

Foreign Direct Investments in Serbia as a Form of Cross-border Cooperation

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Abstract

The forms of foreign direct investments that represent the instrument of cross-border cooperation are Greenfield and Brownfield investments. On the territory of the Republic of Serbia, during the 2000-2016 period, there were established 151 Greenfield and 15 Brownfield companies. The sum of investments of these 166 companies was near € 7,000,000,000. The capital is from 18 European countries, then from United States, Taiwan, China, South Korea, Canada and India. The largest number of the investments is from Italy (30), Germany (29), Austria (17) and Slovenia (16). Most Greenfield and Brownfield companies belong to the secondary and tertiary sectors of the economy, while 22 companies belong to quaternary sector (real estate, tourism, finance, insurance and pension, telecommunication, film industry, software and ICT).

The analysis, synthesis, comparative and mapping methods were used in this paper. The data were collected from domestic and foreign scientific papers, as well as from the official electronic database. Given data are connected to the traffic network of Serbia, and the goal was to realize its influence on choosing locations for foreign direct investments.

Favourable geo- traffic position of the towns, where the company seats are located, has great significance in the work of these companies due to the reduction of transport costs. This paper analyzed the companies' selection of location and their position in relation to the main roads in the country - Corridor X. The zonation of companies and towns where they are located, depending on their distance from the corridor 10, were processed in GeoMedia program. Results showed that most of the companies (102) were located at a distance of 10 kilometres from the highway.

Keywords: *Greenfield and Brownfield investments, cross-border cooperation, Corridor X, GeoMedia GIS program*

Rezumat.

Investițiile stăine directe în Serbia ca formă de cooperare transfrontalieră

Investițiile de tip brownfield și greenfield constituie principalul tip de investiții străine directe ca instrument de cooperare transfrontalieră. Pe teritoriul Serbiei, în perioada 2000-2016, au fost înființate 151 de firme tip greenfield și 15 brownfield, suma investită a acestor 166 companii totalizând aproximativ 7 bln Euro. Capitalul investit provine de la 18 state europene, apoi din SUA, Taiwan, China, Coreea de Sud, Canada și India. Cei mai mulți investitori provin în Italia (30), Germania (29), Austria (17) și Slovenia (16). Cele mai multe firme de tip greenfield și brownfield desfășoară activități din domeniul secundar și terțiar, în timp ce 22 de firme sunt în domeniul cuaternar (imobiliare, turism, finanțe, asigurări, telecomunicații, industria filmului, software și TIC).

Lucrarea are la baza metoda analizei, sintenzei, cartării și comparației, datele fiind obținute din lucrările științifice publicate în Serbia și străinătate, precum și din baza electronică de date oficiale, având în vedere că datele sunt legate de infrastructura de transport a Serbiei, scopul lucrării fiind acela de a evalua modul în care aceasta a influențat localizarea investițiilor străine directe.

Poziția geografică favorabilă a unor orașe în ceea ce privește principalele căi de comunicație are un rol major în localizarea sediilor centrale ale firmelor, datorită reducerii costurilor necesare transportului. Lucrarea de față analizează modul în care firmele au localizat investițiile și poziția acestora față de principalele căi de transport din țară – Coridorul X. Cu ajutorul programului GeoMedia, a fost analizată zonarea companiilor și a orașelor unde sunt acestea situate în raport de distanța până la coridorul X. Rezultatele indică faptul că cele mai multe firme (102) sunt situate la o distanță de 10 km față de autostradă.

Cuvinte-cheie: *cheie: investiții de tip brownfield și greenfield, cooperare transfrontalieră, Coridorul X, GeoMedia GIS.*

Introduction

Serbia is a modern, democratic European country, on the path to the membership of the European Union, and it's the only country outside of the Commonwealth of Independent States that has a Free Trade Agreement with Russian Federation (RAS, 2016). Serbia's tax system is highly conducive to investment, featuring one of Europe's lowest corporate profit tax rates set at 15%, VAT of 20% and 10% salary tax etc. (KPMG, 2014).

