

How FDI influences economy development of Eastern Europe

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Abstract

The article analyzes the benefits, risks and effectiveness of the model of modernization through broad-based foreign direct investment in the Eastern Europe countries. We are going to consider a group of post-transition economies which comprises ten post-socialist countries passed successfully transition period and became EU members in 2004 and 2007. The work analyzed factories, that determine high dynamic growth of FDI inflows in these countries. The purpose of the article is to summarize how FDI influences on structure of economy, its internal and external balance, on the level of technology, efficiency and competitiveness of production. We are going to approach the relation between foreign direct investment (FDI) inflows and innovation activities of Research and Development (R&D), analyzing the empirical data for the East European countries.

KEY WORDS: Foreign Direct Investment (FDI), Research and Development (R&D), Modernization,

INTRODUCTION

Nowadays Foreign direct investment (FDI) is increasingly being recognized as an important factor and financial source in the economic development and modernization of countries. It has been proved by the theory and practice, that foreign Investment facilitates the transfer of technology, organizational and managerial practices and skills, as well as access to international markets. More and more countries are striving to create a favourable and enabling climate to attract FDI, as it helps to increase the competitiveness of the economy of the host countries and contributing to the balance of payments. In addition to reducing the restrictions on the entry of FDI, they are actively liberalizing their FDI regimes. Foreign investment also have important effects on local firms through supply and distribution chains, there are also a range of following benefits, especially higher productivity through new investment in physical and human capital, that contribute an employment in the host countries.(Markusen and Venables, 1997). The flow of financial capital has become vital, shaping the policies and political decisions of governments to attract FDI. According to the International Monetary Fund (IMF) and Organization for Economic Co-Operation and Development (OECD) definitions, direct investment reflects the aim of obtaining a lasting interest by a resident entity of one economy-direct investor in an enterprise, that is resident in another economy- the direct investment enterprise".(Duce, M. 2003). One of the primary motivations for developing countries to attract foreign direct investment is to obtain

advanced technology from developed countries and then base on this to establish domestic innovation capability. Innovation is a key to economic competitiveness and the technological breakthroughs. Economic progress will be driven by the invention and application of new technologies. Research and Development (R&D) is one category of spending that develops and drives these new technologies. However an important factor influencing R&D activity in an economy is the inflows of foreign direct investment. There are several important channels through which inward FDI can benefit innovation activity of domestic firms in the host country.(Baldwin, Braconier, and Forslid (1999)) First, local firms can learn about the products that are brought by foreign investors. Second, local firms obtain the technological know-how from foreign-investment and Third, inward FDI has a demonstration effect on local R&D activity. Accordingly, in the domestic markets, foreign technologies can inspire and stimulate local innovators to develop new products. Most Eastern Europe countries have not sufficient own resources for the catching up a successful implementation of the stated strategy and costly innovative model of technological modernization, they are widely opening their economies to cross-border capital flows and have created the most attractive conditions for foreign investors. Nevertheless, governments of host economies are still continue to liberalize their investment regimes and implement of FDI promotion policies for modernization and development objectives of their economy.

