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# FOREIGN INVESTMENTS AND ECONOMIC CATCHING UP: THE CASE OF HUNGARY

*Both economic history and theory show us that foreign capital is indispensable in the process of modernization. Countries in Central and Eastern Europe in the late 80s were facing an extremely challenging double task: they had to transform both their political and economic systems. Despite the difficulties most of them tackled all the problems with remarkable success, creating the bases of market economies and democracies simultaneously. Rapid privatization and institution building signed the way of Hungary, the first mover in the transition process, and – as a consequence – strong capital inflow (mostly FDI) occurred. The domination of MNCs has become evident by now, and outward investments began to rise, too. In this paper we analyze foreign direct investments in Hungary, the activities of multinational companies, and the characteristics of outward investments in the last two decades.*
*JEL: F23, G31, G38*

The last couple of decades in Central and Eastern Europe have proven that it is possible to simultaneously transform the political and the economic system from a socialist command economy and a communist political regime to a market economy in a democratic environment. Almost all of the countries in the region have shown remarkable performance since the beginning of the transition process, and as a sign of their maturity, ten of them have successfully joined the EU. One of the most striking features of the development was the huge capital inflow into the region, which dramatically altered not only the structure and functioning of domestic economies, but also their positions and roles in the world economy.

This transformation has been paralleled by another, which – among others – has dramatically changed the relationship between enterprises, states, and even individuals, created new production and management solutions, and made information the most important factor of production. This process, globalization, has been very deep, and can be caught not only in the economy, but in politics, and social relations, too. However, we can easily identify the main agent of these changes: it is the multinational enterprise (MNE). In this paper we will try to link the post socialist transformation to the activities of MNEs. We will assess their contribution to the catching up process both in theory and practice, study some lessons from economic history, and analyze how important foreign direct investment has been in Hungary, where the transition first completed.

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In the first part of the paper we turn to economic history, and try to search for some examples that show strong links between rapid development and foreign capital imports. Then we sketch some theoretical considerations regarding foreign direct investments and the activities of MNEs, review the earliest literature in the subject, and set up the theoretical frame we will use in the next two parts. Both of them deal with Hungary, the first mover in the transformation process. In the first we will analyze several aspects of inward investments: industrial patterns, technological characteristics, and foreign trade linkages. In the second we will assess the possibilities of Hungarian outward investments. We will conclude with some general observations, and remarks.

## Lessons from Economic History

Foreign direct investments first occurred in the late nineteenth century, and always had a crucial role in shaping economic relations. In the last two or three decades the process has accelerated in a large extent, and transformed the whole system of worldwide production and services. Capital transfers affected both home and host economies, and influenced the relative positions of the countries in the world economy.

Although original forms of capital exports appeared already in the seventeenth century (in form of trading posts), true multinational firms in organized form were created only two centuries later. In that era the most powerful nation in the world was undoubtedly Britain, but two contenders were narrowing the gap step by step: Germany in Europe, and the United States in America. Although British investors made huge investments abroad, these were mainly portfolio investments. If we consider the size of the empire, and the fact that it was the British financial power (not the British enterprises) that underpinned its role as a leader, we can't be surprised at this phenomenon.

At the same time the new challengers invested more and more direct capital to nearby regions: Germans to Central and Eastern Europe, and Americans to Central and South America, while at home the rapidly growing domestic companies became the motors of development[2]. These domestic companies operated in industries which were in the forefront of technological development: machinery, electricity, and chemistry. They obtained competitive advantages not only by means of their technological advantages, but by their new organizational practices. This era (sometimes called second industrial revolution) saw the development of modern industries and with it successes of capital exporters[3]. Soon the new leaders in the world economy were the United States and in Europe Germany. However, rapid economic growth occurred not only in capital exporter countries, but in host economies, too. Areas that attracted lots of capital, like Russia or the Austro-Hungarian Monarchy also showed remarkable development. The liberalized environment allowed both the leaders and the followers to accelerate their growth rate. The most important factors of success were high R&D expenditures, introduction of modern management techniques, and the creation of unified markets.

