

# MAIN DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN THE SOUTH EAST EUROPEAN COUNTRIES<sup>†</sup>

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## Abstract

The growth of FDI in the world has been significant in recent years. Between 1990 and 2000 world's FDI inflows increased more than five times, and after 2000 world's FDI inflows have declined. During the period of FDI expansion, growth has been especially strong since 1997. However, most of the FDI transactions were between the developed countries. The distribution of FDI is unequal and less developing countries face difficulties in attracting FDI. Despite the fact that FDI is increasingly important to developing countries, over the past few years the share of the developing countries in world's FDI inflows has been declining.

The paper analyses geographical and sector's distribution of FDI in the South Eastern European countries and compares its amount with CEE countries. According to economic theory, FDI towards developing countries flows to labor-intensive and low technology production while towards developed states in high technology production. Identification of determining factors of FDI is a complex problem, which depends on several characteristics specific for each country, sectors and companies. All those factors could be grouped in three broad categories: economic policy of host country, economic performance and attractiveness of national economy. On desegregated level FDI depends on size and growth potential of a national economy, natural resources endowments and quality of workforce, openness to international trade and access to international markets, quality of physical, financial and technological infrastructure.

An important question is how South East European countries can attract more foreign investment. To find the answer, this paper uses data on FDI inflows to SEE countries, to determine the main host country determinants of FDI and provides regressions based estimation of determinants of FDI. Using a sample of South East European countries and panel data techniques, the determinants of FDI in this part of Europe are investigated. The paper research relationship between FDI, GDP, GDP per capita, number of inhabitants, trade openness, inflation, external debt, and ICT sectors. For SEE countries FDI inflows are largely dependent on the completion of the privatization process and in this paper we include the level of private sector and privatization as explanatory variables. Our findings suggest that certain variables such as privatization and trade regime, as well as, the density of infrastructure appear to be robust under different specifications. Positive significance of the agglomeration factor is also observed, confirming the relevant theoretical propositions. However certain differential variables, such as the privatization, could not be fully captured due to the statistical homogeneity of the sample.

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## 1. Introduction

It has been argued in the literature (Bosworth and Collins, 1999), that the ability to attract international capital can offer large potential benefits for developing countries. First of all, foreign capital can be used to augment domestic savings (which is usually at the low level) and thus enable countries to increase the rates of capital accumulation. Consequently, this should improve longer term growth prospects and increase wealth of the population, in other words, speed the development process. Access to the international capital market provides the means to finance increased needs for resources in development countries. Not only the fresh capital is relevant, but other, more intangible assets as well. Some types of foreign capital inflows, principally foreign direct investment, facilitate the transfer of managerial and technological know-how.

The benefits for the recipient are more or less straightforward. But, the decision to invest in the foreign country must also be grounded. Since it bears the risk for the investor, it must also offer at least some tangible prize. According to the traditional view, foreign direct investments (or the FDI) are principally driven by the difference in prices of factors of production and the size of national market. Foreign investors move their production process to the developing countries aiming to exert advantages of cheaper factors of production and their strategy is delocalization of low-skilled production stages towards low-wage countries. The process is in economic literature known as vertical investments. The FDI inflows to advanced and developed countries are driven by market seeking strategy and represent relocation of production process towards a foreign country.

After the fall of the Berlin wall and Balkan crisis, ex centrally planned economies underwent the transition process. In economic analysis of that period they have been usually divided into two groups, Central European countries (CEEC) and South East European countries (SEEC). The latter are generally less developed, receive less FDI, have weaker relationship with the EU and are more lagging in the speed of transition than the former. In this paper, we will investigate the main determinants of the FDI inflows to South East European countries, with specific interest in answering the question how to increase the investments in those economies. Our research includes the following countries Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Serbia and Montenegro and Macedonia<sup>1</sup>.

According to UNCTAD statistics, CEECs<sup>2</sup> include nineteen ex centrally planned economies and cover also our sample of South Eastern European countries. In order to fulfill the purpose of this paper, we divide CEEC into two groups: CEEC-8 and SEEC-7 or eight today's EU members and seven countries, which are very different in political and development terms, economies that will become significant partners in the next enlargement round.

The structure of this paper is following. Section 2 introduces the concept of the FDI and reviews the literature on the main determinants of the FDI. Section 3 presents trends in the

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<sup>1</sup> Most of the countries are small or medium sized. The only exception is Romania with 22 million inhabitants. The region is diverse in political and also economic conditions terms. On the one side is Romania with the GDP of US \$54 198 million, while on the other side is Macedonia with the GDP of US \$ 4 639 million, in 2003. As we compare GDP per capita, the most developed county amongst SEEC-7 is Croatia with the GDP per capita higher than 6000 US \$, while the poorest is Bosnia and Herzegovina with less than 2000 US \$.

<sup>2</sup> CEE countries by UNCTAD are Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, TFYR Macedonia, Ukraine.

FDI flows on the global level and in particular in the CEEC-8 countries. Section 4 presents the FDI data for SEEC-7, discusses the estimation methodology for determining the main determinants of the FDI, as well as the estimation results. Section 5 concludes.

## **2. What is the FDI and why is it Important for Developing Countries?**

The US Bureau of Economic Analysis defines the FDI as an acquisition of foreign assets (based on residence) with the intention to exert control, which, in practical terms, usually means ownership of more than 10 percent (De Santis, R.A., Anderton, R., Hijzen, A., 2004). The definition is not straightforward, since it is difficult to define “control” in each particular case. Consequently, countries differ with regard to the minimum percentage of equity ownership that they consider direct as opposed to portfolio investment (Caves, 1996).

The definition of the FDI, used by central banks to compile balance of payment statistics is prescribed by the IMF's Balance of Payment Manual 1993 (IMF, 1993)<sup>3</sup>. According to this source, ‘direct investment is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise entity in another economy... (it)... comprises not only the initial transaction but also all subsequent transactions between affiliated enterprises’. This definition divides the FDI into equity capital, reinvested earnings and other capital associated with inter-company debt transactions. The FDI is distinguished from portfolio investment by the influence that gives direct investor an effective voice in management.

To explain the difference in the FDI performance among countries, it is necessary to understand how foreign investors choose their investment locations. The FDI usually goes to the countries where it is possible to combine the ownership advantages with the location specific advantages of the host countries through internationalization advantages of foreign investments (UNCTAD, 1998)<sup>4</sup>. With respect to our hypotheses, we will focus on the specific advantages of the host countries. The host country determinants of the FDI may be broadly grouped into three categories: policy framework for the FDI, economic conditions and business facilitations.

In an economic sense, direct investments depend on different aspects of investments: the motive for investment (market-seeking, resource-seeking and efficiency-seeking), type of investment (greenfield or brownfield), the sector of investment (manufacturing or services) and the size of multinational company or investor. However, one must also include location-specific factors, which are more stable over the period. According to the above mentioned, the principal economic determinants of the FDI in specific case could be different. The market-seeking FDI aims at penetrating the local markets of host countries and is usually connected with: market size and per capita income, market growth, access to regional and global markets, consumer preferences and structure of domestic market. The resource-asset seeking FDI depends on prices of raw materials, lower unit labor cost of unskilled labor force and the pool of skilled labor, physical infrastructure (ports, roads, power, and telecommunication),

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<sup>3</sup> However, since there have been many changes in the international finance since the publication of the manual, IMF has recently taken steps to update it in accordance with those changes.

<sup>4</sup> Dunning (Dunning, 1993), stressed that FDI takes place when three sets of factors exist simultaneously: ownership specific advantage, location specific advantage and exploiting both advantages through internationalization.

and the level of technology. The efficiency-seeking FDI is motivated by creating new sources of competitiveness for firms and it goes where the costs of production are lower. In this last case, prior to decision, foreign investors consider price of factors of production (adjusted for productivity differences) and the membership in regional integration agreement (UNCTAD, 1998). Consequently, the efficiency-seeking FDI covers both previously mentioned types of the FDI. It is necessary to stress that is not possible to distinguish exactly between firm-specific and country-specific determinants of the FDI, or to determine motives of small versus large foreign affiliates.

Casson (Casson, 1990) emphasized that the theory of the FDI represents an intersection of three theories:

- *The theory of international capital markets*, which defines the financing and risk-sharing arrangements;
- *The theory of the firm*, which describes the location advantages, management and input utilization; and
- *The trade theory*, which explains the motives for sales in the world economy.

Each theory provides different insights on the FDI flows. The determinants of the FDI are taken from those three theories.

Foreign direct investment represents an important source of finance for developing countries and transition countries but unfortunately most of the FDI inflows and outflows are concentrated within the developed countries. In economic literature, there are differences between the FDI inflows to the developed countries and those to the less developed countries (Marakusen et al., 1996; Carr et al., 1998). Available data indicates that the inward and outward FDI, across time and across countries shifts jointly (Lipsey, 2000).