IMPACT OF FDI DURING 1990S

Since the early 1990s, the European Union (EU) has played a key role in supporting these countries' political and economic transformation as well as the reconstitution of their research infrastructures. The EU has assisted them through financial and technical assistance, investments and trade. Firstly, in Hungary, and after in all other Eastern Europe countries was used special incentives for investors in the form of customs and tax exemptions. The benefits had a direct form for all foreign investors. Hungary created customs zones, industrial parks, etc. (Sass M. (2004). The basic legal norm for companies became a national regime with foreign shareholdings, subsequently all restrictions for foreign investors was abolished (Hunya G. (2000)). Research capabilities of Eastern Europe countries have been severely affected by rapid political changes, internal conflict and the gradual transformation from state-run to market economies. This was manifested by the huge reduction in national Science and Technology (S&T) expenditure and the brain drain of leading scientists from these countries during the 1990s. FDI can have a considerable and immediate positive impact on countries external financial positions and, thus, prospect of their development. Such flows can be particularly beneficial, whereas, access to other types of foreign capital is limited. The financial effect of FDI complements the impact of its potential technology, management and restructurization. For example, early privatization in Hungary and Estonia, related to FDI inflows, helped to boost foreign exchange reserves and reduce the countries external debt. Indeed, reducing the high debt was a considerable as it determined Hungary's privatization strategy. Revenues from official reserves increased and net debt fell in 1990-1993, when privatization reached the peak. Estonia benefited comparably in 1992-1993. Toward the end of the decade, FDI related to privatization helped to strengthen the reserve positions of Bulgaria, Romania and Lithuania. In 2000 Poland earned \$940 million from the sale of telecommunications. Early in the decade FDI also contributed to a weakening of balance of payments constraints in the region. The growth of FDI helped to finance current account deficits. In the 1990s was

observed a fourfold rise in the combined current account deficit in Eastern Europe and 86 percent of it was financed by FDI respectively in 1997-1999. (UN/ECE). Financial resources are generally viewed as a favourable since it is relatively stable and often promotes exports. Despite periods of sizeable current account deficits in the 1990s, the Czech Republic and Poland were able to forgo sovereign borrowing and hold down their external debt. On the other hand, there was a marked increase of the foreign indebtedness in several countries with large current account deficits and relatively low levels of inward FDI (e.g. Romania and Slovakia). FDI related to privatizations proved to be an attractive financing option for several countries nearing their debt ceiling. FDI is generally considered more stable investment, than other type of financial flows, because investments in fixed assets may be more difficult to liquidate, as well direct investors tend to make long-term commitments. Despite the boom of privatization related to foreign investments, the volatility of FDI flows into the transition economies has been less than other types of financial flow.

After 1990, the state planning institutions were replaced by chaotic and short-term markets, especially, commodity exchanges and informal markets (Hohnen 2003) Decisions, that abrogated the principle of conditions for domestic and foreign investors in the process of negotiating, for accession to the EU were abolished, but factually, the instruments which promoted FDI had survived by going into the sphere of employment policy and Research and development (R & D). Encouraging government policies, relatively cheap and highly skilled workforce, developed transport infrastructure and relatively low investment risk, provided an abundant inflow of FDI in Eastern Europe countries. According to United Conference on trade and Development(UNCTD), Its total share rose from \$ 3 billion in the first half of 1990 to \$ 50 billion in 2005-2008.(UNCTAD,2008) Therefore, accumulated FDI exceeded \$ 500 billion, where the share of investing by European companies were around 80% of mainly from the EU-15¹. The main "supplier" of the capital was Germany with a share of about 25% of accumulated FDI. Hungary, Poland and the Czech Republic accounted about 70% of the total amount of FDI, in the 1990s these countries mostly were leading in attraction of FDI . In Slovakia, Bulgaria and Romania Intensive inflow of FDI started at the current decade, when the above mentioned three countries completed the privatization processes and, moreover, greatly increased the cost of labor force. However, In terms of foreign capital inflow into the economy, Slovakia reached a second place in per capita volume of accumulated FDI, after the Czech Republic. In accordance with GDP and with the share of FDI in building, East Europe countries became closer to EU-15 levels, or even surpassed it.(Hunya G. (2005). Slovenia with the orientation of the national capital, and other countries with large economies, namely Poland and Romania were characterized with low level of foreign Investment. According to the motivation of investors, the nature of Foreign capital have changed. An appearing of small and medium-sized investors were mainly aimed to develop a new markets. The bulk of Foreign capital was invested in trade and the production had expanded in that areas, which existed in foreign investor's home countries (Christie E. (2003). Thus, the leading positions was captured by TNCs that seeking to increase their efficiency by

¹ The EU-15 comprised the following 15 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.

reducing costs and place it in a new capacity of the host countries production. Investors, that were oriented on the export. were attracted in the following sectors such is, for example :telecommunications, banking, transportation systems and utilities. Since the late 1990s, TNCs began to place the production facilities in the region with high-tech and innovation sphere. At the beginning, in the structure of industrial investment, were dominated a labor-intensive production with low-tech, for instance food, tobacco, textile, garment, leather footwear, sawing, etc. With the increase of labor cost, investment in these industries have almost disappeared and the main flow of it went to industry where an average level of technology had opportunities to improve productivity, for example, the largest recipient in this regard, was the automobile industry. (Hunya G. (2004).