[2] See Wilkins [1970].
[3] See Chandler [1990].

After World War II the United States got in a hegemonic position, while the isolation of the socialist world stopped the capital flow in that direction. From our point of view the most interesting feature of these decades was the emergence of Japan as an economic challenger of the United States. Like in the case of the United States and Germany FDI here didn't play a crucial role in development, too[4]. But, contrary to the period of the second industrial revolution, Japan's success story was neither based upon its originality, nor its prominence in technology. The factors behind the wonder based upon its cultural heritage: adaptation, discipline, and well-defined economic strategy. Once again it was the performance of the domestic enterprises that promoted rapid economic growth. Foreign capital existed only in form of joint ventures, while the export oriented strategy went together with protectionist trade policy and with the revival of the traditional Japanese enterprise system. By the 80s Japan had become one of the most developed countries in the world.

In the last couple of decades there were other successful attempts to join the narrow group of developed countries, above all in East and Southeast Asia. Rapid economic growth occurred among others in Singapore, South Korea and Taiwan. They followed similar strategy to the Japanese one, but because of the relative weakness of domestic capital sources they relied mainly on foreign direct investment. Learning the lessons of the Japanese way these countries sought possibilities in industries where comparative advantages could be exploited at the given level of development: first labor intensive industries, then in heavy industries, after that in electronics, and nowadays in high tech industries. Behind the successes here we can also find high R&D expenditures and proper economic policy.

## Theoretical Background

Lessons from economic history slowly began to influence economic theory, too. In the beginning economists didn't study the activities of large multinational companies, they were instead targets of political economists[5]. Oligopolistic (or sometimes monopolistic) competition based on economic power and increasing economies of scale[6] didn't fit into the paradigm of classical economics based on perfect competition. From the middle of the twentieth century more and more researchers began to study large corporations and foreign direct investments. They wanted to answer such questions like why companies started to found affiliates abroad instead of exporting their products. After the groundbreaking works of Hymer[7] and Vernon[8] it was Dunning[9] who reached a systematic and coherent synthesis in his so called eclectic theory, in which he studied the most important causes of foreign direct investments.

In the center of the theory stands the well-known OLI paradigm, which tries to catch the causes of foreign direct investments in three factors. First, there are owner-specific advantages like intangible assets of the firm, technological advantages, or any other firm-specific assets. Second, there are location-specific

[4] Wilkins [1974]
[5] like e.g. Hilferding [1955].
[6] see Arthur [1989]
[7] Hymer [1976].
[8] Vernon [1966].
[9] Dunning [1993].

advantages, which occur in the location of the investment in forms of raw materials, exploitable markets, or attractive factors of production. And third, there are internalization advantages, which can be make use of by internalizing conditions that are external to the firm, so they can be integrate into the firm's own production and management system. According to Dunning multinational companies choose to outsource their production instead of exporting due to the combination of these three factors.

Vernon tried to answer the question why companies moved abroad in a given point of time. He investigated links between the life cycles of products (or industries) and the timing of foreign direct investments[10]. He found that firms moved abroad when the product was already standardized, R&D expenditures decreased, and specific decisions were followed by routine processes. These tasks were much easier to be carried out by less qualified workers, and could be transferred to an affiliate. Other researchers made distinctions between different types of multinational firms, like exporting, multidomestic, and global ones, as a measure, how centralized a company was.

It was once again Dunning who systematized the types of motivations of MNCs in moving abroad. The four groups he made are as follows: resource seeking, market seeking, strategic asset seeking, and efficiency seeking investments. In the next part of this paper we will investigate these different motivations in the context of direct investments in Hungary. We will talk about the timing, goals, and types of investments, and analyze the contribution of MNEs to the performance of the Hungarian economy.