The FDI inflows to less developed countries are associated with vertical investments. The vertical FDI takes place when firm re-locates only a part of its production process, and not the whole production. In many cases, it is the re-location of the labor-intensive activities in low wage countries. This process tends to reduce the labor intensity of the home country domestic production (Mariotti, S. et al, 2003). Vertical foreign direct investments are usually driven by differences in factor endowments and prices of the factors of production between home and host countries. Foreign investors are motivated by the factors of production differences, like inexpensive labor, natural resources, specific skills and infrastructure.

The FDI inflows to developed countries are usually horizontal investments driven by market seeking strategies, and they tend to increase the labor intensity of the home country domestic production (Mariotti, S. et al, 2003). Therefore, horizontal investments replicate the complete production process of the home country in a foreign country. The horizontal FDI seeks to take advantages of a new large market, which is considered as traditional motive for the FDI. In recent years, the determinants of and motivation for the FDI in developing countries have changed in the process of globalization.

The FDI is considered responsible for welfare increase in the host country due to advantages related to the introduction of new technologies and innovation, new managerial techniques, development of additional skills (Caves, 1974; Perez, 1997), increased capital, job creation and improvement of working conditions, and the development of industrial sector in the host country (Haddad and Harrison, 1993; Markusen and Venables, 1999). Due to the fact, it can easily be understood why so many developing countries seek new ways to increase the FDI inflows. In order to design appropriate economic policies for the FDI attraction, one must first

find the answer what motivates the investors to seek other markets – in other words, what are the key determinants of the FDI.

Because the FDI is rather complex economic category, which depends on many factors whose relative importance changes as economic environment evolves over time; it is possible that - as the economy of the host country changes as well as international environment evolves - the FDI factors also change (UNCTAD, 1998). Even though traditional determinants and the types of the FDI associated with them have not disappeared with globalization, their importance is declining. For example, one of the most important traditional FDI determinants, the market size, has decreased in importance, while at the same time some new determinants have been pointed out. Cost differences between locations, the quality of infrastructure, the easiness of doing business and the availability of skills have increased in importance (UNCTAD, 1996). This reveals that the investors' motives are changing, and consequently countries must seek new ways to attract the FDI.

Dunning (Dunning, 1999) argued that the motives for and the determinants of the FDI have changed. The FDI to the developing countries has shifted from market-seeking and resource-seeking to more efficiency-seeking (vertical) FDI. However, this might not be true for all of the countries and all of the industries. Even though it can be argued that the main motive might not in all cases be inexpensive labor, it still can be stated that the FDI into developing countries consists more of knowledge transfer connected with production already present in the home country. Therefore, the developing countries must still attract the FDI through:

- More attractive labor market conditions. The main focus is not solely on the inexpensive labor, but also taking into considerations productivity, flexibility and adaptability of the labor force in the host country. Therefore, in order to attract more FDI, the country must offer relatively capable and educated labor force.
- Institutional setup. In addition to favorable tax rates, public administration must be flexible enough to encourage investors. Institutions must be more flexible, and documentation requirements, registration procedures less complicated for foreign investors.
- Market size. Market size might not be measured only by the population of the host country. Other factors might also prove significant. Specifically, factors like purchasing power of the local population, or proximity and connections with other relevant countries, the competition already present in the host country, and others.

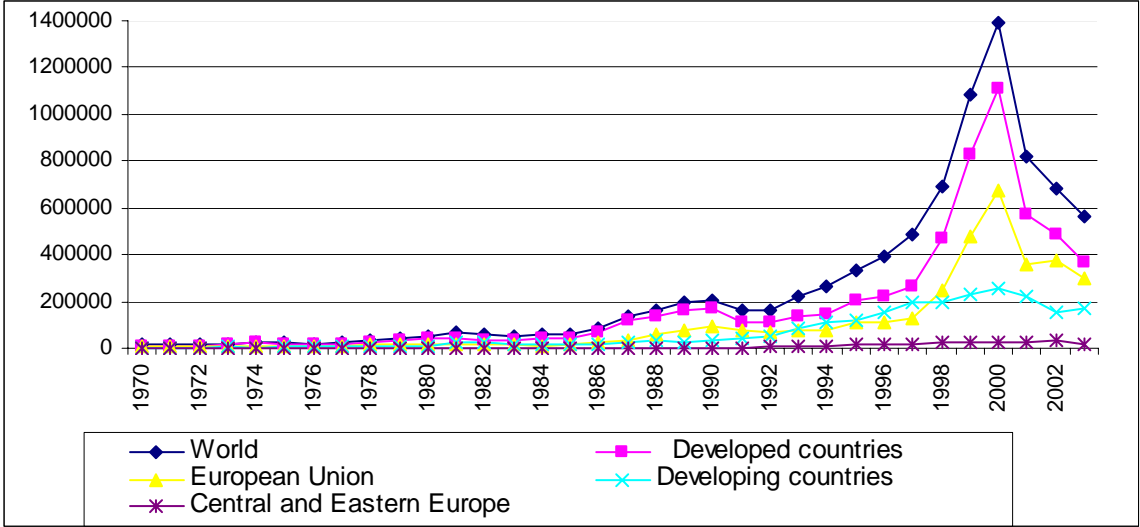
It could be argued that those factors were relevant in the past as well, but that the researchers were unable to measure them and include them adequately in quantitative estimates. Unfortunately, this problem still remains unsolved.

### **3. Global Trends in the FDI Flows**

The foreign investment flows in the world economy increased from 13 billion (1970) to US \$ 209 billion in 1980 and positive growth trend continued during the 1990s. The FDI inflows has increased and reached the amount of US \$ 1,393 billion in year 2000. In 2003, the FDI inflows declined by 18 percent to US \$ 560 billion, following a great decline of 41 percent in 2001 (figure 1). On average, the FDI inflows increased by 17.5 percent each year over the period 1980-1990 and 21.5 percent each year over the period 1990-2000, but the growth of

the FDI inflows was particularly strong in the second half of 1990s. In recent years, the FDI inflows were decreasing on average 25.2 percent each year over the period 2001-2003.

**Figure 1: The FDI inflows, global and by group of countries, 1970-2003 in billion of US \$**

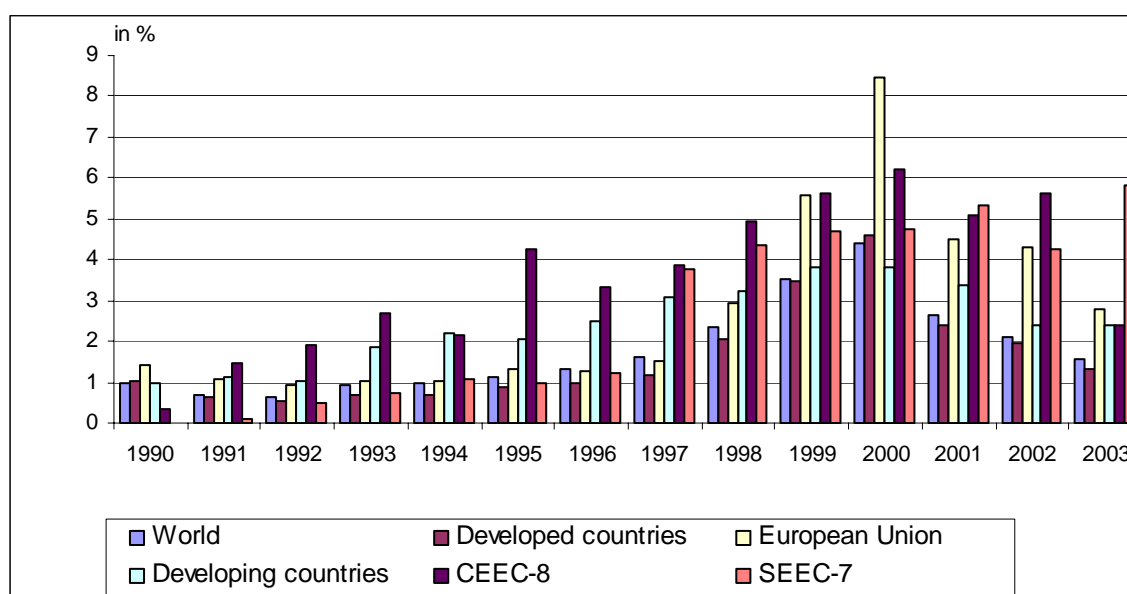


Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_inflows\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_inflows_en.xls)

If we analyze global trends of the FDI in the recent years, we must notice that the trends in the FDI flows have somewhat changed. The FDI flows to developed countries decreased by 25 percent, from US \$ 490 billion in 2002 to US \$ 367 billion in 2003. At the same time, flows to the developing countries increased by 9 percent and amounted US \$ 158 billion in 2002 and US \$ 172 billion in 2003. The trends were different by region, as we will show later in the text.

