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ATTRACTION OF FOREIGN DIRECT INVESTMENTS AS A CHALLENGE IN ACCESSION PROCESS TO EUROPEAN UNION

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Abstract

When we speak about the significance of foreign direct investments (FDI) for the transition economies of Southeastern Europe, we mainly think of two important effects of FDI: effect on economic growth and effect on export performances. Both economic features (growth and export performance) are important for the transition economies in sense of European Union (EU) accession prospect. The experience of Central European countries, now members of European Union, shows that FDI inflows from EU countries were indicator of country's reform progress. After short review of relevant researches, we analyzed the statistical relationship between FDI inflow and economic growth. Results don't reveal any positive correlation between these two variables. However, FDI play important role in technology transfer and improve technological development level in transition economies.

On the other hand, our research shows that FDI are correlated with improving of export's structure of transition countries. FDI inflows in Central European countries were followed by changes of factorial intensity of export goods, as by sectoral structure of export, in positive manner. Compared with Central European transition countries, region of Southeastern Europe has less success in attracting FDI, which consequently results in weaker economic and export performances. FDI have an important role in export's structure convergence between EU and transition countries.

Key words: foreign direct investments, economic growth, export performance, transition economies

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The effects of foreign direct investments on economic growth of host country

Economic theory has identified a few effects of foreign direct investment (FDI) which result in increased growth rate of host economy:

1. FDI are form of import of capital. On that way, domestic investment can be higher than domestic accumulation. That should increase the growth rate of economy. But, in recent years, there are some doubts about it. There is a question if import of foreign accumulation really increases the investment rate or just presses out and replaces the part of domestic savings which now becomes the current expenditure. That enables higher living standard in developing countries. Such tendency is noticed in many developing countries and it is the most conceived in the least developed countries. The second relevant question is does higher investment rate necessary leads to faster economic growth. In other words, economic development is a result of not just the investment level, but also of efficiency of investments.

2. Import of foreign capital (through FDI or any other way) enables the financing of current account deficit. That gives additional time to country for necessary structural transformation. Restructuring of economy is, almost without exception, linked with economic recession, growth of unemployment, social disturbances etc. However, if it is so, that would be a reason for foreign investors to avoid such country. Economic growth and prosperity is among the leading factors of FDI attraction.

3. Opening of foreign companies' affiliation contributes to enhancing of competition level. That improves the consumers' choice and emanates domestic producers to engage in market game more actively, through cost cuts, quality improvement, innovations etc. But, there are evidences that foreign competition destroyed domestic inefficient firms. That makes economic, social and political problems in country, at least in short terms.

4. Foreign direct investments represent the channel of international technology transfer. Increased technological level in host sector of FDI can be transmitted to the rest of domestic economy through spillover effect.

Among all mentioned effects, the most significant is the last. That is the reason why we will analyze the effects of technological transfer through FDI.

Transfer of technology through foreign direct investment

Modern economic theory stresses that FDI foster economic growth primary through improvement of technological level of economy. That effect is much more significant than import of foreign accumulation.

There are three different ways of international technology transfer:

1. import of high-tech products,
2. learning through export, when domestic producers acquire new knowledge about available technology, and
3. foreign direct investment.

As we can conclude, FDI are the most relevant source of technology transfer in developing countries and transition economies. However, it is not a rare case that FDI inflows in such countries result in so called dual economy, when sectors which are host of FDI becomes developed oasis in underdeveloped economy. In that case, effect of FDI on economic growth is limited and small. For that reason, special attention of economists are given to so called spill over effect, when FDI inflows in one sector of economy bring the technology boost that spreads through all economy. Countries should emanate this effect.

In recent years, there are many researches that try to demonstrate or deny the present of spill over effect. For the reason of simplicity, in those papers, the growth of total factor productivity is used as measure of country's technology improvement. There are strong evidences that FDI improves productivity in host companies. The growth in productivity is the biggest in firms with total foreign ownership, less in joint ventures, while total domestic firms have the smallest productivity growth.