Although until the beginning of the World War I, during the last decade of the 20th century, in the former Yugoslavia was a favourable climate for foreign investment, due to the highly developed and export-oriented economy, the scope thereof was

small. The beginning of the 21st century was a period of recovery after the destruction of infrastructure caused by the bombing of Yugoslavia and that was the beginning of the transition economy, from planned economy to the free market. This period was characterized by disappearance of domestic production, so that the domestic market was open and left to foreign investors. Since "globalization and openness to trade, foreign investment and innovation are widely seen as major factors in the post war growth experience" (Barrel, Pain, 1997). National Alliance for Local Economic Development and Airport "Nikola Tesla" started the campaign "Invest in Serbia - the climate is favourable", in 2011. The aim of this campaign was to attract the foreign investors.

Serbia has good traffic position on Balkan Peninsula, between Central Europe and Middle East. Transport infrastructure consists of highways, good connected railways, waterways and air corridors. Highway E-75 connects Norway and Greece, the total length is 5.639 km, of which 374 km pass through Serbia. The main railway through Serbia goes parallel with highway and the other one connect north part of the country with Montenegro. Danube waterway (Corridor 7) connects Western and Central European Countries with South-eastern and Eastern European countries, the total length through Serbia being of 588 km.

"The first regulations on foreign investment in the Yugoslav economy were adopted in July 1967, while more comprehensive foundations for regulating this field were established by the 1971 Constitutional Amendments. In particular, Amendment XXII, Item 4, regulates issues related to the use of foreign investor funds under terms and within scopes laid down by the federal law." (Business info group, 2012).

"FDI are a very important form of financing global economy. Compared to the other two forms of the international movement of capital, loan capital and portfolio investments, foreign direct investments are strongly represented in the financing of the global world economy and national economies of individual countries, especially in the financing of developing countries and countries in transition in which they are a primary form" (Stojadinović, Jovanović, 2013). They are one of the main drivers of economic growth in many countries, particularly in developing countries, where there isn't sufficient domestic capital investment due to the economic crisis. "The global financial crisis has affected, among other things, the decline in foreign direct investment as well as the increase of regional differences, both at global and lower regional levels" (Dašić, 2011).

FDI have positive and negative consequences for the country in which they invest. The positive side of FDI are related to: increasing the number of jobs, lower risks and expenses in relation to taking of loans on the international financial market, increasing the volume of capital and foreign exchange funds by investors, able to generate new knowledge due to training by foreign experts, learning management skills about new technologies, prevents the migration of the working age population, etc. (Begović et al., 2008). "Since multinational firms often use a higher level of technology than the domestic firms, and technology, or knowledge, has certain characteristics of public goods (Markusen, 1995), there is scope for positive externalities and indigenous firms may benefit from these by becoming more efficient" (Barrios et. al, 2004). Negative FDI consequences are related to: the

competitiveness of foreign firms to domestic firms which may lead to their closure, exploitation of resources of the host country, they may voluntarily withdraw from the host country, and thus lead to workers losing their job, a foreign investor acquires the right to control and manage the company in which he invested capital, and have the ability to self-determination on salaries and workers' rights, etc.

Foreign direct investment can be realized in different shapes and implemented in different ways, such as:

- the establishment of a new company (Greenfield investment), a wholly-owned of foreigner through joint ventures;
- taking over existing companies in other country through purchase, recapitalization or by conversion of loans into ownership - swop arrangement (the so-called cross-border acquisitions);
- fusion - the merging companies (cross-border mergers);
- the combination of Greenfield investments and acquisitions (Brownfield investments);
- joint ventures without the right of ownership (i.e. the contractual investment) and
- investment in the form of concessions, B.O.T. system and time sharing.

The paper analyzes a spatial distribution of Greenfield and Brownfield companies, such forms of foreign direct investment, which are established on the territory of the Republic of Serbia in the period from 2000 to 2016. As such, they led to changes in the economic situation of the Republic of Serbia. One of the main differences between Greenfield and Brownfield investment is the level of construction of the area where the investment will be realized. Greenfield investments are usually placed on the previously undeveloped area without infrastructure (green fields), unlike brownfield investments which use existing facilities, that were old, abandoned, poorly used, and therefore they lost the previous function. It is usually the case with industrial plants, military facilities, tourist centres, etc.