In the economic literature, the most widespread indicator in analyzing the FDI inflows is inward FDI flows as a percentage of gross fixed capital formation or inward FDI stock as a percentage of Gross Domestic Product (GDP). At the beginning of 1990s, the FDI inflows represented nearly 1 percent of the GDP in developing and also developed countries. At the same time, the CEEC-8 were not important recipient of the FDI. During the 1990s, the FDI inflows to developed and primarily to developing countries were increasing faster than the GDP. In 2000, the FDI inflows to developed countries represented 4.6 percent of their GDP, while only 3.8 in developing countries. The most attractive region for foreign investors amongst developed countries was the EU (8.5 percent), and amongst developing countries CEEC-8 (6.2 percent). In the last three years we have analyzed, the EU lost its position and the same also happened to CEEC-8, while SEEC-7 received about 5 percent of their GDP. We can conclude that progress towards EU accession, as well as enlargement of the EU market, represent a strong determinants of the FDI inflows.

**Figure 2: The FDI inflows, global and by group of countries as a percentage of GDP, 1990-2003**



Source: authors' calculation based on UNCTAD, [www.unctad.org](http://www.unctad.org).

The FDI outflows recorded the same trends. The peak was reached in 2000 and then the FDI outflows started falling for the next two years. However, this decline was short-lived, as in 2003 they rose on average by nearly 3 percent (Appendix 1).

### 3.1. The FDI in the CEEC-8 and the SEEC-7

Nearly two decades after the beginning of transition in ex centrally planned economies in Europe, it is still difficult to assess whether the process itself has been successful or not. Each country has started its own transition course with different economic potential, different history and resource endowments. Many of countries bordering with developed European countries had very clear perspective to join the integration process. This inclination towards integration is relevant in the case of the FDI analysis. According to the economic theory, integration process has a strong impact on the FDI inflows. Theoretical assumptions have already been proven in practice. Ireland, for example, with stable macroeconomic system, good infrastructure and skilled labor force, experienced one of the fastest growth rates of the FDI inflows between 1983 and 1992. Judging from the Irish experience, and that of Portugal and Greece as well, we should expect that the accession of ex centrally planned economies in the Southeastern parts of Europe into the EU will also exert positive impact on the FDI.

Table 1 shows the distribution of the FDI inward stock as a percentage of the GDP in the world and in the CEEC-8. It can be noticed that the FDI has become more important in transition economies during the 1990s. In 1980, the FDI inwards stock represented 6.6 percent of the world's GDP and this percentage was increased in following twenty years. At the beginning of the 21<sup>st</sup> century, the FDI inward stock amounted to about 22 percent of the world's GDP and this percentage was the highest for the EU, reaching nearly 30 percent.

As the data in Table 1 shows, today's EU members have become more attractive for foreign investors as the date for their accession to the EU approached. In 2000, the highest FDI

inward stock as a percentage of the GDP was recorded in Estonia (51.4 percent), Hungary (49.3 percent) and Czech Republic (42.1 percent). In 2003, the percentage increased even further, and for Estonia was 77.8, Hungary 51.8 and Czech Republic 48 percent. Those three countries reached nearly three times more relative FDI than the developing countries on average in the recent years. However, not all of the countries had equal success in attracting the FDI.

**Table 1: The FDI inward stock as a percentage of the GDP, 1980-2003**

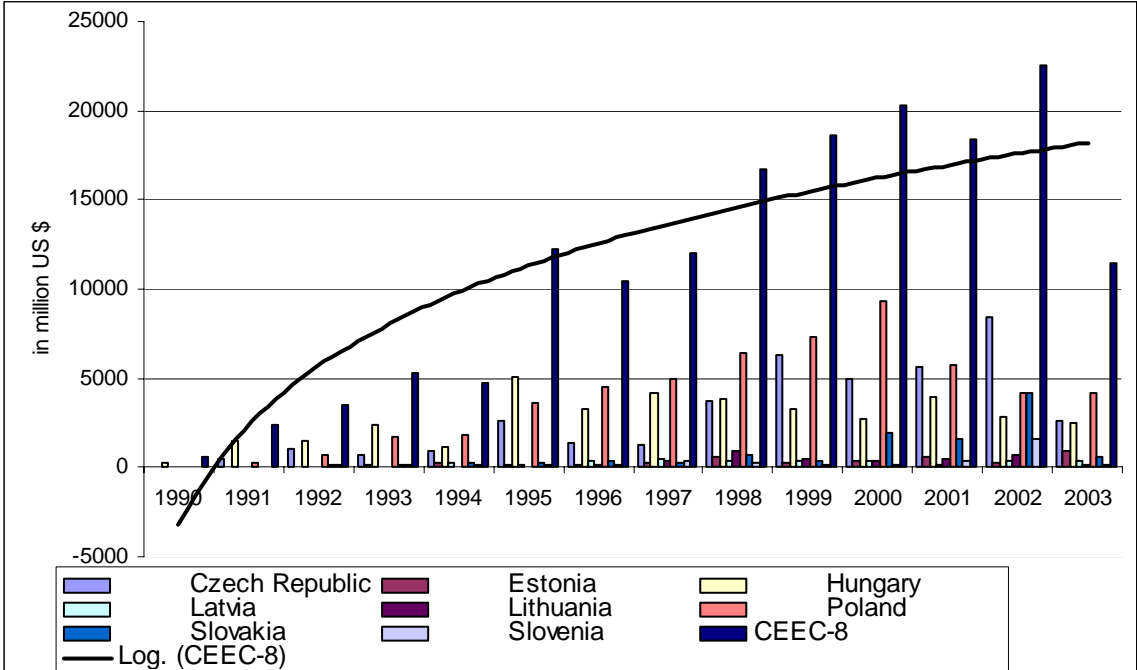
Country	1980	1990	1995	2000	2001	2002	2003
World	6.6	9.3	10.2	19.3	20.9	23.0	22.9
Developed countries	4.9	8.2	8.9	16.6	18.0	20.5	20.7
European Union	6.1	10.9	13.2	28.5	30.8	34.6	32.8
Developing countries	12.4	14.7	16.3	29.3	31.7	31.9	31.4
<b>CEEC-8, today's EU members</b>							
Czech Republic	0.0	3.9	14.1	42.1	47.4	55.3	48.0
Estonia	0.0	0.0	19.3	51.4	56.4	65.0	77.6
Hungary	0.0	1.7	25.3	49.3	45.0	55.3	51.8
Latvia	0.0	0.0	13.9	29.1	30.4	32.8	35.1
Lithuania	0.0	0.0	5.7	20.9	22.5	28.1	27.2
Poland	0.0	0.2	5.8	20.6	22.2	25.0	24.9
Slovakia	0.0	0.5	4.2	18.5	23.2	32.2	31.5
Slovenia	0.0	3.4	8.9	15.3	13.3	18.7	15.6

Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_instock\\_gdp\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_instock_gdp_en.xls)

As figure 3 below shows, the FDI flows to the CEEC-8 as a group have increased in recent 13 years (logarithmic trend) from 640 million in 1990 to US \$ 31 billion in 2002. However, a sharp decline was recorded in 2003, when they fell to US \$ 21 billion. While the world's FDI inflows have been declining from 2000 to 2003, the FDI inflows to the CEEC-8 moved rather volatile during that period – first they recorded a decline, followed by an increase and finally another significant decline. Figure 3 shows the FDI inflows to “accession-eight” countries, which varied significantly in amount between those countries. The highest amount of the FDI was attracted by Poland, Hungary and Czech Republic. After 2000, the FDI to Poland has decreased, and both the Czech Republic and Slovakia recorded sharp decline of the FDI in 2003. On the other hand, it seems that Hungary managed to maintain relatively stable growth trend. Less attractive amongst “accession-eight” countries for foreign investors were Lithuania, Latvia, Slovenia and Estonia. On the overall level, eight CEEC, which are today's EU members, showed a sharp decline of the FDI flows in 2003, from 23 to 11 billion of US \$.



**Figure 3: The FDI in the Central East European countries**



Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_inflows\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_inflows_en.xls)

One of the main reasons for the decline of the FDI has been a slowdown of privatization in analyzed countries (UNCTAD, 2004). At the same time the green-field investments, which are usually smaller in size, could not immediately compensate the decline in the privatization-motivated FDI. Nevertheless, this is somehow contradictory to the expectations that along the path to the EU, capital movements between the countries should increase, and consequently speed the integration into the Union. Even though the FDI has declined in the same period on the global level, one would expect that the integration forces would act in a way of stronger capital movements towards these countries. It remains to be seen whether these countries will, within the European Union, be successful in terms of stronger integration in the capital market.

### 3.2. The FDI trends in the South East European Countries

Formally, South Eastern European countries are not classified as developing countries, since their GDP levels exceed those in developing countries. However, their geographical location – being relatively close to the EU – indicates a relative lag in development behind the neighboring countries. All the countries except Croatia have a level of GDP per capita which is significantly below that of the CEEC-8<sup>5</sup>. During the last decade, the SEEC-7 have increased their gap in comparison to the CEEC-8 and lag even more behind the EU average. In addition, almost all of the SEE countries have expressed their aspirations to join the EU. In order to speed the catching-up, those countries must rely on increased investments. Since the level of domestic savings is inadequate in those countries, and the financial system still underdeveloped, attracting foreign direct investment could produce a shortcut to increase in capital accumulation, growth rates, and in this way speed up the catching-up process.