Although the technology spreading through other sectors of economy, as a result of FDI in one particular sector, is considered as real, some recent studies find no such evidence. From the viewpoint of our paper, the most interesting are studies of European transition economies. Negative correlation between FDI inflows and productivity growth in domestic firms

was found in the case of Czech Republic, for example.¹ Some explanations are:

1. Usurping of new technologies assumes skilled workers which are trained and capable of using it. FDI inflows and the level of country's human capital are complementary. If the stock of human capital is low, possibilities of technology transfer within the country are limited.
2. In the case of imperfect competition markets, entrance of new, foreign companies is related with the loosing of market share of domestic firms. That reduces their capability to use the economy of scales, which have direct negative impact on productivity.

Factors of influx FDI into Central and East Europe countries in transition

Flows of private capital depend on many factors: terms of demand, earning capacity, openness of the market, development of the financial sector, privatization, credit capability, investment risk, etc. Inflow of FDI into the region of CE (Central and East) Europe was negligible until 1990. The development of transition and with it the development of the privatization process created new opportunities for foreign capital owners which resulted in the increase of the FDI into the region. We will point out the most important factors of FDI inflows into the region of CE Europe.

- 1) The availability of natural resources has played a substantial role in attracting FDI in some countries in the region, at the very beginning of the transition. FDI in the extractive sector do not depend greatly on other economic and business policies in a given country, and consequently neither on the achieved level of economic reform process. Therefore, substantial amounts of FDI have arrived to Azerbaijan and Kazakhstan even though poor results were shown in the terms of transformation of the economic system.
- 2) Development and the achieved level of the reforms in the transitional economies is an important factor of FDI influx. Liberalization of the trade regime and the price system, as well as

¹ For more details on this issues see Djankov Simeon and Bernard Hoekman (1998).

the support in terms tax-breaks and importation fees, have played an important role in attracting FDI into the CE Europe region. At the same time, development of the reforms represents factor of decrease of portion public capital in the overall financial influx.

- 3) Privatization also plays an important role in attracting FDI. The countries, which allowed participation of the foreign capital in the privatization process, are the countries with the highest rates of influx of FDI per capita. The greatest portion of FDI went into industrial sector, where the privatization first took-off. Liberalization and privatization of the services sector followed in all countries in the region in the last phase of transition. Influx of FDI into companies which were publicly or privately owned, speeded up the process of their restructuring, significantly improved productivity, brought new technologies, managerial skills and additional capital.
- 4) Finally, we should mention maybe the most important factor in attracting FDI in the region of the CE Europe – access to the EU market. During 1990s all European countries in transition (except the region of the “Western Balkans”) signed the agreement on accession to the EU, so called the “European Agreements”. Its main characteristic is establishing the zone of free trade among the signatory countries and the EU countries. Agreement involved step-by-step introduction of the free trade zone on non-reciprocal basis, with exclusion of “sensitive” economic sectors. This arrangement in fact represents an intermediary phase toward complete accession to the EU. Desire of the European countries in the transition to become members of the EU influenced in two ways on the influx of the FDI into the region. First, with lowering investment risks through bettering the business climate, dedication to the reforms, harmonization of the legislative regulations with the regulations that exist in the EU. Second, the agreement on accession allowed free access to the markets of the developed countries, allowing the investors to avoid trade barriers EU and to increase the economies of scale through larger quantities of goods sold. Simultaneously, low paid work force in transitional countries has become more available for the multinational companies from more developed countries. The proximity of the EU market, as well as the

prospective of the future accession, resulted in geographical direction of the FDI, so that countries that are closer to the EU (in all aspects) received higher levels of FDI.

The effect of foreign direct investment on economic growth of Southeastern European transition economies

On the bases of World Bank's data about influx of FDI in the region of Southeastern Europe, growth rate of these economies, their GDP and GDP per capita, we will test the hypothesis of positive influence of FDI on economic growth. As we already said, previous researches have no unique result. The positive correlation of FDI inflows and economic growth was found in some cases, in other it was not. Researchers were also using the various variables in the attempt to reach more relevant result. Our research is based on newer data, for the period 1998-2004. Correlation between FDI inflows and economic growth will be tested in three different manners, for the reason of more profound result.