FDI played an important role in the economy of Eastern Europe countries, and helped them to create a competitive environment. Government budgets made a profit with additional revenues from privatization, rental payments and taxes. In most countries, FDI was covering the chronic current account deficits, that defended these countries against currency crises. Foreign investors made a significant contribution in fixed assets, created new jobs and ensured dynamic economic growth. TNCs played a key role in the development of industrial production, as it had lead the rise of this sector. As well. dramatically was improved its industrial structure and increased the level of technology. Foreign investors also expanded and modernized a weakly developed service sector. Western companies moved technology and intangible assets in the East Europe, such for example: knowledge, modern organization, managerial experience and etc. Due to this fact , in these countries economic productivity arised and was improved efficiency of capital (UNCTAD (2003) Foreign investors dramatically increased the potential of the export sector by adapting the local production to the demands of the global market and opened access for foreign distribution. However with all positive result , foreign investors in the Eastern Europe, lead the risks to macroeconomic stability and sustainable economic growth. Practice has shown, that enterprises with foreign capital, that have a high import requirements may negatively affect on trade balance, especially in the early stages of implementation of investment projects, as well in this case, the orientation of investors are to sell products on the domestic market. (Pitti Z. (2002). In most countries with increasing their accumulated amount , the share of reinvested earnings began to decline.

EFFECTS OF GLOBAL FINANCIAL CRISIS

The effects of the global crisis vary among regions and countries, fingerprinting thus a different impact on the geographical characteristics of the foreign direct investments flow. Europe and Central Asia have entered the global financial crisis highly dependent on foreign capital inflows. For example, Hungary had been sustaining twin deficits on the current account and the government budget for several years. Key growth determinants for the region started to deteriorate rapidly in September 2008, that

opened a deep vulnerabilities. The increased price of commodity, which had Incentive on growth among commodity exporters in the first half of 2008 declined, external markets began to collapse and capital flows reversed owing to heightened investor risk aversion. As a consequence, according to world bank, growth rates between 2007 and 2008 declined from 8.8% to 6% percent in private consumption and from 19.3% to 7.7% in investment activity. The most vulnerable group of countries within East Europe received shocks through several channels simultaneously. The global crisis made economies fully dependent on exports and foreign financial resources. The drop in industrial exports in the Euro Union have led to a sharp decline on industrial output in Eastern Europe and rise to economic recession.

Romania attracted the greatest value of FDI inflows in the region in 2008. The most important contribution was brought by “E.ON Gaz”. This was actually the biggest capital increase performed in the Country. In 2009, the flow of foreign direct investments attracted by Romania was US\$ 4,8 billion (table.1). The global economic and financial crisis lead the decrease of Foreign investment in the country in 2010 and accounted totally US\$3, 5 billion. The Czech Republic, which historically has attracted around 10% of FDI inflows into the region, experienced a much smaller decline in 2009, than the region overall. In 2008, the Czech Republic saw significant FDI from the automotive sector; investments from Daimler, Volkswagen and Peugeot – Citroen totalled almost US\$1 billion. Real estate and alternative energy were the other key sectors for FDI in 2008. The latter was driven by two large investments by Japan “Wind Development” and “Itochu’. In 2009, total FDI into the Czech Republic declined and accounted \$2. 927 billion. In 2008, more than 60% of total FDI inflows in Latvia were in real estate sector, valued at around \$2 billion, in 2009 country experienced the largest declines in FDI inflows. In

Table:1. FDI inward stock (Millions of dollars)