The most favourable option for the realization of Brownfield investments are the attractive locations. According to the Swiss model, the best locations for Brownfield investment are lands where prices exceed the necessary investments, as opposed to the location where the value of the land is equal or lower than the necessary investment. In another case, state intervention is necessary through various incentives for investors. "In addition, because the Brownfield is a special form of a foreign acquisition undertaken as part of the establishment of the investor's local operation (Meyer, Estrin, 2001), a firm's foreign Brownfield investment may also encounter hurdles with high transaction costs in the hose equity market. However, Greenfield entry can avoid such market transaction costs by reducing

exposure to the host equity market" (Cheng, 2006). The advantage of Brownfield investments is reflected in the beautification of the area, which was abandoned and ruined, and it represented an ugly picture of the city. Brownfield investment gains entirely new revitalization functions, such as recycling and rehabilitation of the area. De Sousa, Wu and Westphal claim that "a key barrier to Brownfield redevelopment is the lack of funding support, and a main barrier to attracting funding is the lack of information about the benefits that Brownfield projects generate" (De Sousa et al, 2009).

Foreign Direct Investments in Serbia

European Union was a favourable area for FDI at the end of the 20th century when „attracted over 40% of total world flows of foreign direct investments, becoming the largest recipient of multinational activity" (Basile et. al, 2008). The volume of FDI was not evenly distributed in all EU countries, but it was favourable because „FDI has been often considered an important way with which to promote the modernization of new entrants to the EU and in the countries considered here it has undoubtedly played a considerable role in this regard, although this has differed across countries." (Barrios et. al, 2004). This can be seen in the case of Central and Eastern European countries that are part of EU. "According to a survey by Ernst & Young, the region including the Czech Republic, Hungary, Poland and Slovakia together with Estonia, Latvia, Lithuania and Slovenia (the other four CEE states which acceded to the EU on 1 May 2004), is now regarded by international executives as the second most attractive place after Western Europe and is the most favourable place for investment in the manufacturing industry." (Allen, Overy, 2006). As for Southern European EU countries Spain, Portugal, Italy and Greece, they "are emerging from a period of uncertainty and have a lot to offer to investors, but the levels of success in attracting FDI vary" however since the reforms have not been implemented yet, "Northern Europe seems to attract more FDI inflows in comparison with the south" (Karadima, 2015). If we consider the volume of FDI in non-EU countries, the situation is quite different. "Although the share of investments coming from non-EU countries is rising, still more than 60% of total inward FDI flows into European countries are intra-EU investments" (Vetter, 2014).

The history of FDI in Serbia was similar to the countries in its vicinity (non-EU countries, except Croatia) due to the process of transition that in the most of Balkan countries was parallel. At the beginning of the 20th century, these countries, , "relied on foreign investors to bring the new capital which would induce economic growth and catching-up, but also improve existing business procedures, update

frequently outdated technology, open new markets, increase the potential for trade, and bring technology and management know-how" (Botrić, 2010).

The focus on foreign direct investments, as potential initiators of redevelopment of the economy, in Serbia was very present just after the year 2000. Thanks to FDI, in the period of 11 years, the revenue was 14.929 billion Euros in total, most of which was by far received in 2006. In that year, the Norwegian company Telenor bought the company Mobtel for 1,513 million euros (SIEPA).

Foreign Direct Investment in Serbia increased by 124 Million Euro in March 2016. Foreign Direct Investment in Serbia averaged 227.73 Million Euro from 1997 until 2016, reaching the all time high value of 3 322.61 Million Euro in November 2006 and a record of the lowest value of -476.61 Million Euro in January 2012. (National Bank of Serbia)

„As part of the competition 'European cities and regions of the future 2012/2013', which is traditionally organised by the Financial Times' FDI Intelligence unit, seven Serbian towns and regions were classified among the top 10 destinations in Europe for different categories related to FDI." (Business info group, 2012).

In Serbia, until 2016 166 companies registered, of which 151 Greenfield and 15 Brownfield companies. The sum of investments of these 166 companies was near € 7,000,000,000. The origin of the capital is from 18 European countries, then from United States, Taiwan, China, South Korea, Canada and India. The largest number of the investments is from Italy (30), Germany (29), Austria (17) and Slovenia (16). Delhaize (Belgium), Telekom Austria Group / VIP Mobile (Austria), Merkator (Slovenia), BIG CEE (Israel) and BIG TIGAR (France) with total investment of 3,040,000,000 Euros (49.2%), represent the first five Greenfield investments in Serbia by the invested money. Among Brownfield investments stand out: Coca Cola (Greece), Tetra Pak (Sweden), Siemens Loher Elektro (Germany), Alumil Milonas (Greece) and DM (Austria) with total investments of 281,000,000 Euros (90.8%).