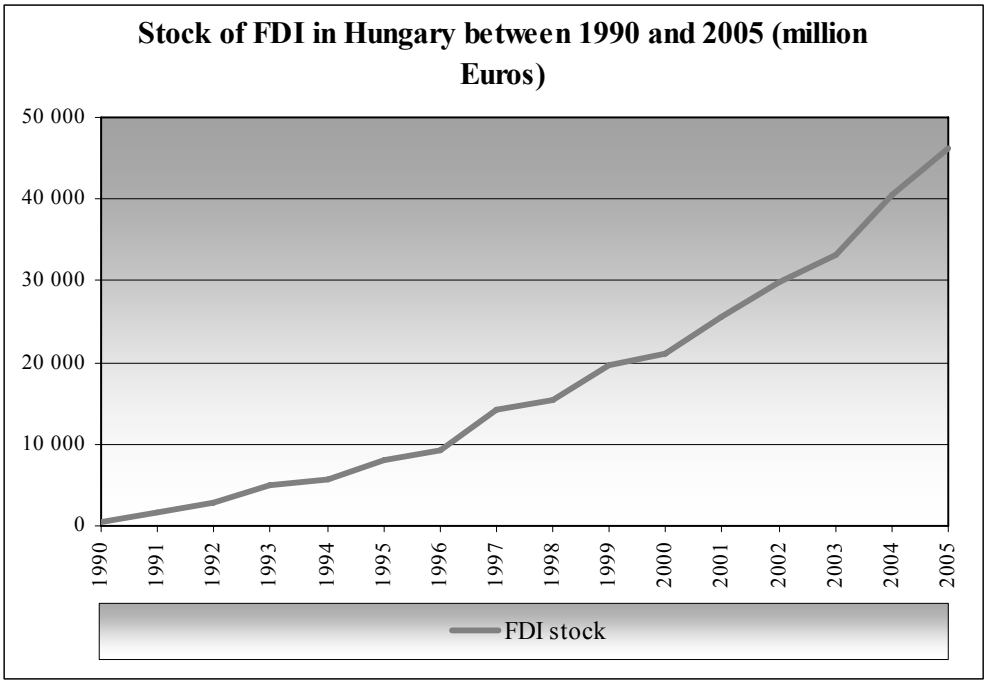
**Foreign Direct Investments in Hungary**

In Hungary the building up of institutions of the market economy, and the catching up process to other developed countries has begun after 1990. The out of date, ineffective, and deformed firm-structure hasn't been sustainable, it needed radical transformation[11]. This simultaneous need of modernization and transformation required so much capital that exceeded the possibilities of the country. The weakness of both private and state capital (and the indebtedness of the latter) made it evident that without significant capital import the tasks couldn't be carried out.

Most of the countries in the modernization process used a huge amount of foreign capital to narrow the gap between them and the developed ones, and this capital import consisted of mainly portfolio, not direct investments. However, the situation in Central and Eastern Europe has been largely different from that of modernizing Western European, and American countries, especially because of the joint need of rapid catching up, and the difficulties of building up the institutional framework. The latter included the lack of financial institutions, which were crucial to channel savings from households to the investors. So, in the beginning, it was obvious that foreign investors could only choose the form of direct investments. Diagram 1 shows the stock of foreign direct investment since 1990:

[10] In an article Székely-Doby [2006] tried to apply the theory to the IT industries.
[11] See: Kornai [1993].

