

# The Impact of FDI on the Transitional Economy in Serbia – Changes and Challenges

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*Abstract: Our study analyzes the transition period of Serbia from a centrally planned to a market economy with a special view to the political, social and economic conditions during the 1990s, and the economic circumstances after the 'democratic revolution' through the inflow of FDI, GDP, GDP per capita, GDP growth rate, exports, imports, trade balance, and unemployment rate. The economic decline in the 1990s was a consequence of war, international sanctions and mismanagement of economic policy. Serbia witnessed one of the greatest hyperinflations in modern history. With the purpose of creating the conditions for an inflow of FDI, economic reforms started in 2000 in Serbia. Since the 'democratic revolution', most FDI has entered the sector of non-exchangeable goods. That has had negative effects on Serbia from the development viewpoint, since the country needs FDI to the sector of exchangeable goods, as they encourage productivity and technological progress. Foreign investors to Serbia were primarily interested in profiting from the privatization of former state-owned companies. The benefits that Serbia has had from the inflow of FDI since 2000 relate to significant transfer of technology, enhancement of competition on the local market, the training of employees, etc.*

*Keywords: transition period; democratic revolution; economic policy; FDI; Serbia*

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## 1 Introduction

The effect of foreign direct investment (FDI) on domestic economy, trade, and unemployment is a subject of many debates. Although recent research projects have attempted to analyze the impact of FDI on a domestic country's economy, empirical results show that the consequences could be different. Some studies indicate that FDI can stimulate the economic growth, while others point out that FDI can offset the economic growth and increase in the host country. Following these hypotheses, ours is structured into four sections. We introduce a general overview of the major aims, theoretical background of the contemporary research literature in an area of FDI, methods and data. The next section provides analyses of the political, social and economic conditions in former Yugoslavia and Serbia during the 1990s and of the final transition from a centrally planned to a market economy. Then we compare the Inward FDI Performance Index of Serbia and that of other South Eastern European (SEE) countries. And finally we analyze the economic circumstances in Serbia after the 'democratic revolution' through the inflow of FDI, GDP, GDP per capita, GDP growth rate, exports, imports, trade balance, and unemployment rate, in the period 2000-2010.

The aims of this study are to discuss the political and economic conditions in the former Yugoslavia and Serbia during the 1990s. The economic situation in Serbia after the 'democratic revolution' and FDI dynamics, as well as its role in the country's recovery, are explained. The main objective of this paper is to answer the following questions: (1) What is the relationship between FDI and GDP? (2) Will FDI have a positive impact on exports? (3) Can FDI lead to a decrease in unemployment in Serbia?

## 2 Theoretical Background

Many scientists have analyzed the impact of FDI on economic growth of the host country [12, 29], the choice of location for foreign enterprises (region, country, and city) as well as the importance of FDI to social, economic, and political arena. FDI influences economic growth through several segments. First, it is expected to enhance it through capital accumulation: more inputs are incorporated into production [19]. Second, FDI is a source of technological enhancement and diffusion, as well as human capital strengthening [9, 40]. Furthermore, FDI promotes the diffusion of innovation: new technologies, know-how, marketing, and managerial skills through direct linkages (or spillovers) to domestic firms. Kokkinou and Psycharis [37] argue that the internationalization of production leads to better utilization of enterprises and stimulates technology transfer. The theory of multinational companies proposes that they have a technological advantage over domestic enterprises that outweighs the cost of doing business in

external markets [13, 42]. The impact of new knowledge and technology may be of benefit to domestic enterprises [8, 20], in addition to increased competition in local markets, facilitation of human capital mobility [21, 23], and vertical linkages [41, 50]. According to Altomonte and Guagliano [1], FDI may contribute to the improvement of exports with respect to domestic firms. Using the so-called Heckscher–Ohlin standard, Mundell [47] showed that capital transfer could be an excellent substitute for trade. Vernon's product cycle model also suggested a substitutional relationship between FDI and trade [57].

As the theorists indicate [1, 2, 4, 6, 43], many countries, especially transition economies such as Serbia, have stimulated foreign investors to expand their economic development and, consequently, to provide political stability. According to Griffiths and Sapsford [27], FDI from countries that are closer to the world technology frontier have a greater positive influence than FDI from technologically less advanced countries. Physical distance from investors' countries may also make a difference. Firms from countries that are closer to investor's home will have lower costs sourcing from their home countries than firms from more distant shores [50].

There are several studies providing evidence of the positive effects of the openness of a country on its economic growth and exports. Arslan and Wijnbergen [3] and Joshi and Little [34] discussed that trade liberalization in developing countries caused improvements in their economic performance. The logic behind this outcome is that trade liberalization reduces anti-export bias and makes exports more competitive in international markets. However, some studies have showed some scepticism regarding the link between openness and export performance [26, 33].

Attracting FDI is one of the most important activities across the world. Especially Crozet et al. [14] argue that the factors in choosing a location of foreign enterprises depend on the expected demand in a certain region, the factors of cost, the number of domestic and foreign enterprises in a certain area, and the public policies of attracting investment capital. Disdier and Mayer [16] indicate that the location choice of foreign enterprises is also determined by market access and production costs. Many other theorists have also evaluated the factors the location of foreign enterprises and FDI concentration [17, 22, 48]. According to the United Nations Conference on Trade and Development [56], the main traditional factors driving foreign enterprises' location have been diminishing in importance, such as the large markets, natural resources and access to low-cost labor. Other contemporary factors involved in attracting FDI are policy liberalization, favourable regulatory changes, technical progress, local conditions, managerial and organizational factors, and management practices. Many empirical studies on attracting FDI propose that foreign investors choose the region, country or city which has the probability of higher rate of profit. Scientists Helpman and Krugman [31], as well as Markusen and Venables [43], provide the theoretical background for the further clarification of FDI. Dunning [18] describes the incentives which lead to FDI undertaking and to the cross-border investment

activity. Basile [4] argues that the rate of profit is considered as a result of the following factors: the cost of productivity, the cost of transport, the size and the characteristics of local market, and the level of infrastructure. Lucas [40] and Jun and Singh [35] find that the key factors in attracting FDI are the general economic and social environment stability of the host country, which is the case with Serbia after 2000. Bevan and Estrin [6] focus on the importance of encouragement, as the cost of labor, the size of market, and the investment risks. Furthermore, Globerman and Shapiro [24] argue that the economic success of a host country depends on its institutional infrastructure. The institutional infrastructure is the main factor influencing investment decisions on FDI. According to the above-mentioned authors, the natural environment and the human capital are of great importance.