Results of previous studies

Impact of FDI on economic growth of transition economies was the object of few studies. Campos and Kinoshita did the research in 2002 for the period 1990-1998. Their study includes 25 Central and East Europe countries. In that period, FDI inflows contributed to technological development of analyzed economies. The result of study confirms the hypothesis that FDI have a significant positive effect on the economic growth of each selected country.

According to the United Nations Secretariat of the Economic Commission for Europe (2001), the countries that attract large amounts of FDI are those with good economic performances, favorable investment environment and political stability. European Union accession perspective is stressed as significant factor of FDI attraction in transition economies. Regarding that, their report determined a distinction between those countries which are candidates for 2004 EU enlargement, and those that will follow in the next wave. The first group received almost 60% of the total FDI inflows in the region. Report emphasis that the countries of so called West Balkan (Croatia, Bosnia and Herzegovina, Serbia and Montenegro, FRY Macedonia

and Albania) have not been able to attract FDI due to slow economic reforms and political instability. Also, it was found that although there were significant technology transfers through FDI there were negative intraindustry spillovers (Czech Republic, Slovenia, Estonia).

Lyrودي, Papanastasiou and Vamuakidis (2004) examined the relationship between FDI inflows and economic growth in 17 transition economies for the period 1996-1998. The evidence from the statistical analysis suggests that FDI does not have any significant relationship with economic growth for transition countries.²

Our study examines the same relationship, but for the period 1998-2004 and for the countries of Southeast Europe (Romania, Bulgaria, Serbia and Montenegro, Croatia, FRY Macedonia, Bosnia and Herzegovina and Albania).

Correlation between FDI inflows and economic growth rates

First, we will test the correlation of FDI inflows and economic growth rates. Relevant data are given in the tables 1 and 2. Testing is done using the Pearson correlation coefficient and coefficient of determination (r^2). The r-squared value (coefficient of determination) can be interpreted as the proportion of the variance in y attributable to the variance in x.

Table 1: FDI inflows for selected countries during the period 1998-2003 (millions \$)

	1998	1999	2000	2001	2002	2003
Albania	45	41	143	207	135	178
Bosnia and Herzegovina	100	90	146	118	268	38
Bulgaria	537	802	1,001	813	904	1,419
Croatia	835	1,420	1,089	1,558	1,124	1,998
Macedonia FYR	128	32	174	441	77	94
Romania	2,040	1,025	1,037	1,157	1,144	1,844
Serbia and Montenegro	113	112	25	165	475	1,360
REGION	3,798	3,522	3,616	4,461	4,128	7,276

² See Lyrودي, Katerina, Papanastasiou, John and Athanasios Vamuakidis (2004).

Table 2: Economic growth rates for selected countries during the period 1998-2004 (%)

	1998	1999	2000	2001	2002	2003	2004
Albania	8	7	7	8	5	6	6
Bosnia and Herzegovina	na	na	6	4	4	3	5
Bulgaria	4	2	5	4	5	4	6
Croatia	3	0	3	4	5	4	4
Macedonia FYR	3	3	5	-5	1	3	3
Romania	-5	-3	1	5	4	5	8
Serbia and Montenegro	3	-19	5	6	4	3	7

na: not available

We will examine the relationship between these two variables during the period 1998-2004. Knowing that any investment has impact on production only after some time, we have tested the correlation between FDI inflow in one year and growth rate in the next year. **Time lag is necessary in every statistical study of the influence of investments.** The results of this test are given in the table:

	Pearson coefficient	Coefficient of determination
Albania	-0.584456134	0.341588972
Bosnia and Herzegovina	-0.193855153	0.03757982
Bulgaria	0.777423458	0.604387233
Croatia	0.594574451	0.353518778
Macedonia FYR	-0.369522669	0.136547003
Romania	-0.268607186	0.07214982
Serbia and Montenegro	0.315592792	0.09959881

As we can see, there is a big variability of coefficient of determination. We can, thus, conclude that there are no significant statistical relationships between influxes of FDI and growth rates for the selected countries. Further statistical analyze confirm this attitude, but it is not included in this paper.