Increase in the overall economic activity, effects of knowledge and technology transfer usually connected with the FDI, might prove significant in the process of job creation in SEEC-7. The FDI inflows could play very important for SEEC-7 because those countries are faced with high unemployment rate (for example, in Bosnia and Herzegovina nearly 40 percent). However, effects of the FDI on job creation in a host country are not straightforward. Specifically in situation when the FDI is more related with privatization (that is, an acquisition of existing firms) than green-field investment. Some of the studies that compare the level of productivity in western economies and transition economies indicate that it was quite lower in the latter (Havlik, 1998). A change in ownership, and management structure, might induce initial layoffs in order to improve the productivity and profitability of the acquired enterprises. Consequently, if this is the case on a greater scale, the FDI inflows could, at least in the short run, be negatively correlated with the unemployment rate.

The South East European countries have received a small part of the international direct investment flows. The FDI inflows to SEEC-7 have increased from US \$ 408 million in 1993 to 6.7 billion in 2003. This amount represented about 8 percent of the total FDI that came in the CEEC-8 in 1993. Fortunately, this share in 2002 was much higher, nearly 20 percent. In 2003, the SEEC-7 attracted about 60 percent of the total FDI inflows to the CEEC-8, due to the fact that the total FDI inflows to the South East European countries have continued to increase in 2001 and 2003. This trend is reversed in comparison with the world's FDI inflows dynamics and especially with dynamics for the CEEC-8.

Detailed structure of the FDI inflows by country can be seen in Figure 4. The main characteristics of the FDI in the SEEC-7 are that they are relatively small and volatile, but also highly concentrated in a few countries: Croatia, Bulgaria and Romania. Since the share of FDI in the SEE countries is quite low, it can be concluded that Albania, Bosnia and Herzegovina, Macedonia, and Serbia and Montenegro have received negligible share of the FDI in the region. Since these are the countries that are, at the same time, the least developed ones, the pattern observed at the global level – that the FDI is predominately concentrated in more developed economies – is once again repeated at the regional level.

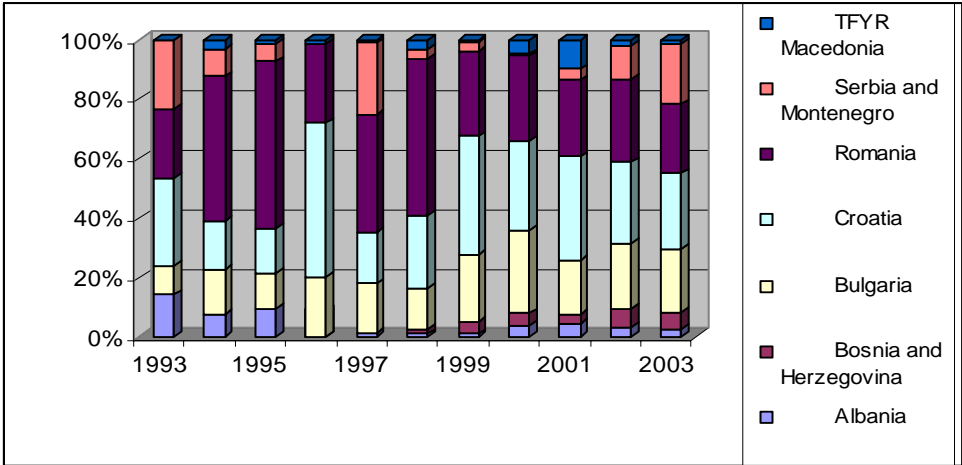
The South East European countries received also a very small amount of the FDI inflows per capita. The inflows varied between US\$ 14 in 1995 to 77.6 in 2002. During the same period

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<sup>5</sup> In 2002, GDP per capita in Albania was 1,590 €; in Bosnia and Herzegovina 1,475 €; Bulgaria 2,125 €; 5,368 €; Macedonia 1,925 €; Romania 2,161 € and Serbia and Montenegro 1,679 €, while for example Slovenia had 11,208 €; Czech Republic 7,248 €; Hungary 6,487 and Poland 5,168 € (Gligorov, Holzner, Landesmann, 2003)

the FDI inflows per capita for Czech Republic fluctuated between US\$ 248 and 832. Looking at the inflows in per capita terms, it seems that the SEEC-7 countries are lagging behind the CEEC-8 in attracting foreign investment even more than previously shown. In 2003, the most important receiver was Croatia with US\$ 440 per capita, which exceeds the FDI flows not only to other the SEEC-7 countries but also to some of the CEEC-8. On the other side was Macedonia with only US\$ 46 per capita. Relatively more attractive countries for foreign investors in 2003 were also Serbia and Montenegro and Bulgaria, while the rest of the countries received less than 100 US \$ per capita (Appendix 3).

**Figure 4: FDI inflows in SEEC-7, by country, 1993-2003**



Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_inflows\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_inflows_en.xls)

The FDI flows to the SEEC-7 were principally encouraged by the wave of privatizing state companies and in less extent green-field investments. Those countries are usually not deemed very interesting for foreign investors, because they represent a small national and regional market, with weak infrastructure and with unpredictable perspective to become the EU members. Therefore, those countries can not provide enough motives for efficiency-seeking nor market-seeking investments and due to the fact they have, over the past period, accumulated much lower FDI stock than the CEEC-8. In 1990, the FDI stock of the SEEC-7 amounted to US\$ 212 million while the CEEC-8 attracted nearly 6 billion of the FDI in same year. The FDI stock of the South East European region reached US\$ 36 billion by the end of 2003, which represented only 21.6 percent of the CEEC-8 FDI stock (detailed data in Appendix 3). Among the SEEC-7, the most important receivers were Romania (nearly US\$ 13 billion), Croatia (US\$ 11 billion), and the next was Bulgaria with US\$ 5 billion. If we use a relative indicator to analyze the FDI stock, the situation has been little changed. The analysis is presented in Table 2.

**Table 2: The FDI inward stock in the SEEC-7 as a percentage of GDP, 1980-2003**

SEEC-7	1980	1990	1995	2000	2001	2002	2003
Albania	0.0	0.0	7.4	15.4	18.2	18.8	18.1
Bosnia and Herzegovina	0.0	0.0	1.0	7.9	10.1	13.8	16.4
Bulgaria	0.0	0.5	3.4	17.9	20.3	22.6	29.1
Croatia	0.0	0.0	2.5	19.3	24.1	31.6	49.6
Romania	0.0	0.0	2.3	17.5	19.0	19.4	23.4
Serbia and Montenegro	0.0	0.0	2.7	15.3	12.8	12.5	16.2
TFYR Macedonia	0.0	0.0	0.8	11.4	24.8	24.7	22.1

Source: UNCTAD. [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_instock\\_gdp\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_instock_gdp_en.xls)

The South East European countries have become more interesting for investors after 1995. In 2000, the highest FDI inward stock as a percentage of GDP was recorded for Croatia (19.3), Bulgaria (17.9) and Romania (17.5). Those three countries were the main attractors of the FDI also in 2003. The lowest level of the FDI inward stock was recorded in Serbia and Montenegro and Bosnia and Herzegovina, less than 20 percent. The data in Table 2 shows that only Croatia recorded the FDI stock of the amount similar to the most FDI-attractive CEEC-8.

Analysis of the FDI in the SEEC-7 by sectors, results with the confirmation of the global trends - an explosion of the FDI in the service sector as a result of the general trend towards the liberalization of the FDI framework for services (UNCTAD, 1998). The results of the FDI according to specific sectors are presented in Table 3. The investment in services sector in four of the SEE countries represents nearly a half amount of the total FDI stock in 2003, while the manufacturing industry is also very important for foreign investors. Despite relatively low amounts of the total FDI inflows in the SEEC-7, foreign penetration in the manufacturing industry is significant and varies between 25.4 percent in Macedonia and 54.4 percent in Romania. Within the manufacturing sector, the FDI is primarily concentrated in steel production. Amongst services, the highest amount of the FDI inflows were attracted by financial services and transport activity, the latter according to the classification covers the growing sector of telecommunications.

**Table 3: FDI inward stock by economic activities in 2003 in SEEC-7**

Shares in %

Activity	Albania *	Bosnia and Herzegovina	Bulgaria	Croatia	Macedonia	Romania	Serbia and Montenegro*
Agriculture. forestry and fishing			0.20	0.30	0.40	1.00	0.00
Mining and quarrying			0.90	2.90	1.30		
Manufacturing	42.30	40.10	30.00	37.70	25.40	54.40	39.20
Electricity. gas. water supply			1.40	1.00	0.10		
Construction	6.20		2.30	0.80	3.70	2.40	8.10
Trade	27.20	12.00	17.40	6.50	2.80	16.60	
Hotels and restaurants		0.60	1.70	3.50	1.00	2.40	
Transport		0.30	15.20	22.30	35.00	7.60	
Financial intermediation		34.90	21.50	21.80	19.60		
Real estate. renting &business ac.			4.50	2.80	1.90		
Public admin. defense				0.20			
Education			0.30				
Health and social work							
Other community. soc. pers. Ac.			0.90	0.20			
Other non class. ac.	24.30	12.10	3.80		8.80	15.60	52.70
Total	100.00	100.00	100.10	100.0	100.00	100.00	100.00
Services**	27.2	47.8	57	54.2	58.4	26.6	0

\*in 2001

\*\* in services we include trade, hotels, transport, financial intermediation and public services

Source: Hunya (2004).