Furthermore, in Serbia, many scientists are actively involved in the studies of FDI [5, 10, 11, 15, 44, 45, 46, 49]. Due to the great importance to the economy of Serbia as a transition country, it is necessary not only to inject capital but also to provide access to new technologies, new markets, and organizational and marketing expertise. Begović *et al.* [5] emphasize the significance of greenfield investments in Serbia that will help the country's economic recovery after the political changes in 2000 and provide a critical review of the situation of the Serbian economy. The Serbian authorities have in the past years achieved remarkable results in terms of creating a favourable environment for attracting foreign FDI. Bošković [10] explains the correlation between FDI and increasing Serbian exports, while Cvetkovski *et al.* [15] deal with the human resource planning associated with FDI and make reference to the situation after the political changes. Milosavljević *et al.* [44] study the effects of FDI on the economy of Serbia through the diffusion of innovation. Mitić [45, 46] defines a causal relationship between FDI and employment in Serbia, as well as the problem of growing unemployment.

### **3 Methods and Data**

Alongside the theoretical research literature, we used the methodology of contemporary economic geography based on the methods of scientific achievement. The complexity of the study required the application of research methods suitable for setting up hypotheses, proving attitudes, verifying, and forming conclusions. In the methodological apparatus, as general methodological procedures, the mathematical–statistical method was used, and as a particular – analysis, synthesis, comparison, and cartographic method. The tabular and graphic classification of the data and presentation of statistical data, as well as changes of variables (growth, stagnation, and decline) are presented.

With the aim of comparison of FDI in Serbia with other SEE countries, we used the Inward FDI Performance Index ( $I_1$ ). According to the World Investment Report [55] methodology, the Inward FDI Performance Index ranks countries by the volume of attracted FDI according to the country's GDP. This index is usually calculated by the formula:

$$I_1 = \frac{(FDI_A / FDI_W)}{(GDP_A / GDP_W)} \quad (1)$$

where  $FDI_A$  is the FDI inflow to country A,  $FDI_W$  is world FDI,  $GDP_A$  is GDP of country A, and  $GDP_W$  is world GDP. If the value of  $I_1 \geq 1$ , then the country receives more FDI than it could count on based on its contribution to the production of the world GDP. If  $I_1 \leq 1$ , it receives less. A negative index means that foreign investors withdraw their capital from the country.

Pearson's Correlation ( $r$ ) was used to evaluate the degree of linear relationship between the variables: (1) FDI ( $x$ ) with GDP ( $y$ ), (2) FDI ( $x$ ) with export ( $y$ ) and (3) FDI ( $x$ ) with unemployment ( $y$ ) in Serbia during period 2000–2010, according to the commonly used formula:

$$r = \frac{n \cdot \sum xy - \sum x \cdot \sum y}{\sqrt{n \cdot \sum x^2 - (\sum x)^2} \cdot \sqrt{n \cdot \sum y^2 - (\sum y)^2}} \quad (2)$$

Coefficient of determination ( $R^2$ ) represents the proportion of variation in the dependent variable that has been explained or accounted for by the regression line. The aim of coefficient of determination is to offer the proportion of FDI ( $x$ ) in GDP growth ( $y$ ), in export ( $y$ ) and in unemployment ( $y$ ) in the analyzed period, according to the following formula:

$$R^2 = b_1^2 \cdot \frac{\sum x^2 - \overline{nx}^2}{\sum y^2 - \overline{ny}^2} \quad b_1 = \frac{n \cdot \sum xy - \sum x \cdot \sum y}{n \cdot \sum x^2 - (\sum x)^2} \quad (3)$$

The statistical data bases of the Serbia Investment and Export Promotion Agency [51], the Statistical Office of Serbia [54], UNCTAD [55, 56] and the International Monetary Fund [32] were used for the period 2000-2010.

The theoretical background, the representative nature of statistical variables, and the time frame of research (the transitional period after 2000) are the indicators of the performance of methodologically and scientifically based results presented in this study.

## 4 Results

### 4.1 Social and Economic Situations during the 1990s

In the Western world, state institutions gradually evolved in order to become the modern forms which work effectively today. The first attempts to build modern institutions in the former Yugoslavia began in 1990. Deep reforms were introduced to the centrally planned economy, but without much success, because the former Yugoslavia was in debt. A boost to reforms was given by the fall of the Berlin wall and the collapse of socialism in other Central and SEE countries. After the collapse of socialism, Western multilateral institutions suggested that a successful ‘transition’ from the centrally planned economy to a market-based system could only be achieved with large inflows of FDI [25].

Reforms in the Communist Party had caused its disintegration and political power was transferred to the former Yugoslav republics. The political elites understood that the cosmetic changes could not go too far. Furthermore, to some politicians, it was clear that the goal must be a capitalist economy, while others naively believed that the third option was possible – a path that combined the best features of a centrally planned and a market-based economy. The beginning of reforms in the former Yugoslavia in 1990s, a stable exchange rate and the ‘opening’ of the country made the population feel confident about the country’s welfare and progress.