The project teams of the Ministry of Regional Development and Local Government, Republic Geodetic Authority and "Jovan Cvijić" Geographical Institute SASA created the Development of the solution for Establishing an Integral Business Infrastructure Cadastre in order to inventory of potential locations for Brownfield investment. The design solution in Serbian and summary in English was done in 2013, but has never been implemented.

Data and methods

The database of investments has been taken from National alliance for local economic development. On the website of this organization there are given all

data about foreign direct investments, but for this paper only the data about Greenfield and Brownfield investments were used. For other data of foreign direct investment there was used the available literature cited in the references.

This paper aims at analyzing the spatial distribution of Greenfield and Brownfield companies and their position in relation to the mail roads in the Republic of Serbia – Corridor X. Favourable geo-traffic position of the towns, where the company seats are located, has great significance in the work of these companies due to the reduction of transport costs. The zonation of companies and towns where they are located, depending on their distance from the corridor 10, were processed in GeoMedia program.

Results

Analysis of Greenfield and Brownfield investments by year

The number of Greenfield and Brownfield investments in Serbia goes up and down through years, but great increase could be seen in two years – 2007 and 2010. In 2007 the investments were originating from nine countries. The largest number was from Austria (6) then from Italy (5) and Slovenia (5). In that year all twenty-five investments were Greenfield. In 2010 one Brownfield investment was from Germany and twenty-five were Greenfield from twelve countries. By far the largest number of investments was from Italy (8). In second place there was Germany (3 Greenfield and 1 Brownfield), and the third place was shared by Israel (2), the U.S. (2), Slovenia (2) and South Korea (2).

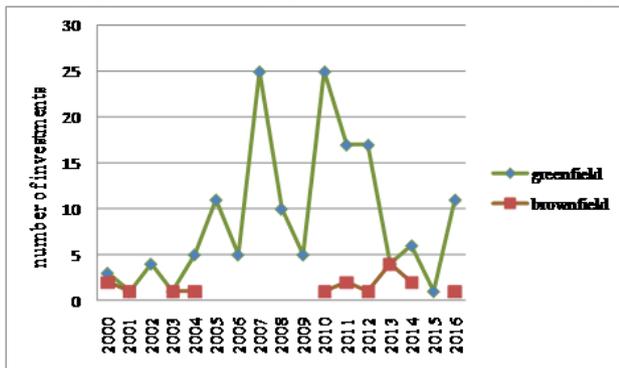


Fig. 1: The number of investments by year (2000-2016)

As shown in figure 1, Brownfield investments are not so frequent and numerous as the Greenfield. During the observed period of 17 years, there were even seven years without this kind of investments.

Analysis of Greenfield and Brownfield investments by areas

From 2000 to 2016, the largest number of Greenfield and Brownfield investments (according to

the investment amount) was in Sremska area (34), which means that every fifth investment is in this area. Belgrade’s (Beogradska) area is on the second place with 30 investments, and then there follows Južnobačka (13), Srednjobanatska (12) and Šumadijska (11) areas (Fig. 2). The five mentioned areas occupy 60% of the total number of investment. These five districts occupy 18% of the territory of Serbia.

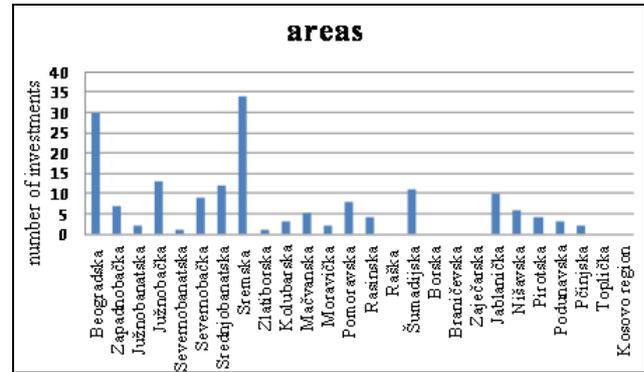


Fig. 2: The number of investments by areas

There are five areas without any investments: Raška, Borska, Braničevska, Zaječarska and Toplička. They belong to the group of underdeveloped areas in Serbia. In Severnobačka area there is only one investment, it is a Brownfield and the amount of the investment is not known. In Zlatiborska area, there is also one investment.