Years	2005	2006	2007	2008	2009	2010
Bulgaria	3 920	7 805	12 389	9 855	3 351	2 170
Czech Republic	11 653	5 463	10 444	6 451	2 927	6 781
Estonia	869	1 797	2 725	1 731	1 838	1 539
Latvia	707 1	1 663	2 322	1 261	94	349
Lithuania	1 028	1 817	2 015	2 045	172	629

Hungary	7 709	6 818	3 951	7 384	2 045	2 377
Poland	3 930	10 902	3 055	4 665	2 706	1 452
Romania	6 483	11 367	9 921	13 910	4 847	3 573
Slovenia	588	644	1 514	1 947	- 582	834
Slovakia	2 429	4 693	3 581	4 687	- 50	526

Source: World Investment Report 2011

Hungary data from 2009 (Table 1) shows the effect of the global economic crisis on FDI. Investment inflow of \$ 2. 045 billion was considerably lower than the \$7. 384 billion posted in 2008. Reinvestments slumped as a result of the global financial crisis, while other capital flows were negative following an increase in reverse intra-company loans and repayment of debt to parent firms by Hungarian subsidiaries of multinational organisations. This trend continued in 2010 even though the inflow of equity capital increased compared to 2009, reinvestments and reverse intra-company loans decreased inflows significantly.

IMPORTANCE OF RESEARCH AND DEVELOPMENT

Nowadays, One of the most important aspect of the globalization is formation of innovation and scientific - technological sphere. In recent times, the role of new ideas and technological transfer, that are implementing by TNC, plays a crucial role in economy development. TNC are offshoring more and more R&D in different parts of the world. The global environment is characterized with the rapid growth of technological changes and with short product life cycle, TNCs carry out the scientific - research works in the various parts of the world through foreign direct investment and alliances. At present, innovations and new technologies can be processed outside from the based country, however, these functions may no longer be concentrated in the headquarters. The globalization of R&D are promoting the development of new capabilities and nowadays largely seen, as the instrument for sustained economic growth and rising quality of life of the citizens.(Lundvall,1999). Accordingly, developing countries are trying to create a favorable environment for TNCs to provide an innovative activity there. Attraction of foreign investment in Research and Development, helps increasing an innovative potential in developing countries and gives chance to improve more complex products and possibility to have technological advantages, but interests of TNCs to connect with a global innovation network, depending on human resources, relevant institutions and on local firms to develop their potential in these countries.

As mentioned above, global corporations are implementing innovation activity in their foreign affiliates. This creates a global innovation networks. between these branches. Global firms, as well transfer some stages of their work to specialized suppliers (outsourcing), that creates complex networks between firms Off-shoring of Research and Development. Process applies to Asia, East Europe and other non-members of OECD countries. TNCs are implementing FDI in R&D in order to help these markets in developing, as well the main goal is to produce the goods for developed countries with low-cost. Many information technology companies are opening a software center in new emergence markets. For example such software centers are located in East Europe in order to serve costumers in North or Latin America. The Slovenian political, institutional and economic framework went through considerable changes during its transition and the EU enlargement process. Slovenia's economic growth of 4.6 per cent in 2004 was a sign of favourable economic trends. According to the Table 2. In comparison with other countries in the region, Slovenia remains leader with gross domestic expenditure on R&D. In 2009 share of gross domestic expenditure on R&D was the highest, approximately 1.86%.It confirms, that Slovenia performs well in terms of innovativeness and certain other indicators, compared with the other new EU member countries. The institutional framework for research and innovation policy has gone through a multitude of changes, since Slovenia became independent, reflecting attempts to find the most efficient distribution of tasks among the different ministries and the influence of both the scientific and business communities For example, Estonia, the Czech Republic and Hungary have re-oriented their economies towards attracting

Table:2 Gross domestic expenditure on R&D (% share of GDP)