According to Begović *et al.* [5], the reality was different, and in the former Yugoslavia the year 1990 was remembered as the last year of ‘brotherly’ co-existence of peoples from all six republics and two provinces. Unfortunately, the following year witnessed the collapse of the former Yugoslavia. The process of democratization of the society in the former Yugoslavia was unable to compete with national programs of constituent republics. Stančić and Grubišić [53] pointed out that many political and economic decisions were put under the carpet for decades. The rising nationalism in the Yugoslav republics led to the disintegration of the joint country. According to Popov [49], since 1991 some very unfavourable political and economic developments resulted in the catastrophic decrease of FDI inflow, the collapse of GDP per capita, and the diminishing of the real value of salaries and other personal income in Serbia. Consequently, the reduced employment, the flourishing of grey economy, technological regress, criminalization of society, and the influx of about 800,000 to 1 million refugees from the former Yugoslavia followed. The disintegration of the Yugoslav market in 1991, the beginning of civil wars and the UN sanctions imposed on Federal Republic of Yugoslavia in 1992 led to hyperinflation in 1993. The inflation in December 1993 and January 1994 broke the world record for the period since World War II. Salaries and pensions were reduced to 5-10 DEM per month, while production stalled in the autumn/winter 1993-1994. In January 1994 the

hyperinflation was liquidated and the economic activity revived. The main objective of that economic policy was the provision of sufficient quantities of basic foodstuffs for the population (bread, oil, milk, sugar, salt), regardless of whether the cost was effective or not. The abolition of trade sanctions at the end of 1995, after signing the Dayton Agreement, unfortunately did not change the political situation. The conflict in Kosovo and Metohia was followed by the NATO bombing campaign of Serbia in the period between March and June 1999. According to Begović et al. [5], as a result of the interruption of economic activity in 1999, GDP was reduced by one fifth compared to 1998. In the second half of 1999, a certain recovery of production was detected. The changed production structure decreased the participation of industry (especially metal, electric, and chemical) and increased the participation of agriculture, public services and energy. The decline of the formal sector was partly compensated by the grey economy. In October 2000, Serbia was ready for new economic strategies while a new political path was being set.

## **4.2 Stabilization and Economic Recovery Beyond 2000**

At the end of 2000, with the acquired knowledge and transfer of technology from the West, Serbia started building new democratic institutions and a market-based system. An important role in encouraging the reforms belonged to the World Bank and IMF, which, due to previous failures in other transition countries, perceived Serbia as an opportunity to do their best. They offered Serbia the financial resources that Serbia greatly lacked and strong incentives to continue with the economic reforms.

Starting after political changes in October 2000, improvements were made especially regarding the institutional and legal framework [28]. In the development of Serbia two phases of transition can be distinguished. The first phase represented a moment of enthusiasm when Serbia opened to the world. Legislative reforms were easily adopted at this stage, and there were no opponents to the changes. Therefore, the year 2001 is considered the stellar moment of transition in Serbia. However, in the second phase after 2002, political elites lost enthusiasm and political life went back to normal. The first phase was facing legislative changes, while the second phase was based on increased legislation. Although other transition countries were late to reform the system protecting the rights of private property, in Serbia there was a weakness in applying legislation. Many reform laws passed, but legislation was still the weakest link eleven years after ‘democratic revolution’.

Transitions in the other Central and SEE countries differ in many ways, despite certain similarities, such as reduced industrial production in the first years of transition and a sudden increase in poverty. Decreases in production were mainly caused by the destruction of the centrally planned economy before the new

market-oriented system was built. The growth of poverty was the consequence of falling GDP, increasing inequality and slow construction of efficient mechanisms of social protection. However, the situation in Serbia was different. Industrial production was growing and poverty was reduced, which can be evaluated as the peculiarities of Serbian transition. There are several reasons for the lack of decline in industrial production. First, Serbia was different in many ways from most of Central and SEE countries. In 2000, Serbia moved from a centrally planned economy to a market economy, but was greatly distorted by the former socialist government. Furthermore, the Serbian institutions in 2000 were better prepared for the transition than the other Central and SEE countries ten years earlier. Liberalization of foreign trade and business in late 2000 only abolished the unnecessary regulation, which had positive effects on production. The economic growth in Serbia contributed to the inflow of external financial support which stimulated domestic production.

In Serbia, after 2000 the private sector grew, but did not represent a major driving force as in some other Central and SEE countries, where it had quickly become the main bearer of economic progress. This was caused by the fact that the private sector had been relatively developed even before 2000, while in most Central and SEE countries it had started from scratch and grew very quickly in the early stages. The transition of Serbia after 2000 was fast-paced at first, but it slowed down over time when the country was halfway through reforms.

A strong impetus to reforms was Serbia's candidacy for EU membership in December 2009. The process of joining the EU is considered as a sustainable instrument for economic reforms, stabilization and strengthening of institutions.

### **4.3 Inflow of FDI, GDP, Trade and Unemployment Rate**

The general benefits of post-socialist economic change in transitional countries have been widely discussed [17, 36, 38, 39]. They include greater independence from political control and enhanced well-being of consumers through better quality and easier access to FDI. On the other hand, social welfare in some ways declined, in the sense of economic security, the end of full employment, and increased social inequalities.

FDI had an important role in the economic development of SEE countries through industrial restructuring, which led to national prosperity of each country. In the first years of the 21<sup>st</sup> century, most SEE countries had relatively low inflow of FDI, especially Serbia, Bosnia and Herzegovina and Albania. Their Inward FDI Performance Index ( $I_1$ ) was below 1 in 2000.