#### 4. The FDI Determinants in the SEEC-7

The key question is whether the FDI influences the capital formation in the country. Usually, studies indicate that there is a positive relationship between inflows of the FDI and capital formation. Lovrinčević, Buturac and Marić (Lovrinčević, Buturac and Marić, 2004) in their study of the group of 7 countries<sup>6</sup> in the period of 1993-2003 conclude that the increase of foreign capital by 1 percent resulted in the increase of capital formation share in the GDP of 0.32 percent. Therefore, for the transition countries, it seems that the influence of foreign investments is positive, but not of the great magnitude.

A major assumption in the literature on transitional economies is that the privatization – whether the change in ownership is related to foreign or domestic owners – should induce the increased investment efficiency in the region. Through increased investment activity and its efficiency, the growth rate of the economies should also increase. The role of the FDI in this context is straightforward. Foreign investment should, almost by definition, positively contribute to the increased investment efficiency, since in addition to capital, they also introduce technology and knowledge transfer. Lovrinčević, Marić and Mikulić (Lovrinčević, Marić and Mikulić, 2004) study this relation for a group of 11 transition economies<sup>7</sup> in the 1993-2002 period. Their research found no correlation between the FDI stock and ICOR for these countries. However, once they have controlled for the structure of the FDI, they have found that there is a significant relationship between the above average share of the FDI in services sector and the increased efficiency of investment. At the same time, countries with those characteristics – more FDI in services and more efficient investment – have proven to be those with high share of the external debt in GDP.

Even though the impact of foreign investments has apparently not yet had larger influence on the transition economies, it still seems an important task for many countries to attract more investors than other countries in the region. The direction and magnitude of capital flows between emerging and industrial-country markets depend on the relative attractiveness of placing funds in emerging markets, as well as on the ease with which such transactions can be carried out. Therefore, such factors are usually classified into three categories - ‘pull’, ‘push’ factors, and changes in the degree of financial integration. ‘Pull’ factors are those that operate through improvements in the risk-return characteristics of assets issued by developing-country debtors, such as would result from productivity-enhancing economic reforms. ‘Push’ factors operate by reducing the attractiveness of lending to industrial-country borrowers.

Researchers have put considerable effort on the empirical identification of the FDI determinants. When it comes to the analysis of the FDI directed to the CEEC, the two main approaches have been survey-type studies and formal quantitative analyses. Quantitative studies of the determinants of FDI are based on a number of different models, but the gravitational approach the most commonly used in practice.

Since we cannot differentiate the origin of the FDI in our data sample, we did not use the gravity model. Other researchers have tried to approximate the gravity model by adding a distance from Brussels variable<sup>8</sup>. Although this approach would enable us to approximate the gravity model, we believe that with the short time-span we are dealing with (and presumably

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<sup>6</sup> Their sample overlaps with ours and includes Croatia, The Czech Republic, Hungary, Poland, Slovakia, Slovenia and Romania.

<sup>7</sup> Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia and Slovenia.

<sup>8</sup> See, for example, Campos and Kinoshita (Campos and Kinoshita, 2003), who study the CEE countries.

inadequate quality of the available dataset in SEEC-7 countries), there is no need to influence our results with additional variable at this point.

What are the determinants of the inward FDI flows according to the theory? Standard determinants that could be found in the literature include:

- The size of the country. The size can be measured by the nominal GDP expressed in common currency.
- Economic prospects of the country. These could be assessed by the rate of growth of the GDP.
- Level of income. This is usually measured by the GDP per capita.
- Openness of the country. This is usually expressed as the ratio of the trade (exports and imports) to GDP but also by import tariffs of the host country.
- Business climate. One of the indicators used to assess the business climate could be the tax rate on companies.
- Labor market conditions.

Those determinants can be broadly grouped into two categories: market-related (which cover the GDP, GDP per capita and the GDP growth rate) and trade related - specifically, openness variable. Besides mentioned traditional determinants, some economists use non-traditional determinants such as human capital (Noorbakhsh, Paloni, Youssef, 2001). In the case of our sample of countries, we have chosen from the pool of traditional and non-traditional determinants in the literature, and based on the availability of relevant indicators, chosen the following set of possible determinants of the FDI.

**Table 4: Possible FDI Determinants in the SEEC-7**

Variable	Type of FDI	Expected effect
GDP	Market seeking	Positive
GDP growth	Market seeking	Positive
Population	Market seeking	Positive
Labor cost	Resource/asset seeking	Negative
ICT	Resource/asset seeking	Positive
Openness	Efficiency seeking	Positive
Inflation	Efficiency seeking	
External debt	Efficiency seeking	
Service sector share		
Privatization		Positive
Financial sector development		Positive
Private sector share		Positive

Source: authors.

The data sources for our variables are presented in the Appendix 5. Here we only briefly discuss some of the variables in the table, and explain their expected sign.

Openness of the economy is one of the traditional variables for explaining the FDI movements. It is defined as the trade (import plus export) share of the GDP. The expected effects may differ by the type of investment regarding local market or export orientation, the host country's foreign exchange control laws and applied capital taxation. However, for our

group of countries, we expect that the openness will indicate also the level of integration of the local economy into the regional economic flows. Therefore, the openness should have positive influence on the FDI.

Investment in capital-scarce countries is expected to yield higher return indicating an inverse relationship between the levels of GDP and FDI. At the same time, in case of the market-seeking FDI, there could be a positive relationship between the income level and the FDI, since the investor predominate intention is to substitute for exports. Here we use the GDP growth measured by the annual growth rate as an indicator of the market growth. We expect a positive association between the GDP growth and the FDI. Another traditional variable measuring the market size is the number of inhabitants, for which we also expect the positive sign.

One of the factors affecting investor's yield is the rate of inflation. A high return promotes the FDI and consequently the growth of prices of products the investor has invested in, should be positively associated with the FDI. However, very high inflation rates or volatile inflation can be judged as impediment to the FDI, since it is a clear sign of macroeconomic instability. Therefore, the expected sign on the inflation rate is not ex ante determined.

Labor costs are represented by the wages. Since the countries in our sample are relatively less developed with small markets, we expect that one of the relevant motives for the foreign investors could be inexpensive labor. We expect initially that higher wages should reduce the inflow of FDI. However, this might not be the case if FDI is directed predominately in service sector (as our previous analysis reveals), where wages are higher than in other sectors. Consequently, there could also be a positive relationship between the FDI and the wages.

The ICT variable is defined as the number of telephone lines per 100 inhabitants, or the number of Internet connections. Both of the indicators are judged as relevant proxy for available infrastructure to foreign investors. The variables could also be used as a proxy of the relationship between the FDI and technology transfer, since they might represent the preconditions for the technology transfer. We expect the positive relationship.

In different specifications, we have also used additional variables, commonly used in the analysis of economic processes in the transition economies. Those are the variables that try to capture the effect of transitional changes, that might influence overall economic activity, and the FDI as well.

In order to reveal the main determinants of the FDI in SEEC-7, we have pooled the data in our sample and used the GLS regression method. The basic equation can be expressed as follows:

$$FDI = \alpha + \beta X + \varepsilon \quad (1)$$

where  $X$  denotes a specific vector of explanatory variables. Since we have specified three separate equations, the set of explanatory variables varies in each case. There are more reasons why we have specified separate equations. First of all, the data quality for the countries in our sample is not deemed to be very high. Specifically, this can be claimed for the FDI, which comes from the balance of payment data. Lipsey (Lipsey, 2000) argues that the problem with the FDI data stems from the fact that their source is balances of payments, which are usually quite frequently revised in the short period of time. Specifically in countries that we are investigating these issues could be pronounced for several reasons. First of all, the



transition of the statistical system towards the introduction of market concepts is relatively new in these countries with many methodological changes still to be introduced in the years to come. Secondly, due to the underdeveloped financial system and regulation enforcement it could be expected that the rate of capital movements non-declaring could be higher than in other similar countries. Indeed, higher percentage of errors and omissions in the balance of payments in these countries in addition to the frequent updates of the data seem to confirm that this problem is present.

The second reason is that our sample is not very long. Therefore, we did not try to include all of the variables in the same equation, but rather varied them in order to allow for a more degrees of freedom in every specification.

In our first specification, dependent variable is the net FDI.

**Table 5: Determinants of the FDI in the SEEC-7, 1996-2002, GLS regression**

Variable	Estimated coefficient
Constant	-49,26 (-0,29)
GDP	0,09*** (4,94)
GDP p.c.	-0,23** (-2,56)
Population	-0,10*** (-3,20)
Openness	5,43*** (3,30)
Inflation	0,11 (0,73)
External debt	0,02 (1,43)
Telephone	2,04 (0,61)
Internet	-14,04 (-0,69)
Adjusted R <sup>2</sup>	0,66
Number of observations	49

Source: authors' calculation.

t-values are presented in brackets below the regression coefficients. Coefficients marked \*\*\* are significant at a level of 1%, \*\* at a level of 5%, \* at a level of 10%.