Observed by regions, almost every second investment is in Vojvodina, while the lowest number of investments is in the region of Southern and Eastern Serbia (15%), where the above mentioned 5 areas belong. There are no available data for the Kosovo and Metohija region.

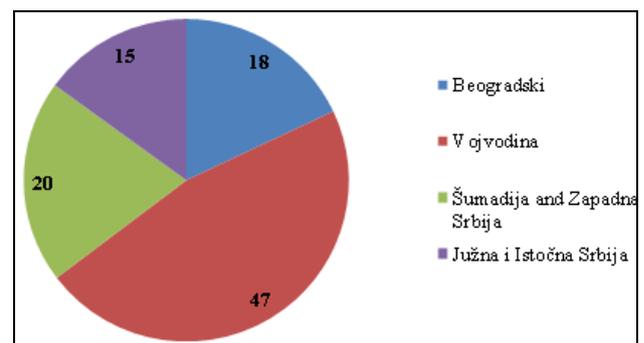


Fig. 3: The number of investments by regions

Analysis of Greenfield and Brownfield investments by the amount

Belgrade area has by far the largest amount of money of Greenfield investments, 3,313,000,000 Euros, which is 55% of all investments from 2000 until now. Južnobačka area is on the second place and occupies 12%, and Sremska and Šumadijska

area are on the third place with 7% and 6%. This means that in these four areas there are 80% of the money of all the Greenfield investments. Zlatiborska area does not have any Greenfield investments, and 8 areas have each 1% of the amounts of the investments (Fig. 4).

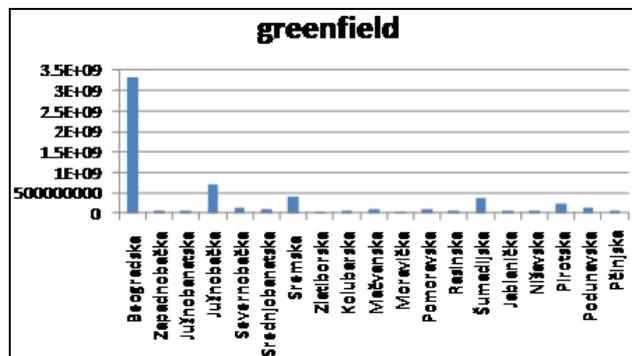


Fig. 4: The analysis of Greenfield investments by the amount

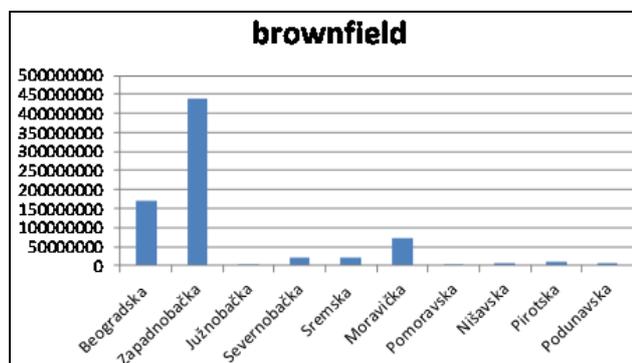


Fig. 5: The analysis of Brownfield investments by the amount

The largest amount of Brownfield investment is 437,000,000 Euros and it's in Zapadnobačka area (Fig. 5). This is 58% of all Brownfield investments. Beogradska area is on the second place with 22% and Moravička area is on the third place with 10% of the Brownfield's money. Two areas have 3% each (Severnobačka and Sremska) and five areas have 1% each (Južnobačka, Pomoravska, Nišavska, Pirotska and Podunavska).

If Greenfield and Brownfield investments are analyzed together, in Belgrade area there is 51%, in Južnobačka area 10%, in Zapadnobačka area 7%, in Sremska area 6%, in Šumadijska area 5% and in Pirotska area 4% of all the money from investments. In thirteen areas is 1-2% and in five there are no investments.

If we consider the total invested money and total population of the 19 areas, we can conclude that the average money per capita is 1,093 Euros. Figure 6 also shows (like the previous analysis) that six areas are above average: Beogradska, Zapadnobačka, Južnobačka, Sremska, Šumadijska and Pirotska. The

reason why the Pirotska area is so much above the average is due to the smallest population and the sixth (of nineteenth) place by amount of investment.