Table 1  
Inward FDI Performance Index ( $I_1$ ) in SEE countries

Country/region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Albania	0.78	1.84	1.36	1.78	2.51	1.21	1.12	1.64	2.63	4.16	4.43
UNMIK–Kosovo	-	-	-	-	0.79	1.34	2.93	3.44	3.28	3.77	3.52
Bosnia and Herzegovina	0.52	0.74	1.78	2.59	3.78	2.10	1.93	3.61	1.99	1.53	0.66
Bulgaria	1.55	2.12	2.53	5.83	5.67	5.62	7.26	7.85	6.37	5.03	2.15
Montenegro	-	-	-	-	-	-	-	6.32	7.14	16.39	8.96
Serbia	0.12	0.56	1.68	4.14	2.34	3.06	5.26	2.33	2.12	2.30	1.67
Croatia	1.03	2.48	1.85	3.44	1.41	1.50	2.16	2.25	2.18	2.23	0.26
Macedonia	1.19	4.71	1.25	1.42	3.15	0.61	4.89	2.27	2.10	1.39	1.52

Source: IMF [32] and World Bank [58]

With time, inflow of FDI grew in most SEE countries as well as  $I_1$ , but the fall was recorded for 2004 and between 2008 and 2009. However, instability occurred in some SEE countries in 2004 due to the political changes, which led to decrease in inflow of FDI.



Figure 1

Inward FDI Performance Index ( $I_1$ ) in SEE countries in 2000

The global economic crisis affected economies of SEE countries in 2008-2009. In 2010, most SEE countries had a relatively good  $I_1$  ( $I_1 \geq 1$ ), bearing in mind the size of their economies (except Croatia and Bosnia and Herzegovina). This is mainly due the fact that most SEE countries received more FDI than they could count on based on their contribution to the production of the world GDP. Montenegro had

the best  $I_1$  in 2010 with the index value of 8.96. A relatively good performance index compared with the other SEE countries was also observed in Albania, where the value of the index was 4.43, followed by UNMIK–Kosovo (3.52), Bulgaria (2.15), and Serbia (1.67).



Figure 2

Inward FDI Performance Index ( $I_1$ ) in SEE countries in 2010

Most FDI in the first decade of the 21<sup>st</sup> century entered the SEE countries through greenfield investments because the privatizations of the 1990s had ended. The other reason was the effectiveness-oriented investors who estimated that this region had prosperity. According to Begović *et al.* [5], Western countries, mostly EU members, remained the main source of FDI for the SEE region, especially through greenfield projects. If SEE region is compared to Central European countries, the inflow of FDI is not high. For example, in 2004, FDI amounted only to USD 620 million per capita in the SEE region, while in the Central European countries it was USD 2,227 million per capita. Lucas [40] and Jun and Singh [35] explained that this ratio is due to the unfavourable political and economic circumstances in the SEE region.

Due to political and economic changes, Serbia has seen a growth in FDI since the year 2000, especially after 2002, when the Law on Foreign Investments was adopted. This Law equalizes the rights and obligations of both foreign and domestic investors in Serbia. The combination of legal framework and customs regime ensure that foreign capital enjoys security and prosperity in Serbia. Serbia's tax system is highly conducive to FDI. Apart from featuring the lowest

tax rates in Europe, investments can benefit from possible tax incentives which create excellent start up. Primarily, there is a possibility of a 10-year corporate profit tax holiday for investments in the manufacturing sector.

In the analyzed period, the highest inflow of FDI in Serbia originated from the EU country members, as well as from the USA and Russia, especially in the sectors of finances, telecommunications, energy, cement, oil, and tobacco industries. The highest inflow of FDI in 2006 (USD 5.474 billion) is not likely to reappear in the near future, since it coincided with the maximum FDI in the SEE region. The high inflow of FDI to Serbia in 2006 was the consequence of privatizing the mobile telecommunications operator 'Mobtel', purchased by Norwegian 'Telenor', followed by 'Philip Morris', a mobile operator 'Austria group' and others. Due to the political instability and the elections, the inflow of FDI to Serbia decreased to USD 3.569 billion in 2007, compared to USD 3.363 billion in 2008.

Table 2  
Inflow of FDI to Serbia (in USD mil.)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Cash investment	52	178	503	1,389	987	1,616	5,474	3,569	3,363	2,498	1,518
Total investment	55	160	550	1,410	1,030	2,090	5,120	3,980	2,990	1,920	n/a

Source: Serbia Investment and Export Promotion Agency [51]

Significant decrease in FDI occurred in 2009 with the appearance of the world economic crisis. Specifically, at the moment when a large import-oriented production project was announced in Serbia ('Fiat') and when it seemed to lead to economic growth, the world economic crisis made additional inflows uncertain. The negative effects of the crisis also influenced the decrease of global investment trends in the whole region. That especially becomes evident in the case of Serbia, when compared to the first half of 2008. In the first six months of 2008, the inflow of FDI to Serbia was 75% higher than in 2009. The difference would have been even more significant but in February 2009 Russian 'Gazprom' bought Petroleum Industry of Serbia, with a 50% share in total FDI in 2009. The inflow of FDI to Serbia decreased to USD 2,498 million in 2009. From 2000 to 2008, most FDI inflows in Serbia went to the financial sector and telecommunications. In 2009 the highest FDI was recorded in the energy sector.

As an effect of the global economic crisis, the inflow of FDI in 2010 was only USD 1,518 million. The most important foreign investor countries in 2010 were the Netherlands with USD 264 million, Austria with USD 193 million, Slovenia with USD 108 million, and the USA with USD 77 million. Civil engineering and agriculture are still deficient in foreign capital inflow. Despite the convenient natural conditions for the development of agriculture, and experience for the intensive growth of this sector, it is still without FDI.