Time	2003	2004	2005	2006	2007	2008	2009
EU(15 country)	1,93	1,89	1,89	1,92	1,93	2,01	2,1
Bulgaria	0,48	0,49	0,46	0,46	0,45	0,47	0,53
Czech Republic	1,25	1,25	1,41	1,55	1,54	1,47	1,53
Estonia	0,77	0,85	0,93	1,13	1,1	1,29	1,42
Latvia	0,37	0,42	0,56	0,7	0,59	0,61	0,48
Lithuania	0,67	0,75	0,75	0,79	0,81	0,8	0,84
Hungary	0,93	0,87	0,95	1	0,97	1	1,15
Poland	0,71	0,75	0,78	0,99	1,17	1,5	1,66
Romania	0,39	0,39	0,41	0,45	0,52	0,58	0,47
Slovenia	1,27	1,4	1,44	1,56	1,45	1,65	1,86

Slovakia	0,57	0,51	0,51	0,49	0,46	0,47	0,48
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Source: Eurostat , 2010

foreign direct investments (FDI), which has fuelled technological progress in these countries. With the lowest level of R&D are characterized Slovakia, Romania and Poland , where share of R&D has been falling for many years., that underlines a weak inovative capabilities in these countries.

In Overall, the favorable factors for development R&D in developing countries are following:

- The presence of technological and research institutions;
- Qualified labor force;
- Markets and customers;
- Low cost work force;
- Proximity of production capacity;
- Generally favorable business-environment

The role of foreign capital in the modernization of East Europe can not be assessed unambiguously. On the one hand, foreign investors have played a key role in the improvement of its structure, but on the other hand, reliance on FDI is not promiss entering to the advanced technological position that is related with three factors:

Firstly, the leaders of international competition, as it well known, usually are not transferring an advanced technologies to the new markets, it may mean for Investors to get rid of labor-intensive or low-profit industries. Most of the industrial investments in the Eastern Europe countries was implemented in such direction;

Secondly, in these countries there is no almost diffusion of technology. The economy is essentially divided into two sectors: a "foreign" - more technological, and national - with low productivity, where local companies producing the products primarily for the domestic market (example of "dualism" is evident in Hungary)(UNCTAD (2003). This is not only a lack of national companies to have not enough financial resources for borrowing technology, but as well the state do not support for investment in joint ventures. The main flow of FDI was directed in the sales of state assets, also to placement the branches of large TNCs and companies that are controlled or wholly owned by foreign capital, as it is well known, practically, no developing cooperative has linkage with local businesses.

Thirdly, in Eastern Europe, the accumulated stock of knowledge is significant, but it is not utilised. Thus, creation of knowledge by itself does not automatically mean that country will benefit from it. Much of the research and development (R&D) in ex-communist countries went on military research. While the military R&D may have spin-off effect t in other areas, it seems that these countries did not benefit from it to a greater extent. The availability of the latest technology weakens the need to develop their own areas of research and development

Despite the presence of a high human capital in all Eastern Europe countries, their share is lower than in EU-15, Lack of support for scientific and technical sphere leads to a weak innovative capacity. An evidence example of this is the small number of patent applications. in 2008, even in Slovenia, where is spending the most significant part of GDP on R & D, application of the patent was twice as less on per capita, than in the EU-15. Lack of support for research and development is affecting negatively on the technological level of production, and hence on their productivity, that can eventually become an obstacle on the path to reach the goal of the strategy. Economic leadership will continue for those countries, that are creating a new technologies and extending them .

CONCLUSIONS

According represented above, we can make the conclusion, that, abundant inflows of FDI in the Eastern Europe countries contributed to the economy growth, improved the structure and competitiveness of these countries, but it lead their deep dependence on external conditions and the decisions of foreign investors. As it seen, Foreign investors do not lead in these countries a technological development. The enterprises with foreign capital are not the driving force of modernization of the economy. As well attractiveness of FDI, without adequate support for scientific and technical sphere, in the long term will increase the economical and technological backwardness of the Eastern Europe countries. From the analysis of contemporary data of these countries, we can conclude, that in general, countries that invest more in research and development yield better results in per capita income. For example, Slovenia clearly sticks out to confirm this conclusion.

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