According to the results presented in the Table 5, the FDI in the SEEC-7 depends on the GDP and the GDP per capita, as well as on the population. However, according to those results, it seems that market-seeking might not be the main reasons why investors choose to invest in those countries. Even though the GDP level turned out to be significant and positive, the coefficient value turned out to be relatively small. Therefore, the FDI in those countries could not be considered as market-seeking. This confirms the negative coefficient on population and the GDP growth rate. When one takes into consideration the fact that all of the countries in our sample are relatively small, it seems reasonable to conclude that market-seeking is not a relevant motive for the FDI in the SEEC-7. Other variables in this specification did not turn out to be significant, with only one exception – openness. Indeed, openness is a variable that

turned out to be most robust to various specifications, always being highly significant and exerting a positive influence on the FDI in the SEEC-7.

In order to shed some light on our results, we have tried to determine other variables, which might be more significant in explaining the FDI determinants in the SEEC-7. The results are presented in Table 6.

**Table 6: Determinants of the FDI in the SEEC-7, 1996-2002, GLS regression**

Variable	Estimated coefficient
Constant	-1274,20*** (-4,28)
GDP	0,07*** (5,37)
Population	-0,07*** (-3,20)
Openness	9,20*** (4,46)
External debt	0,03** (2,47)
Private sector share	11,84*** (3,13)
Internet	-45,33*** (-2,74)
Large scale privatization	-223,98*** (-3,21)
Unemployment	12,31** (2,35)
Wage	-0,56* (-1,91)
Financial sector	154,89* (1,98)
Adjusted R <sup>2</sup>	0,84
Number of observations	49

Source: authors' calculation.

t-values are presented in brackets below the regression coefficients. Coefficients marked \*\*\* are significant at a level of 1%, \*\* at a level of 5%, \* at a level of 10%.

In line with previous research, we find a positive impact of openness on the FDI, a fact that suggests that economies in which trade is important also receive relatively higher share of the FDI (for instance they pursue policies that are more attractive to foreign investors).

In this second specification, the GDP level is also positive and has significant effect on the FDI. This is consistent with the fact that the horizontal FDI (i.e. FDI seeking a base to produce for the domestic market in the host country) is attracted to countries in which real income, and therefore domestic purchasing power, is relatively high.

The variables included in this specification are labor market and “transitional” indicators. When it comes to the labor market, the results indicate positive relationship with the unemployment rate, and negative relationship with the wage level. The latter can be explained with the usually argumentation, that the FDI are attracted by the lower labor costs. However,

the negative relationship between the unemployment rate and the FDI is not what the countries in questions would hope for.

“Transitional” variables, as we call them, include the set of qualitative characteristics of the economies. First of all, there is the share of the private sector in the economy. This variable captures the effect of the speed of transition. The larger share of the private sector implies that larger share of the economy operates according to the market principles. This fact should appeal to the foreign investors, since it indicates that market mechanisms are more developed. Our results indicate that this variable has positive and significant influence on the FDI.

However, the privatization by itself does not guarantee positive influence on the FDI. This can be seen from the negative relationship between the FDI and large scale privatization indicator. It seems that foreign investors might be more interested in small scale privatization in these countries. One must also notice that during the analyzed period, there have not yet been major privatizations in the countries in question. Although in the CEEC-8 larger systems have been privatized during that period, for the SEEC-7 this process still remains to be conducted, specifically in the areas such as telecommunications, which are one of the most interesting for the foreign investors.

During the 1990s, foreign involvement in the financial sector of emerging economies rose substantially. By the end of the decade, foreign-owned banks in Central and Eastern Europe accounted for an average of 70 percent of bank assets. Another related variable is the development of the financial system in the host country. Focarelli and Pozzolo (Focarelli and Pozzolo, 2001) show that foreign banks prefer to operate in countries with a relatively developed and not too concentrated financial system. Our results indicate that developed financial sector is important for the FDI attraction. In addition to the fact that acquisitions of domestic financial institutions by foreign investors is common in the SEEC-7, investors in other sectors of the economy also tend to expect the same level of financial services as they are accustomed in their home country.

The ICT sector is defined as manufacturing and services industries that produce equipment and software used for the capture, storage, transmission and presentation of information in electronic form.<sup>9</sup> The ICT sector offers opportunities for developing countries not only to respond to market challenges in developed economies but also on improving their export sector and on increasing foreign direct investment as a means of generating employment and trade.

According to Addison and Heshmati (Addison and Heshmati, 2003) investment in the ICT infrastructure and skills helps to diversify economies. In doing so, they can separate from dependence on their natural-resource endowments and offset some of the locational disadvantages of landlocked and geographically remote countries. This can attract more FDI, particularly investment in non-traditional sectors. But as the availability of ICT infrastructure and skills becomes increasingly important in the decisions of foreign investors, poorer countries could fall further behind if they are unable to build this capacity. Our analysis reveals that the ICT variable (Internet connections) is significant, but has a negative sign. It could be explained by the fact that the Internet as a tool has only started to be extensively used in those countries after 2000. However, it should also be stressed that this is the

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<sup>9</sup> The ICT sector includes computer and telecommunications equipment; industrial process equipment; consumer electronic goods; bespoke software services; instrumentation and packaged software.

opportunity for the future, and even though there is a negative relationship in case of the FDI, domestic investment activity must be located in the technology advanced areas.

Finally, we also ran regressions with the FDI stock data. The results are presented in the following table.

**Table 7: Determinants of the FDI stock in the SEEC-7, 1996-2002, GLS regression**

Variable	Estimated coefficient
Constant	-306,37 (-1,42)
GDP	-0,01* (-1,99)
Population	0,02* (1,76)
External debt	-0,01*** (-2,71)
Service sector share	9,51** (2,48)
Internet	63,67*** (11,00)
Unemployment	-6,55*** (-5,32)
Wage	0,60*** (3,60)
GDP growth	1,55** (2,01)
Adjusted R <sup>2</sup>	0,89
Number of observations	49

Source: authors' calculation.

t-values are presented in brackets below the regression coefficients. Coefficients marked \*\*\* are significant at a level of 1%, \*\* at a level of 5%, \* at a level of 10%.

In Table 7, the estimation results are somewhat different than in the previous two cases. First of all, the GDP level variable turned out to have a negative impact, as opposed to positive one in the previous two cases. Secondly, population turned out to change the sign as well, but in the opposite direction. It can be concluded, that based on our results, we are getting mixed signals for the market-seeking determinants of the FDI.

Labor market indicators behaved opposite to our previous specification – unemployment exerts negative influence, and wage small but positive influence. Even though the negative relationship with the unemployment could be explained by the traditional arguments – more investments are bound to reduce the unemployment eventually, there is a small issue with the positive relation of the wage and the FDI. This could be explained with sectoral distribution of the FDI. Since we have shown that the non-tradable sector is a strong attractor of the FDI, it could be argued that the qualification of the labor force in this sector is also one of the relevant variables. Therefore, foreign investors are willing to increase the existing nominal wage, if they have relatively skilled and productive workers.

In this case, we have positive influence of the ICT variable on the FDI stock. It seems that on the overall level, the countries that were able to accumulate more FDI, are at the same time those that can offer better infrastructure in comparison with their competitors.

Our results are extremely sensitive to the data quality for the countries in question. We expect that the longer time period will enable us to provide stronger results. Another consideration is, what part of the FDI inflows really changes capital formation in the receiving countries. Specifically, a common knowledge is that the significant part of the FDI recorded in the balance of payment data might actually be only changes in the ownership structure of the enterprises. This, naturally, adds quite little in terms of quantitatively measured new investments in the receiving countries. It could be argued that the main effect of this type of the FDI is in the dissemination of the know-how and tighter integration of the local firms in the world market. However, this type of the FDI could also be considered more similar to portfolio investment, as foreign owners are free to withdraw their assets by selling their ownership to domestically or internationally owned private or state enterprise.

The prospects for the future FDI inflows in the SEE countries coming from the other countries within the region, predominately the EU members are not straightforward. According to the Blomström and Kokko (Blomström and Kokko, 1997) who apply their analysis on the member states, as the countries advance on their way to the EU, regional agreements could lead to a reduction in the horizontal FDI which follow a tariff-jumping motive. At the same time, economic integration can generate the additional vertically-integrated FDI between member countries, when firms are able to geographically fragment production at low costs. In every case, it seems that the SEE countries will probably follow the similar path as their CEEC neighbors. Whether or not they will learn from the obstacles or repeat the same mistakes, still remains to be seen.