Correlation between FDI inflows per capita and economic growth rates

In this section we will test the relationship between FDI inflows per capita and economic growth rates. Advantage of this approach, in comparison with the previous one, is in considering not only the value of FDI, but also the size of the country. The same value of FDI inflow has not the same effect on economy in different size countries. Influxes of FDI per capita for the selected countries are given in table 3.

Table 3: FDI inflows per capita for selected countries during the period 1998-2003 (\$)

	1998	1999	2000	2001	2002	2003
Albania	14.46	13.17	45.94	66.20	42.85	56.18
Bosnia and Herzegovina	26.45	23.80	38.63	31.20	69.95	99.63
Bulgaria	66.63	99.50	124.26	102.77	114.97	181.44
Croatia	190.64	324.20	248.72	351.06	253.15	449.57
Macedonia FYR	63.18	15.79	86.13	216.95	38.19	46.15
Romania	90.90	45.67	46.21	52.28	52.47	84.81
Serbia and Montenegro	10.62	10.53	2.35	15.49	58.43	167.16

Coefficients of determination are:

	Pearson coefficient	Coefficient of determination
Albania	-0.579695892	0.336047328
Bosnia and Herzegovina	-0.194263832	0.037738436
Bulgaria	0.777833763	0.605025363
Croatia	0.590888204	0.34914887
Macedonia FYR	-0.371348694	0.137899853
Romania	-0.224488974	0.050395299
Serbia and Montenegro	0.320629095	0.102803016

The variability of coefficients of determination shows that there is no statistical relationship between FDI inflows per capita and economic growth rates.

Correlation between FDI participation in GDP and economic growth rates

Taking in account the size of economy in analyzing the effect of FDI on economic growth is necessary and useful. But, using the population as the measure of country size is not reasonable in economic studies. That's why we are going to use GDP as a measure of economic size of country. We will test the relationship between FDI/GDP ratio and economic growth rates now.

Table 4: FDI/GDP ratio for selected countries during the period 1999-2003

	1999	2000	2001	2002	2003
Albania	1.1	3.87	5.05	3.00	3.12
Bosnia and Herzegovina	3.6	3.21	2.36	4.78	5.48
Bulgaria	6.2	7.94	5.98	5.81	7.12
Croatia	7	5.91	7.85	4.93	6.94
Macedonia FYR	0.8	4.86	12.85	2.05	2.03
Romania	2.8	2.80	2.88	2.50	3.24
Serbia and Montenegro	1.1	0.29	1.43	3.06	6.58

Resulting coefficients of determination are:

	Pearson coefficient	Coefficient of determination
Albania	-0.40529687	0.164265553
Bosnia and Herzegovina	0.021040293	0.000442694
Bulgaria	-0.008427105	0.000001
Croatia	0.266046051	0.070780501
Macedonia FYR	-0.357177546	0.127575799
Romania	0.498421247	0.248423739
Serbia and Montenegro	0.374008796	0.139882579

This is the most proper way of all three approaches we have used in determination of effect of FDI on economic growth. FDI/GDP ratio

represents the most appropriate measure of FDI inflow's significance for economic activity of host country. But, we did not find statistical correlation between these two variables.

There is no doubt that foreign direct investments have a positive influence on economic activity in these countries, but we must not forget that this region is in the middle of transitional process. **The affiliations of foreign companies contribute to increase of production and employment. But, on the other hand, due to structural reforms, there are production and employment decrease in domestic inefficient firms. This can neutralize or even surpasses the positive effect of FDI on economic growth.** That's the reason why we did not find statistical correlation between influx of FDI and economic growth. Certainly, if we analyzed not the growth of economy, but the growth of host sectors of FDI inflows, we would find the positive correlation between influx of FDI and sectoral growth.