The average growth rate of the total investment (inflow of FDI to Serbia between 2000 and 2010) is 48%. A fall of 27% in the total investment was recorded in

2004, for the period between 2007 and 2010 (Table 2). The most important inflow of FDI to Serbia in the period 2000-2010 according to investment type relate to privatization and capital market.

Apart from the sale of domestic companies in the process of privatization, greenfield investments are becoming more present. It is generally difficult to attract greenfield investments to the country until entrepreneurial environment has been created, an environment that involves fewer investment risks and more business transparency. Even though no FDI are inferior to the others, greenfield investments have an advantage which is less noticeable in the other forms: these investments have the greatest influence on the increase of employment. However, most greenfield jobs in Serbia have been created in the services sector, industries and mining. On the other hand, owing to the arrival of foreign investors, imports held back domestic suppliers. According to Hardy [30], Smith and Ferenčíková [52] and Pavlinek [48], after the entry of foreign enterprises, local economies may benefit from continued and often expanded production that saves jobs (especially where the privatization agreement obliged foreign investors to maintain current employment for a particular period), or new jobs are created in greenfield investments. That is expected for the automotive industry Fiat in Kragujevac, which can jointly with its network of suppliers have important positive effects on increase in employment by about 10,000 jobs. It is assumed that local producers of car components will employ over 15,000 people. An important part of the agreement between the Serbian Government and the local authorities with Fiat is the establishment of a 67-hectare supplier park in Grošnica, which will provide components to the plant and potentially contribute to increased production for export. From the infrastructural point, the Government and the local authorities are contributing to this greenfield investment by improving railway and road conditions and building a connection with Corridor 10.

Another positive example is the Municipality of Indjija, which is among the most popular destinations for FDI inflow in SEE, primarily due to good infrastructure and the latest information technologies. Indjija was considered the most attractive municipality and ranked 18<sup>th</sup> in Europe. The tender was carried out in the second half of 2007, when FDI magazine, issued by renowned Financial Times, sent questionnaires to more than 1,000 cities and regions across Europe. The basic criteria was economic potential, the most significant investments in the last two years, the levels of investment, the number of new jobs created, GDP growth rate, economic reforms, and development priorities. The largest investments in Indjija were USD 600 million worth construction of technological park by Indian company Embassy Group, a USD 76 million business-housing complex financed by multinational construction company Trade Unique, and USD 11.4 million Battery Factory funded by Bulgarian Monbat. These three investments will provide about 2,700 new jobs in Indjija.

Belgrade as the capital and the primary centre of development has seen the greatest increase of FDI in Serbia. The contributing factors are the existence of

infrastructure, human resources and business operating conditions. The level of investment to Belgrade in 2007 was 105.9 times higher compared to the level in 1996, which can be accounted for by a number of factors, such as economic sanctions imposed by international community in the 1990s, political isolation, and the war in the former Yugoslavia. The highest inflow of FDI in 2010 was invested to the central Belgrade municipalities: Savski Venac, Novi Beograd, Vračar, Palilula and Stari grad. The Municipality of Novi Beograd was converted from a former huge ‘dormitory’ into ‘Serbian Manhattan’, because almost all leading business and financial subjects, as well as leading foreign enterprises in the country, have their representative offices there. As Pavlinek [48] asserts, the inflow of FDI to other Central and SEE countries as well as Serbia, was considerably higher in the capital cities in comparison to the other urban agglomerations. According to Blažek [7], Prague attracted 49% of total FDI invested to the Czech Republic, while the involvement of Bratislava amounted to 67.8% of total FDI in Slovakia (in 2002), and Budapest held 56.5% in 2000 (Hungary).

Table 3  
GDP and external trade of Serbia

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP per capita (USD)	1,152	1,524	2,012	2,613	3,169	3,391	3,958	5,277	6,467	5,438	5,139
GDP (PPP) per capita*	5,655	6,100	6,468	6,786	7,598	8,315	8,928	9,722	10,900	10,708	10,897
GDP (USD bn)	8.7	11.4	15.1	19.5	23.7	25.2	29.3	39.0	47.7	40.1	38.0
GDP growth rate	5.3%	5.6%	3.9%	2.5%	9.3%	5.4%	5.2%	6.9%	5.5%	-3.0%	1.8%
Exports (USD mil.)	1,558	1,721	2,075	2,477	3,523	4,553	6,428	8,825	10,973	8,344	9,794
Imports (USD mil.)	3,330	4,261	5,614	7,333	10,753	10,575	13,172	18,554	22,875	16,056	16,734
Trade Balance (USD mil.)	-1,772	-2,540	-3,539	-4,856	-7,230	-6,022	-6,744	-9,729	-11,902	-7,712	-6,939
Exports/Imports	46.8%	40.4%	37.0%	33.8%	32.8%	41.1%	48.8%	47.6%	48.0%	52.0%	58.5%

Source: IMF [32] and Statistical Office of Serbia [54]

\* Geary–Khamis USD

The average growth rate of GDP (USD bn) is 4.8% (Table 3). Following the political changes in Serbia in 2000, GDP per capita rose until 2008, when maximum GDP per capita 6,465 USD was recorded. Between 2004 and 2008, average economic growth was 6.3%, while GDP per capita almost doubled. Strong GDP performance was largely driven by the services sectors such as telecommunications, retail, and banking. In 2009, the global economic crisis led to the first negative GDP growth in Serbia during the analyzed period. GDP growth rate was negative -3.0%, while in 2010 it was 1.8%. The Serbia’s external liquidity was secured through a € 3 billion stand-by agreement with the IMF. The Serbian Government and IMF estimate real GDP growth at an average rate of

3.8% for the next three years. These projections are based on expected growth in activity in the majority of sectors, as well as on the recovery in the construction sector after a big drop in 2009. Economic policy of the Serbian government includes strengthening of industrial production and stimulation of capital investments in industry, especially in export-oriented sectors.