The latest research indicates that one of the important factors for increasing the FDI inflows is increasing the efficiency of institutions. Bénassy-Quéré, Coupet and Mayer (Bénassy-Quéré, Coupet and Mayer, 2005) show that public efficiency is a major determinant of the inward FDI. The public efficiency includes tax systems, easiness to create a company, lack of corruption, transparency, contract law, security of property rights, efficiency of justice and prudential standards. These results are encouraging for our sample of countries in the sense that efforts towards raising the quality of institutions and making them converge towards those of the FDI source countries could increase the chances of catching-up. Since the authors found that the impact of improving institutional surroundings is large, meaning that moving from a low level to a high level of institutional quality could have as much impact as suddenly becoming a neighbor of a large source country, it could provide a path for the SEE countries to improve their economic activity. Governments, therefore, have greater powers to encourage the 'vertical' FDI. Aside from a supportive policy framework, the human capital stock heavily influences the FDI flows and the associated technology transfer.

## **5. Conclusions**

We have analyzed the FDI determinants in the SEEC-7 during the period 1996-2002. We have used the GLS regression analysis on a pooled sample, and tried to determine whether the traditional and less traditional determinants prove significant for our sample of countries. The analysis shows that market-seeking determinants of the FDI (GDP level, GDP per capita, GDP growth, population) give mixed signals in different specifications.

We were unable to provide definitive conclusions on the relationship between the unemployment and the FDI in the SEEC-7, since the results are not robust to different

specifications. Therefore, at this point it cannot be concluded that the FDI will exert positive influence on the vast labor market problems in those countries.

The only variable robust to different specifications was openness. At the same time, characteristics of the economies, such as private sector share or service sector share, also proved to be significant and exerted positive influence on the FDI. It can be concluded that the increasing trade with other economies, and the development itself, will contribute to the stronger integration of the SEE region with other economies in the region and at the same time positively influence the FDI. As on the global level, once again we can confirm that the FDI is attracted by the development.

One of the issues not discussed in this paper is the business climate. Relatively recent in Croatia, foreign investors have organized themselves in order to achieve common goals on the local market. In their first address to the public, they have pronounced the lack of adequate business climate as one of the most important impediment to doing business in Croatia. Since this statement comprises many different factors, most of which are quite intangible, it could be argued that the most important conclusion, and the recommendation for the countries in our sample, is to improve the business climate, reduce the administrative procedures and increase the transparency. Other indicators, including those that we have analyzed in this paper, will improve along with the more intangible ones.

## References

- Addison, T. and A. Heshmati (2003), "The New Global Determinants of FDI Flows to Developing Countries The Importance of ICT and Democratization", UNU/WIDER (World Institute for Development Economics Research), Helsinki, Discussion Paper No. 2003/45.
- Bénassy-Quéré A., M. Coupet and T. Mayer, (2005), "Institutional Determinants of Foreign Direct Investment", CEPII, Working Paper No 2005-05.
- Blomström, M. and A. Kokko (1997), "Regional Integration and Foreign Direct Investment", NBER Working Paper 6019.
- Bosworth, B. and S. M. Collins, (1999) "Capital Flows to Developing Economies: Implications for Saving and Investment", Brookings Paper on Economic Activity. No. 1.
- Campos, F. N. and Y. Kinoshita (2003), "Why does FDI go where it goes? New Evidence from the Transition Economies", IMF Working Paper No. 228.
- Carr, D.L., J. R. Marakusen J. R. and K. E. Maskus (1998), "Estimating the Knowledge Capital Model of the Multinational Enterprise", Working Paper 6773, Cambridge: National Bureau of Economic Research.
- Casson, M. (1990), "The Theory of Foreign Direct Investment", in Buckley P. (ed.), International Investment, Aldershot: Edward Elgar Publishing.
- Caves, R.E. (1974), "Multinational Firms, Competition and Productivity in Host-country Markets", *Economica*, vol. 32., p. 176-193.
- Caves, R. (1996), *Multinational Enterprise and Economic Activity*, Cambridge: Cambridge University Press.
- De Santis, R.A., R. Anderton and A. Hijzen (2004), "On the Determinants of Euro area FDI to US: The Knowledge-capital-Tobin's Q Framework", Working Paper Series, European Central Bank No. 329.
- Dunning, J. H. (1993), *Multinational Enterprises and the Global Economy*, New York: Addison-Wesley Publishing Company.
- Focarelli, D. and A. F. Pozzolo (2001), "The Patterns of Cross-Border Bank Mergers and Shareholdings in OECD Countries", *Journal of Banking and Finance*, 25, 2305-2337.
- Gligorov, V., M. Holzner and M. Landesmann, (2003), "Prospects for Further (South) Eastern EU Enlargement: From Divergence to Convergence?", WIIW and GDN, June 2003.
- Lipsey, R. E. (2000), "Interpreting Developed Countries' Foreign Direct Investment", NBER Working Paper No. 7810.
- Haddad, M. and A. Harrison. (1993), "Are there Positive Spillovers from Direct Foreign Investment?", *Journal of Developing Economics*, vol. 42, p. 51-74.

Havlik, P. (1998) "Wages, Productivity and Labour Costs in CEECs", The Institute of Economic Research Hitotsubashi University, Tokyo, Discussion Paper Series A., No. 359.

Hunya, G. (2004) Foreign Direct Investment in South East Europe in 2003-2004, Vienna: OECD and WIIW.

Lovrinčević, Ž., G. Buturac and Z. Marić, (2004) "Priljev inozemnog kapitala – utjecaj na domaće investicije i strukturu robne razmjene", *Ekonomski pregled*, 55, 11-12, pp. 894-934.

Lovrinčević, Ž., Z. Marić and D. Mikulić (2004) "Efikasnost investicija i FDI – stara priča. nove okolnosti", in Teodorović, I., ed., "Hrvatska na putu u Europsku Uniju", pp. 52-89.

Marakusen, J. R., D. E. Konan, A. J. Venables, and K. H. Zhang (1996), "A Unified Treatment of Horizontal Direct Investment: Vertical Direct Investment and the Pattern of Trade in Goods and Services", Cambridge: National Bureau of Economic Research, Working Paper 5696.

Markusen, J. R. and A. J. Venables (1999), "Foreign Direct Investment as a Catalyst for Industrial Development", *European Economic Review*, vol. 43, p. 335-356.

Mariotti, S., M. Mutinelli, and L. Piscitello (2003), "Home Country Employment and Foreign Direct Investment: Evidence from the Italian Case", Cambridge: Cambridge Journal of Economics, vol. 27 (3), p.419-431.

Noorbakhsh, F., A. Paloni, and A. Youssef (2001), "Human Capital and FDI inflows to Developing Countries: New Empirical Evidence", *World Development*, vol. 29 (9), p. 1593-1610.

IMF (1993), Balance of Payment Manual, 5<sup>th</sup> edition, Washington D.C.: IMF Publications.

Perez, T. (1997), "Multinational Enterprises and Technological Spillovers: an Evolutionary Model", *Evolutionary Economics*, vol. 7, p. 169-192.

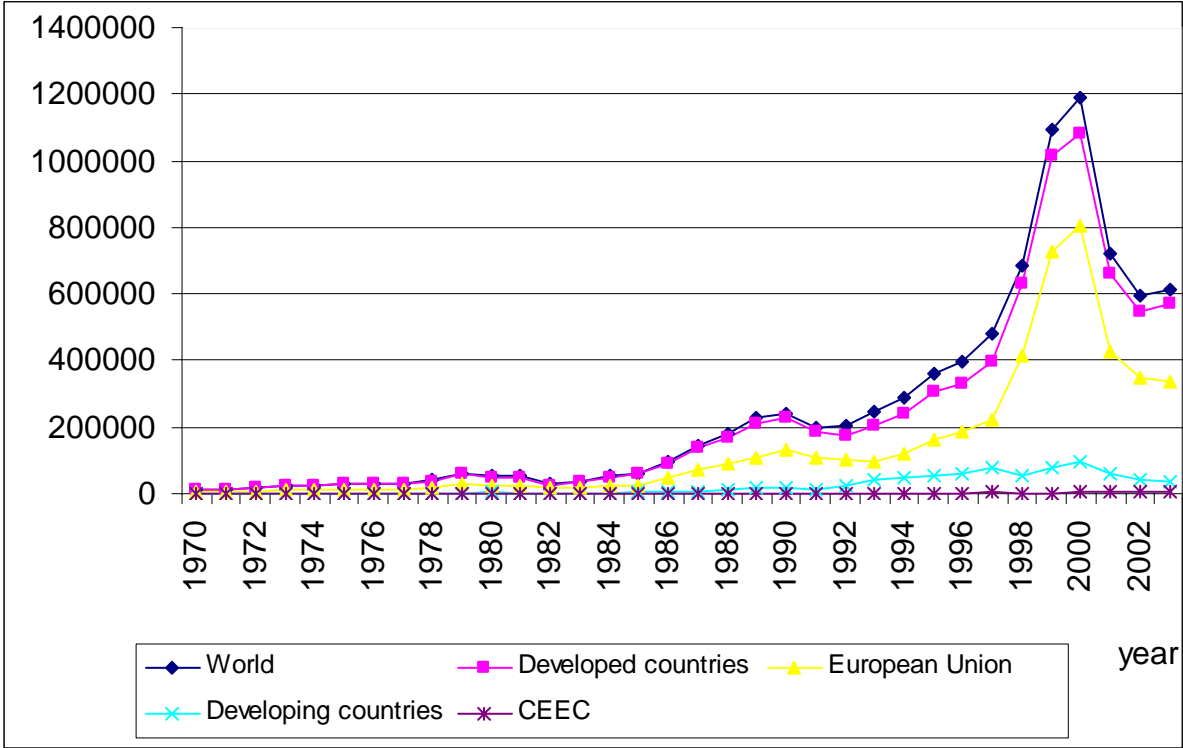
UNCTAD (1996), World Investment Report, New York: UN.