Basic tendencies in change of scale and structure of the foreign trade of the countries in transition

During the transition process, countries of the CE Europe have dramatically changed scale, geographic and goods structure of foreign trade, as well as factorial intensity of its import and export activities. These changes were being followed, with changes in terms of trade of the countries of this region, resulting in improved position in the world markets. Contribution of the transitional countries of the CE Europe in the world trade has the increasing tendency. Influx of FDI into the countries of the CE Europe was motivated by a desire to utilize advantages that this region offers in terms of production for the purpose of exporting, mainly to the markets of the EU. That is verified by the change in geographic direction of trade export of the CE European countries. EU has become a significant trading partner for the transitional countries, soon after the disintegration of the CMEA. Germany replaced USSR as the main trading partner of the CE European countries. Geographical redirection of trade was more the result of market forces, compared to the measure of the economic policies. After 2000, goods exports of the CE Europe countries is orientated towards the developed countries, with over 70%, compared to the developing countries which

accounted for just over 6% of the total exports of goods. Before the beginning of transition, the circumstances were quite different.

Influx of FDI, besides the impact on geographic direction, had impact on the goods structure of these countries. Prior to transition, countries of the CE Europe were mainly the exporters of raw materials, and the produce of low fabrication level, to the markets of the OECD countries. Taking into consideration that there was an increase of exports into the developed countries – an achievement due to the change in the structure of goods exports, increased levels of industrial products, and products of the higher - level of fabrication – makes the results even more significant. Such change in the structure of the exports demands modernization of the production processes, introduction of new technologies, implementation of new management styles, etc. All of this is assured with the influx of FDI. Influx of the FDI allows for the access to the distribution channels of the mother companies. This fact alone significantly simplified, if not allowed, access to the markets of developed countries. Through opening branches TNC in the countries of the CE Europe, this region has become a part of the world's production network. The newest tendencies in the world economy suggest even larger dislocation of production processes into different countries, in line with its comparative advantages. **The accompanying and complementary occurrence of production disintegration is the trade integration.** Parts and semi-products produced in one country are being exchanged with branches of the same company in different countries, where the process of assembly is continued. The importance of such, so called “inter-company” exchange is becoming more important, and at the same time the contribution of the CE European countries is growing in this type of trade. Soon after the initiation of the transition period, paired with the first results in attracting FDI, industrial products have become the bearer of the exporting expansion of the region.

Above-mentioned changes in the goods structure in the trade exchange of the CE European countries had an impact on the increase of intra-industry trade in the total trade of this region with the EU. Intra-industry trade is often found among the countries, which are on the similar and relatively high level of economic development. On the other hand, low level of intra-industry trade in the total trade is seen as the inferior positioning of the country in the world markets. Again it can be concluded that the countries that have

attracted the most FDI are the ones with the highest values of intra-industry trade.

At the very beginning of the transitional period, trade exports among the CE European countries and the EU was shaped by the exportation of the products mainly based on the simple labor and natural resources, while the importation of these countries from the EU was mainly capital-intensive and rich in the “human capital.” Over the years a high level of influx of FDI, has had a significant influence on improving the structural and factorial intensity in exportation of the transitional countries. With improving structure and factorial intensity, the position of these countries is also being significantly approved in the international division of labor. The production structure of these countries is aligned with the structure of import demands of the developed countries, which allows for the increase their exports to the markets of developed countries. Therefore, it can be concluded once again that the countries, which attracted more FDI, have had more success in achieving this.

Comparison of trade exchange performances of the Balkan countries and the Central European countries