The average growth rate of export is 19% (Table 3). After 2000 Serbia had constant export and import until 2008. A big drop in export was recorded in 2009 and 2010 (8,344 USD million in 2009 and 9,794 USD million in 2010), as well as import (16,056 USD million in 2009 and 16,734 USD million in 2010). The main export products of Serbia in 2009 and 2010 were: iron and steel, clothes, cereals, vegetables, and non-ferrous metals. In 2009 and 2010, the EU countries were both the largest Serbia's export partners and the largest import partners. Serbia signed the CEFTA agreement which enabled exports of all products originating from Serbia without customs duty and other fees to the following countries: Albania, Bosnia and Herzegovina, Croatia, Macedonia, Moldova, Montenegro, and UNMIK–Kosovo. The CEFTA countries were the second largest export destinations (33% in 2009) and the third largest import destinations (7.8% in 2009). Serbia signed a free trade agreement with CIS (Russia is a participating country of CIS). CIS countries were the third largest export partners (7.3%) and the second largest import partners (18.5%) of Serbia in 2009. Serbia signed a free trade agreement with EFTA countries, Norway, Switzerland, Iceland, Liechtenstein, as well as with Turkey (April/May 2010). Trade with the United States is pursued under the Generalized System of Preferences (GSP). The USA trade benefits provide for a preferential duty-free entry for approx. 4,650 products from Serbia.

During the analyzed period, the Serbian economy suffered from a constant trade deficit, which is the reason the Serbian Government is strongly supporting the further industrial development of the country, especially in export-oriented sectors. Furthermore, the three sectors declared as the sectors of special importance for development of Serbia are automotive, electronics and ICT industry. The highest trade deficit was recorded in 2008 – 11,902 USD million.

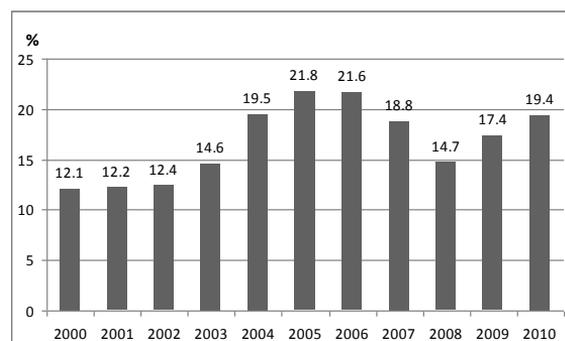


Figure 3  
Unemployment rate in Serbia, Source: IMF [32]

The average growth of unemployment rate is 17.27% (Figure 3). In 2000 the unemployment rate was 12.1%. It reached its maximum in 2005 (21.8%). With the increase in the unemployment rate, employees are faced with decreased salaries and great uncertainty. Unfortunately, a lot of domestic enterprises have to make decision about forced redundancies.

Our study shows that positive linear coefficient of correlation for FDI *versus* GDP – USD bn  $r= 0.71$ ; linear correlation FDI *versus* export – USD millions is 0.74; and coefficient of correlation FDI *versus* unemployment shows very weak linear correlation ( $r=0.023$ ). As for coefficient of determination ( $R^2$ ) for GDP (USD bn) is 50% while coefficient of determination ( $R^2$ ) for export – USD millions is 54%.

### Conclusion

Serbia, unlike other Central and SEE countries, went through transition after 2000. The economic decline in Serbia in the nineties was a consequence of war, international sanctions and mismanagement of economic policy. In addition, Serbia witnessed one of the greatest hyperinflations in modern European history. For the purpose of creating the conditions for sustainable development, economic reforms took place between 2000 and 2010.

To sum up, our analysis showed the following. Firstly, the inflows of FDI in Serbia have had a positive impact on economic growth, but not on exports. The main reason is that, since the ‘democratic revolution’ most FDI have entered the sector of non-exchangeable goods (banking, insurance, telecommunications, real estate and retail trade). This has had negative effects on Serbia from the development viewpoint, since the country needs FDI to the sector of exchangeable goods because they encourage productivity and technological progress. Large inflows of investments to the sector of non-exchangeable goods, particularly to the real estate sector, have been intensified by migrations of population to Belgrade and other cities, which results in a deeper demographic and economic polarization of Serbia. Foreign investors were primarily interested in profiting from the privatization of the former state-owned companies. Therefore, the privatization policy which was directed to higher and faster profit, and not toward modernizing production capacities or maintaining employment rate, was particularly convenient.

Secondly, the priority problems of Serbia are still the external trade deficit and a relatively small number of export-oriented projects by foreign investors. The economy of Serbia requires larger FDI that would encourage productivity and technological progress, i.e. FDI more directed towards trade and processing industry (metal processing, textiles and automotive industry). By enhancing competitiveness and economic efficiency, including and owing to FDI, the balance

of trade deficit will not pose a problem. Furthermore, the economic growth can significantly promote export expansion and vice versa.

Thirdly, likewise, we have also found that FDI inflows have no obvious effect on unemployment. The relationship between FDI inflows and unemployment shows very low correlation ( $r=0.023$ ). During the analyzed period, the transfer of formally employed workers to real sector of economy occurred. The process of transition in Serbia led to a decrease in the number of employees in state-owned companies and consequently to a decline of formal employment.