UNCTAD (1998), World Investment Report, New York: UN.

UNCTAD (2004), World Investment Report, New York: UN.



**Appendix 1: FDI outflows, global and by group of countries, 1970-2003 in billion of US \$**



Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_outflows\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_outflows_en.xls)

## Appendix 2: The FDI inflows to the SEEC-7 in million of US \$, 1993-2003.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>CEEC-8</b>	5248,103	4747,0845	12194	10461,145	12066,378	16680,275	18564,263	20328,591	18392,59	22588,392	11459,267
Albania	58,00	53,00	70,00	90,10	47,50	45,01	41,20	143,00	207,30	135,00	180,40
Bosnia and Herzegovina	0,00	0,01	0,03	-2,00	1,00	55,75	154,07	147,21	130,17	265,36	380,91
Bulgaria	40,00	105,40	90,40	109,00	504,80	537,30	818,80	1001,50	812,90	904,70	1419,40
Croatia	120,30	117,00	114,20	510,80	532,90	932,40	1467,20	1088,70	1561,30	1123,99	1712,95
Romania	94,00	341,00	419,00	263,00	1215,00	2031,00	1041,00	1037,00	1157,00	1144,00	1566,00
Serbia and Montenegro	96,11	62,58	44,99	0,00	740,00	113,00	112,00	25,00	165,00	475,00	1360,00
TFYR Macedonia	0,01	24,00	9,49	11,21	30,09	127,73	32,70	174,53	441,53	77,82	94,56
<b>TOTAL SEEC-7</b>	<b>408,42</b>	<b>702,99</b>	<b>748,11</b>	<b>982,11</b>	<b>3071,29</b>	<b>3842,19</b>	<b>3666,97</b>	<b>3616,94</b>	<b>4475,20</b>	<b>4125,87</b>	<b>6714,22</b>
SEEC-7 in CEEC-8	7,8	14,8	6,1	9,4	25,5	23,0	19,8	17,8	24,3	18,3	58,6

Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_inflows\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_inflows_en.xls)

## Appendix 3: FDI inflow per capita in SEEC-7, 1995-2003

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Albania	21	27	14	13	12	47	67	45	57
Bosnia and Herzegovina	-	-	-	18	47	39	31	69	99
Bulgaria	11	13	61	65	1000	123	103	115	181
Croatia	24	114	117	207	322	245	352	253	440
Romania	18	12	54	90	46	46	52	52	72
Serbia and Montenegro	-	-	70	11	13	6	20	57	152
TFYR Macedonia	5	6	15	64	16	86	217	38	46
<b>TOTAL SEEC-7</b>	<b>14.1</b>	<b>18.5</b>	<b>57.8</b>	<b>72.3</b>	<b>69.0</b>	<b>68.0</b>	<b>84.2</b>	<b>77.6</b>	<b>126.3</b>
Czech Rep.	248	138	126	361	615	485	552	832	253
Hungary	459	319	405	326	323	272	388	282	249

Source: Hunya, 2004 and authors' calculation

#### Appendix 4: FDI inward stock in SEEC-7 and CEEC-8, 1990-2003 in million of US \$

	1990	1995	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Albania	..	20,00001	78,00001	131	201	291,1	338,6	383,61	424,81	567,81	775,11001	910,11001	1090,51
Bosnia and Herzegovina	..	..	..	..	20,1522	18,15222	19,15222	74,90222	228,969	376,1832	506,35522	771,71539	1152,6211
Bulgaria	168,17	209,67	249,67	355,07	445,47	554,47	1059,27	1596,57	2402,65	2257,26	2757,69	3662,39	5081,79
Croatia	..	126,15	246,45	363,45	477,65	988,45	2135,857	1902,6	2578,11	3560,32	4706,45	6710,69	11351,3
Romania	44	122	215	402	821	1097,2	2352	4417,9	5469,2	6479,9	7638	8873	12692,9
Serbia and Montenegro	..	125,6813	221,7887	284,3734	329,359	329,3598	1069,36	1182,36	1294,36	1319,36	1484,3598	1959,3598	3319,3598
TFYR Macedonia	..	..	..	24,00001	33,49	44,70001	74,79001	202,52	235,22	409,75	851,28001	929,10001	1023,66
<b>Total SEEC-7</b>	<b>212,17</b>	<b>603,5013</b>	<b>1010,909</b>	<b>1559,893</b>	<b>2328,12</b>	<b>3323,432</b>	<b>7049,029</b>	<b>9760,462</b>	<b>12633,3</b>	<b>14970,58</b>	<b>18719,245</b>	<b>23816,365</b>	<b>35712,141</b>
Czech Republic	1886	2889	3423,1	4546,8	7350	8572,4	9233,8	14375	17552	21643,7	27092,2	38450,1	41032,7
Estonia	27,7	109,6	271,8	486,4	687,9	838,2	1147,932	1821,6	2467,4	2644,734	3160	4225,9	6510,5
Hungary	2107	3424	5576	7087	11303,5	13281,88	17968,23	22315,06	23260,2	22869,89	23337,073	35889,834	42914,662
Latvia	146,8569	176,2622	221,3852	435,8382	615,456	936,1511	1271,695	1557,513	1795,42	2083,809	2331,522	2751	3320
Lithuania	96,8248	106,8248	137	321	352	700,3	1040,61	1625,3	2063,03	2334,31	2665,49	3981,33	4959,77
Poland	425	1370	2621	3789	7843	11463,4	14587,2	22479,2	26074,9	34227	41247	47900	52125
Slovakia	168	268	400	591,9095	810,336	1604	1670,6	2128,5	2272,3	3738	4836,2	7800,4	10248
Slovenia	675	775	954	1325,9	1763,4	1998,1	2207,3	2765,8	2687,31	2893,672	2601,9441	4108,9095	4289,941
<b>Total CEEC-8</b>	<b>5532,382</b>	<b>9118,687</b>	<b>13604,29</b>	<b>18583,85</b>	<b>30725,6</b>	<b>39394,43</b>	<b>49127,36</b>	<b>69067,97</b>	<b>78172,6</b>	<b>92435,11</b>	<b>107271,43</b>	<b>145107,47</b>	<b>165400,57</b>
<b>SEEC-7 in CEEC-8</b>	<b>3,8</b>	<b>6,6</b>	<b>7,4</b>	<b>8,4</b>	<b>7,6</b>	<b>8,4</b>	<b>14,3</b>	<b>14,1</b>	<b>16,2</b>	<b>16,2</b>	<b>17,5</b>	<b>16,4</b>	<b>21,6</b>

Source: UNCTAD, [http://www.unctad.org/sections/dite\\_dir/docs/wir\\_instock\\_en.xls](http://www.unctad.org/sections/dite_dir/docs/wir_instock_en.xls)

## Appendix 5: Data Sources

Variable	Country	Source
FDI	The whole sample	UNCTAD, <i>Key Data from WIR Annex Tables</i> , <a href="http://www.unctad.org/">http://www.unctad.org/</a>
GDP	The whole sample	WDI, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
GDP p.c.	The whole sample	Own calculation based on WDI data, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
Population	The whole sample	WDI, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
Openness	The whole sample	Own calculation based on WDI, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
External debt	The whole sample	WDI, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
Wage	Bulgaria, Croatia, FYR Macedonia, Romania, Serbia and Montenegro	WIIW Handbook of Statistics, various issues.
	Albania	Institute of Statistics, Albania
	Bosnia and Herzegovina	Statistics BIH, Central bank
Unemployment	Bulgaria, Croatia, FYR Macedonia, Romania, Serbia and Montenegro	WIIW Handbook of Statistics, various issues.
	Albania	Institute of Statistics, Albania
	Bosnia and Herzegovina	Statistics BIH, Central bank
Share of the services sector	The whole sample	WDI, World Bank, <a href="http://devdata.worldbank.org/data-query/">http://devdata.worldbank.org/data-query/</a>
Share of the private sector	The whole sample	Transition Report, EBRD, various issues
Privatization Large scale	The whole sample	Transition Report, EBRD, various issues
Financial sector	The whole sample	Transition Report, EBRD, various issues
Telephone	The whole sample	UNCTAD, Statistical Databases, Millennium Indicator Database
Internet	The whole sample	UNCTAD, Statistical Databases, Millennium Indicator Database