In spite of initial euphoria and fast transition of the CE European countries, the reform itself in various countries had assumed different modes and was implemented with different success. In a way, two groups of countries can be noticed: Balkan countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Serbia and Montenegro, Macedonia and Romania) and the countries of the Central Europe (Czech, Poland, Slovakia, Hungary, and Slovenia). We have seen which factors played important role in attracting FDI to these regions and that the countries of the Central Europe have had a much better position. Transition process and the desire to join the EU, resulted in the policy of opening the economies of these countries towards the world markets. Having this in mind that this transition has been implemented simultaneously with deep economic recession and in the state of quite weak competitiveness, it is no wonder that without exception, there was an increase of the trade balance deficit. As we mentioned, the so called “European Agreements” assume the creation of the free trading zone between each member state and the EU, but with particular and sometimes very important exceptions. This mainly refers to the fields of agriculture,

textile, steel, etc., the very sectors in which the transitional countries traditionally have had comparative advantage. In the case of the Central European countries, a factor was present which considerably has lowered the negative consequences, eliminating epithet of the “catastrophic” – that is the influx of the FDI. The countries of the Balkans did not have such stimulation, at least not on the same scale. Weak influx of the FDI into the Balkan countries has also had an impact on the poor structure of the exports. Liberalization of foreign trade, while still lagging behind compared to the EU – the most important trade partner – has had an effect on the exports performance of these countries. Liberalization of trade led to specializing of the labor intensive production and in the production of low level fabricated goods. On the other hand contribution of hi-tech products and knowledge was increasing in imports. Such developments, which directly depict the principle of comparative advantages, have had an impact on widening the gap between the EU and the Balkan countries. At the same time, the structure of exports of the Central European countries is shifting towards greater share of capital goods followed with decline in consumer goods and reproductive goods. In other words, exports structure of Central European countries is converging towards exporting the EU, while the exporting structure of the Balkans is diverging. Great impact on such state of affairs is due to the FDI influx which, as it has been noted earlier, much greater in the countries of Central Europe.

Conclusion

This study examined the relationship between FDI and economic growth of Southeastern European transition economies. The study is based on World Bank’s data for the period during 1998-2004. The result suggests that FDI does not have any significant relationship with economic growth. Is this conclusion in contrast with economic theory? As a matter of fact, it is not. Branches of transnational companies (TNC) in transition economies contribute to increase of production, productivity and employment. At the same time, TNC affiliations are among the most successful exporters in these countries. They are responsible for export increase, increase of export/GDP ratio, better structure of exports etc. Why then we didn’t find positive correlation between FDI inflows and growth? The cause can be found in transition process itself. Due to structural reforms in these countries, there is

production and employment decrease in domestic inefficient firms. This can neutralize or even surpasses the positive effect of FDI on economic growth. Further researches should try to isolate this effect.

References

1. Appleyard, D. and Field, A. Jr., 2003, *International Economics*, Irwin/McGraw-Hill, Boston
2. Aturupane, C., Djankov, S. and Hoekman, B., 1997, *Determinants of Intra-industry Trade between East and West Europe*, working paper, World Bank, Washington
3. Campos, N. F. and Kinoshita, Y., 2002, *Foreign Direct Investment as Technology Transferred: Some panel Evidence from the Transition Economies*, Centre for Economic Policy Research, discussion paper no.3417
4. Djankov, S. and Hoekman, B., 1998, *Foreign Investment and Productivity Growth in Czech enterprises*, World Bank economic review, Washington
5. Global Development Finance, World Bank, Washington, also available on www.worldbank.org
6. Kaminski, B., 2000, *How Accession to the European Union has Affected External Trade and Foreign Direct Investment in Central European Economies*, working paper, World Bank, Washington
7. Kovacevic, R., 2001, *Tranzicija i spoljnotrgovinska politika*, Institut za spoljnu trgovinu, Beograd
8. Kovacevic, R., 2004, *Savremene tendencije u svetskoj privredi*, autorsko izdanje, Beograd
9. Lyroudi, K., Papanastasiou, J. and Vamuakidis, A., 2004, *Foreign Direct Investment and Economic Growth in Transition economies*, SEEJE, Vol. 2, No. 1, ASECU, pp 97-110
10. Petrakos, G., 2003, *Peripheral European Transitions: performance, structure and trade relations in the Balkan region*, SEEJE, Vol. 1, No 1, ASECU, pp 41-64
11. United Nations, Secretariat of the Economic commission for Europe, 2001, *Economic Growth and Foreign Direct Investment in the Transition Economies*, Chapter 5 in Economic Survey of Europe 2001, Geneva and New York