Fourthly, we have found that a feedback relationship exists between exports, growth of GDP and inflow of FDI. Thus, an appropriate development strategy of Serbia such as providing incentives for economic growth and FDI can lead to export growth. The essential problem of Serbia is a lack of export products and services and non-competitiveness. Therefore, the biggest economic problems of Serbia are the significant trade deficit, the low employment rate and, above all, the lack of investment and technological innovations and an unfavourable image of the country abroad. Increasing export requires new projects, programs and products, and they are most easily achieved with the help of foreign capital and world transnational companies. Economic growth and exports expansion can significantly decrease unemployment. This result means that rapid economic growth and expansion of exports, accompanied by higher per capita income, usually increase output growth. Thus, foreign corporations and domestic firms will demand more labor force with skills to create products. The final finding is that exports not only attract inward FDI but also stimulate economic development in the long-run. The process of joining the EU is of significance for foreign investors. If they are already interested in investing in Serbia, and if Serbia is about to obtain the EU candidate status, they will be convinced that Serbia is getting ahead with reforms, so they will invest here in order to be the first in the market.

Fifthly, the large benefits Serbia has had from the inflow of FDI since 2000 refer to the significant transfer of technology and the domino effect on the domestic economy, the enhancement of competition on the local market, and improving the business environment in Serbia, connecting and involving domestic companies into the international technological, production and distributive networks, training of employees etc. The flexibility and ability of the labor market to attain new knowledge and skills are compatible with new business principles. Finally, inflows of FDI to Serbia are still moderate (2011, FDI amounted to 5% GDP) which can be explained by the impact of the world economic crisis on reducing FDI, the exhausted possibilities of privatization and the structural weaknesses of the economy.

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### References

- [1] Altomonte, C., Guagliano, C.: Comparative Study of F.D.I. in Central and Eastern Europe and the Mediterranean, *Economic Systems* 27: 223-246, 2003
- [2] Altomonte, C.: Economic Determinants and Institutional Frameworks: FDI in Economies in Transition, *Transnational Corporations* 9(2): 75-106, 2000
- [3] Arslan, I., Wijnbergen, S. V.: Export Incentives, Exchange Rate Policy and Export Growth in Turkey, *Rev. Econ. Stat.* 75(1): 128-133, 1993
- [4] Basile, R.: Acquisition Versus Greenfield Investment: the Location of Foreign Manufacturers in Italy, *Regional Science and Urban Economics* 34: 3-25, 2004
- [5] Begović, B., Mijatović, B., Paunović, M., Popović, D.: Grinfield strane direktne investicije u Srbiji, Beograd: Centar za liberalno-demokratske studije, 2008, pp. 23-27
- [6] Bevan, A. A., Estrin, S.: The Determinants of Foreign Direct Investment in Transition Economies, CEPR Discussion Paper 2638, London: Centre for Economic Policy Research, 2000
- [7] Blažek, J.: Regional Development and Regional Policy in Central East European Countries in the Perspective of EU Enlargement, In: Hampl, M. (Ed): *Geography of Societal Transformation in the Czech Republic*, Department of Social Geography and Regional Development, 1999
- [8] Blomström, M.: Foreign Investment and Productive Efficiency: The Case of Mexico, *Journal of Industrial Economics*, 35(1): 97-110, 1986
- [9] Borensztein E., de Gregorio J., Lee, J.: How does Foreign Direct Investment Affect Economic Growth? *Journal of International Economics* 45: 115-135, 1998
- [10] Bošković, T.: Strane direktne investicije u funkciji povećanja izvoza Srbije, *Računovodstvo* 50 (3/4): 133-140, 2006
- [11] Bubanja-Vidas, M.: *Metode i determinante FDI*, Institut ekonomskih nauka, Beograd, 1998
- [12] Carkovic, M., Levine, R.: Does Foreign Direct Investment Accelerate Economic Growth? Working Paper. University of Minnesota, Minneapolis, 2002
- [13] Caves, R.: *Multinational Enterprises and Economic Analysis*, 2<sup>nd</sup> ed. Cambridge: Cambridge University Press, 1996
- [14] Crozet, M., Mayer, T., Mucchielli, J.: How do Firms Agglomerate? A study of F.D.I. in France, *Regional Science and Urban Economics* 34(1): 27-54, 2004

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- [15] Cvetkovski, T., Langović-Miličević, A., Cvetkovska-Ocokoljić, V.: Strane direktne investicije i mogućnosti za planiranje ljudskih resursa – stanje u Srbiji, *Megatrend revija* 6(2): 145-174, 2009
- [16] Disdier, A., Mayer, T.: How Different is Eastern Europe? Structure and Determinants of Location Choices by French Firms in Eastern and Western Europe, *Journal of Comparative Economics*, Elsevier, 32(2): 280-296, 2004
- [17] Domański, B.: Industrial Change and Foreign Direct Investment in the Postsocialist Economy: The Case of Poland, *European Urban and Regional Studies* 10(2): 99-118, 2003
- [18] Dunning, J.: The Prospects for Foreign Direct Investment in Eastern Europe, In: P. Artisien, M. Rojec, M. Svetličič (Ed.): *Foreign Investment in Central and Eastern Europe*, New York: St Martin's Press, 1993, pp. 16-33
- [19] Feenstra, R., Markusen, I.: Accounting for Growth with New Inputs. *International Economic Review* 35: 429-447, 1994
- [20] Findlay, R.: Relative Backwardness, Direct Foreign Investment and the Transfer of Technology: A Simple Dynamic Model, *Quarterly Journal of Economics*, 62(1): 1-16, 1978
- [21] Fosfuri, A., Motta, M., Ronde, T.: Foreign Direct Investment and Spillovers through Workers' Mobility, *Journal of International Economics*, 53(1): 205-22, 2001
- [22] Freidman, J., Gerłowski, D., Silberman, J.: What Attracts Foreign Multinational Corporations? Evidence from Branch Plant Location in the United States, *Journal of Regional Sciences* 32: 403-418, 1992
- [23] Glass, A. J., Saggi, K.: Multinational Firms and Technology Transfer, *Scandinavian Journal of Economics*, 104(4): 495-513, 2002
- [24] Globerman, S., Shapiro, D.: Global Foreign Direct Investment flows: The Role of Governance Infrastructure, *World Development* 30(11): 1899-1919, 2002
- [25] Gowan, P.: Neo-Liberal Theory and Practice for Eastern Europe, *New Left Review* 213: 3-60, 1995
- [26] Greenaway, W., Morgan, D., Wright, P.: Trade Liberalization and Growth in Developing Countries, *J. Dev. Econ.* 676: 229-244, 2002
- [27] Griffiths, D., Sapsford, D.: Foreign Direct Investment in Mexico, In: Y. A. Wei, V. N. Balasubramanyam (eds.): *Foreign Direct Investment: Six Country Case Studies*, Cheltenham, UK, and Northampton, MA: Elgar, 2004, pp. 103-27
- [28] Hadžić, M., Pavlović, P.: How to Overcome (SME) Crisis: Serbian Case, *Acta Polytechnica Hungarica* 8(1): 61-80, 2011

