechanisms for growth and development of dynamic entrepreneurship [14, p. 112],
- Change the existing method of financing of the entrepreneurial sector and focus on financing aligned with various stages in the development of enterprises,
- Develop institutions for non-financial support to the development of entrepreneurship and change the structure of services offered in the direction of advisory assistance in the field of growth and development of enterprises [12, p. 220].

Implementation of these measures, along with those previously initiated and still not fully implemented, can contribute to a stronger development of entrepreneurship and SMEs in Serbia in the medium and long term, which will, on the other hand, have a very positive effect on the overall economy and contribute to higher employment and standard of living for the majority of people in Serbia.

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### Samir Ljajić

graduated from the Faculty of Economics, University of Novi Pazar. He defended his master's thesis entitled "The Role and Importance of Small and Medium Enterprises in the Implementation of the European Union's Development Strategy - Europe 2020" (2016), while his doctoral dissertation defense at the same university is pending. At the Faculty of Philosophy, University of Niš, he defended his master's thesis (2017) entitled "Public Relations as a Function of Management in Crisis". He has participated in numerous conferences in the country and abroad. He authored and co-authored numerous papers published in national and international journals. Mr. Ljajić is currently Teaching Assistant at the International University of Novi Pazar, teaching the following courses: Human Resource Management, Management of Small and Medium Enterprises, Entrepreneurship and Public Relations.



**Vladimir Kostić**

defended his doctoral dissertation entitled “Causes and Consequences of Financial Crises in Global Economy” at the Faculty of Economics, University of Niš, in 2014. He first started working at the Faculty of Economics in Kosovska Mitrovica as Teaching Assistant in 2010. In 2014, he was appointed Assistant Professor for the course Theory of Economic Development. Kostić also teaches Basics of Economics and Economic Integration and the EU. The domain of his scientific interest includes economic integrations and problems of contemporary crises. He published more than twenty scientific papers.



**Miroljub Nikolić**

graduated (2004) and received his MA (2009) from the Faculty of Economics, University of Belgrade, and acquired his PhD title at the Faculty of Economics, University of Niš, (2014) with a dissertation entitled “Innovativeness of Small and Medium-Sized Enterprises as a Factor in Economic Development of Serbia”. He is the author of several scientific papers in the fields of innovation development, entrepreneurship, small and medium enterprises and economic development planning, and he participated in the preparation of many different national research projects and studies. Mr. Nikolić is a member of the Scientific Society of Economists and the Presidency of the Belgrade Association of Economists, as well as a scientific associate of the Institute of Economic Sciences in Belgrade.