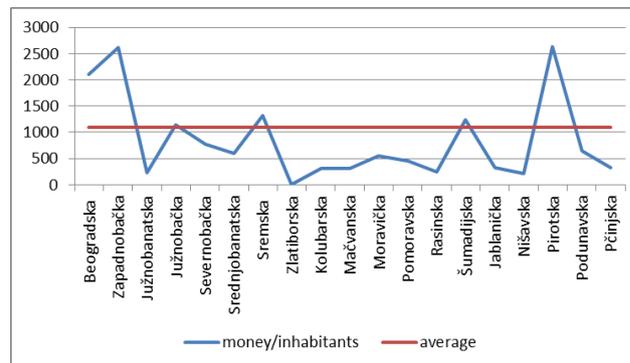


Fig. 6: The area in comparison to the average (money/inhabitants)

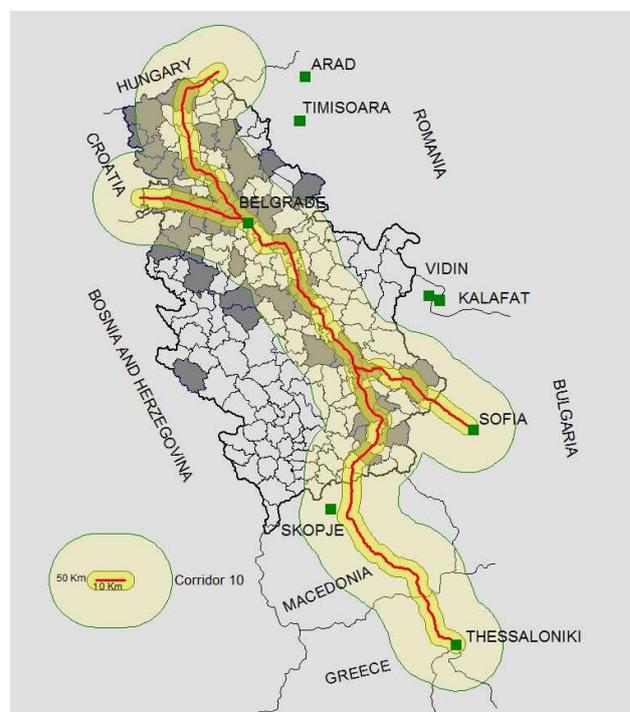


Fig. 7: The map of the buffer zones investment depending on the Corridor 10 (realised by authors, 2016)

Figure 7 shows three buffer zones: First one— 10 km from Corridor 10, second one—from 10 to 50 km from Corridor X, and third one— 50 and more km from Corridor X, the rest of the area. The largest number of investments was located in municipalities that are near the Corridor 10, in fact there are 56% of all municipalities in which Greenfield and Brownfield are invested. And the most of companies, 102 of 161, were located at a distance of 10 km from Corridor X. In the buffer zone, from 10 to 50 kilometres from highway, there are 38% and in the zone which is 50 kilometres and more from corridor 10 there are only 6% of the municipalities.

Discussion and conclusion

Greenfield investments are a characteristic of developing countries, such as Serbia. A positive thing is that the Serbian market is open to this kind of economic cooperation and that European and global economic forces are involved. However, greater competition in form of strong domestic companies is necessary.

From 2010 to 2015, there was a decreased number of Greenfield and Brownfield investment, and also the amount of invested money, but this situation is better in 2016 than during previous three years. Italy, Germany, Slovenia and Austria are the countries that make most of these types of foreign direct investments in Serbia. From the neighbouring countries, three investments were from Hungary in 2005 and 2008, and one was from Bulgaria in 2007.

In Sremska, Beogradska, Južnobačka, Srednjobanatska and Šumadijska areas there are 60% of all the studied investments. On the other side, five areas (Raška, Borska, Braničevska, Zaječarska and Toplička) do not have this type of investments. In Severnjobanatska area there was one Brownfield and in Zlatiborska area there was one Greenfield investment. More than half of invested money goes to Belgrade area. In Beogradska, Južnobačka, Šumadijska and Sremska areas went 80% of money. These four areas and Zapadnobačka and Pirotka areas have invested money per capita more than the average for Serbia (1,093 Euros).

Greenfield and Brownfield investments have a great role in the economy of Serbia, but Greenfield investments are numerous. According to the analysis, the number of those investments by municipalities in most cases, is determined by their geographic position. The fact that 102 of 161 investments (96%) were located at a distance of 10 km from Corridor X, confirms that the main roads are one of the decisive factors when choosing the location for new investment.

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