- [29] Halmos, K.: The Effect of FDI, Exports and GDP on Income Inequality in 15 Eastern European Countries, *Acta Polytechnica Hungarica* 8(1): 123-136, 2011
- [30] Hardy, J.: Cathedrals in the Desert? Transnationals, Corporate Strategy and Locality in Wrocław, *Regional Studies* 32: 639-52, 1998
- [31] Helpman, E., Krugman, P. R.: *Market Structure and Foreign Trade*, Cambridge, MIT Press, 1985
- [32] International Monetary Fund: *World Economic Outlook, 2000-2010*
- [33] Jenkins, R.: Trade Liberalization and Export Performance in Bolivia, *Dev. Change* 27(4): 693-716, 1996
- [34] Joshi, V., Little, I. M. D.: *India's Economic Reforms 1991-2001*, Oxford University Press, Oxford, 1996
- [35] Jun, K. W., Singh, H.: The Determinants of Foreign Direct Investment: New Empirical Evidence, *Transnational Corporations* 5: 67-106, 1996
- [36] Kiss, J. P.: Industrial Mass Production and Regional Differentiation in Hungary, *European Urban and Regional Studies* 8(4): 321-328, 2001
- [37] Kokkinou, A., Psycharis, I.: Foreign Direct Investment: Explaining the Regional Location Determinants in South-Eastern European Countries, In: G. M. Korres (Ed.): *Regionalization, Growth, and Economic Integration*, Physica Verlag Heidelberg, 2007, p. 308
- [38] Kornai, J.: *Struggle and Hope. Essays on Stabilization and Reform in a Post-Socialist Economy*, Cheltenham: Edward Elgar, 1997
- [39] Lazear, E. P. (Ed.): *Economic Transition in Eastern Europe and Russia: Realities of Reform*, Stanford, CA: Hoover Institution Press, 1995
- [40] Lucas, R. E.: On the determinants of Foreign Direct Investment: Evidence from East and Southern Asia, *World Development* 21(3): 391-406, 1993
- [41] Markusen, J., Venables, A.: Foreign Direct Investment as a Catalyst for Industrial Development, *European Economic Review*, 43(2): 335-356, 1999
- [42] Markusen, J.: *Multinational Firms and the Theory of International Trade*, Cambridge, MA: MIT Press, 2002
- [43] Markusen, J. R., Venables, A. J.: Multinational Firms and the New Trade Theory, *Journal of International Economics* 4: 183-203, 1998
- [44] Milosavljević, Z., Nestorović, O., Zdravković, D.: Efekti stranih direktnih investicija na privredu i inovacije, *Ekonomika* 55(6): 114-123, 2009
- [45] Mitić, B.: Radna snaga, problem nezaposlenosti i politika SDI u Republici Srbiji, *Tržište, novac, kapital* 39(4): 35-50, 2006

- [46] Mitić, B.: Uticaj SDI na izvoz Srbije u periodu tranzicije i iskustva drugih zemalja u tranziciji, *Tržište, novac, kapital* 40(2): 51-67, 2007
- [47] Mundell, R. A.: International Trade and Factor Mobility, *American Economic Review*, XLVII, pp. 321-335, 1957
- [48] Pavlínek, P.: Regional Development Implications of Foreign Direct Investment in Central Europe, *European Urban and Regional Studies* 11(1): 47-70, 2004
- [49] Popov, Dj.: Privatization and Foreign investments: The Case of Serbia and Montenegro, *Transition Studies Review* 11(3): 196-209, 2004
- [50] Rodríguez-Clare, A.: Multinationals, Linkages, and Economic Development, *American Economic Review*, 86(4): 851-873, 1996
- [51] SIEPA – Serbia Investment and Export Promotion Agency: Investors Profile Serbia, Belgrade, 2011, pp. 1-24
- [52] Smith, A., Ferenčíková, S.: Inward Investment, Regional Transformations and Uneven Development in Eastern and Central Europe: Enterprise Case-studies from Slovakia, *European Urban and Regional Studies* 5(2): 155-173, 1998
- [53] Stančić, V., Grubišić, Z.: Povezanost političkih i ekonomskih reformi u procesu tranzicije – iskustvo tranzicionih zemalja, sa posebnim osvrtom na Srbiju, *Politička revija* 10(3): 241-258, 2011
- [54] Statistical Office of Serbia, 2000–2010
- [55] UNCTAD: World Investment Report, Promoting Linkages, UN, New York, 2003
- [56] UNCTAD: World Investment Report, Promoting Linkages, UN, New York, 2001
- [57] Vernon, R.: International Investment and International Trade in the Product Cycle, *Quarterly Journal of Economics*, 80: 190-207, 1966
- [58] WORLD BANK: Foreign Direct Investment, Net Inflows 2000–2010, (<http://data.worldbank.org/indicator>)