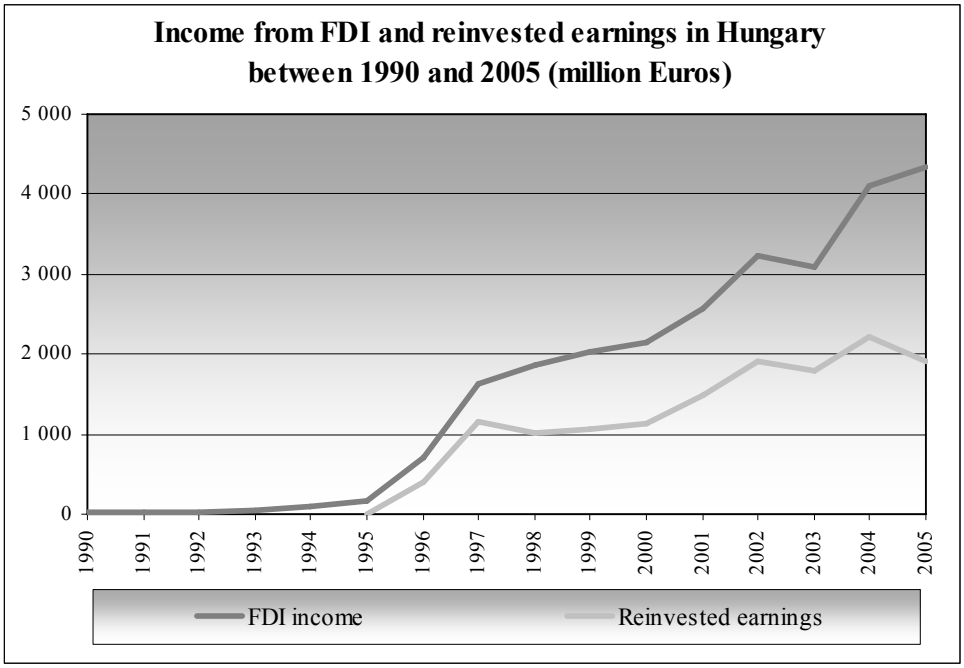
Diagram 1




Source of data: Hungarian National Bank (MNB [web])

As we can see, the presence of foreign capital in Hungary is very substantial. Beside the huge capital stock, the share of foreign-owned companies in value added in different industries is very impressive, too. In all industries this is about 40 percent, but in the transportation equipments industry, and electrical machinery their shares are much higher: 90, and 84 percent, respectively. Because these are largely capital intensive industries, it is not surprising that their share in assets (45 percent) is even higher than that of value added, and that their weights in employment is only about 25 percent. There is a large gap in foreign gross fixed investments between manufacturing and services industries. Compared to all gross capital formation, their share is 70 percent in the former, and hardly more than 20 percent in the latter. The role of multinational companies is especially crucial in Hungarian foreign trade: 80 percent of all exports and 75 percent of all imports are linked to them. The most important branches are machinery and transportation equipment industry with 90, and 85 percent shares in exports and imports respectively.

Diagram 2




Source of data: Hungarian National Bank (MNB [web])

Investments tend to be profitable only after some time, usually two to five years. The same phenomenon occurred in Hungary after the systemic transformation. On Diagram 2 we can see the income of foreign affiliates in Hungary in the past one and a half decade. Data illustrate that income began to rise in the middle of the 90s, after a four or five year lag. The situation with reinvested earnings is similar to this, with the difference that profit repatriation began after 1997. However, this process seems to be natural, and we mustn't treat it as an adverse symptom of foreign investments. On the contrary, this underlines the profitability of Hungarian businesses, and until reinvested earnings are high enough, we can be optimistic.
Composition of Hungarian FDI stocks is shown in table 1. About three quarters of all investments came from the from the former 15 member states of the EU, with three countries (Germany, the Netherlands, and Austria) comprising more than half of them. In the same time, the other two members of the Triad, the United States, and Japan have only a share of about 6 percent. To be correct, we have to add that after the systemic change the largest American multinationals were among the first who invested in Hungary, but after buying out strategically important companies, their interest diminished dramatically. These figures show that even amid strong globalizing tendencies, geographic proximity plays a crucial role in choosing locations for production, and services. From this point of view EU membership through unifying regulation and institutional solutions only strengthens these processes.

Table 1

**Stock of FDI by countries of origin in Hungary (million Euros)**

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|
| Germany | 6 317 | 8 607 | 7 875 | 8 576 | 9 680 | 9 694 | 11 808 |
| The Netherlands | 2 183 | 2 700 | 3 074 | 3 828 | 4 412 | 6 523 | 7 174 |
| Austria | 1 370 | 1 557 | 1 870 | 2 755 | 3 236 | 3 725 | 4 594 |
| France | 865 | 1 056 | 1 161 | 1 392 | 1 571 | 1 442 | 1 905 |
| USA | 1 050 | 1 284 | 1 597 | 2 273 | 2 473 | 1 729 | 1 805 |
| Luxembourg | 128 | 208 | 231 | 317 | 471 | 1 451 | 1 802 |
| Japan | 122 | 145 | 139 | 426 | 520 | 569 | 675 |
| Other | 3 272 | 4 180 | 5 102 | 5 977 | 7 396 | 8 106 | 10 664 |
| EU15 | 11 938 | 15 318 | 15 955 | 19 132 | 22 175 | 26 399 | 31 619 |
| EU25 | 12 050 | 15 438 | 16 143 | 19 342 | 22 521 | 26 691 | 31 884 |
| *Total* | *15 306* | *19 738* | *21 048* | *25 543* | *29 758* | *33 239* | *40 426* |

Source of data: Hungarian National Bank (MNB [web])

When we were talking about FDI theories, we mentioned four kinds of motivation that could drive investments. These were: resource seeking, market seeking, strategic asset seeking, and efficiency seeking investments. Timing of investments in Hungary follows a specific pattern regarding these categories. In the beginning of the transition process large multinational companies acquired those Hungarian state enterprises that were highly competitive in world markets (like privatization of Tungsram by General Electric). The main goal of these investments was to acquire unique strategic values that could largely contribute to the functioning of the global production network of the multinational firm. Early in this period there were another wave of investments that aimed at acquiring Hungarian (and sometimes whole regional) markets (e.g. in Hungarian food, beverages, and tobacco industries).
These “first round” privatization transactions were carried out by large multinational companies independently from their geographic origins. Other resource seeking investments began to rise only after this initial wave of FDI, and were driven mainly by the relatively cheap labor force. Contrary to strategic investments these ones were less long-lasting, and foreign investors frequently moved further searching even cheaper environment for their activities (the most evident example of this behavior was the downsizing of the hardware manufacturing complex of IBM). Because the last type of motivation according to the theory is to improve efficiency, which is part of the global strategic optimization process, it is very difficult to link it either to particular industries or companies. At the same time it is obvious that if we can join these global network systems, Hungary can largely improve its competitiveness position in the long run.

Table 2

**Stock of FDI by industries in Hungary (million Euros)**

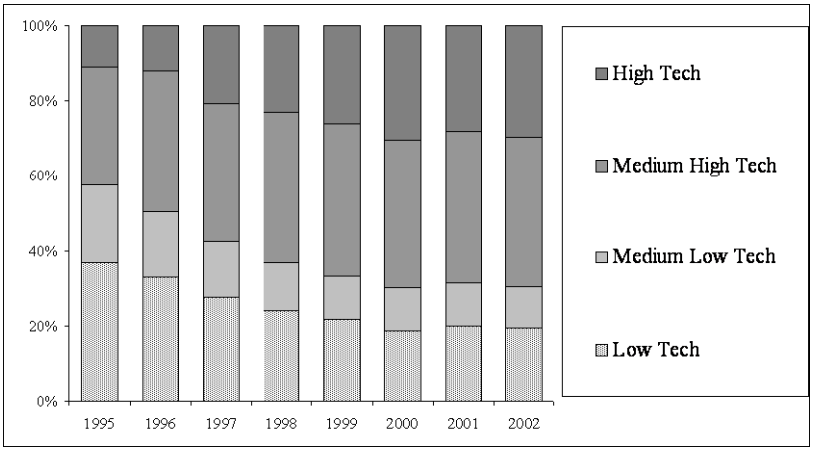
| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|---|---|
| Transportation equipments | 849 | 1454 | 1661 | 2833 | 3247 | 3762 | 4387 |
| Chemicals | 611 | 787 | 1004 | 1315 | 1696 | 2523 | 2318 |
| Food, beverages, tobacco | 1107 | 1248 | 1478 | 1882 | 2022 | 1976 | 2093 |
| Electric machinery | 1331 | 1541 | 1892 | 2438 | 2754 | 2981 | 3571 |
| Other manufacturing | 1834 | 2162 | 2435 | 3119 | 3890 | 3963 | 5493 |
| Trade | 1358 | 1718 | 1954 | 2649 | 3469 | 3250 | 4067 |
| Transportation, post, telecommunications | 3323 | 4755 | 3477 | 2968 | 2968 | 2872 | 3989 |
| Finances | 1558 | 1826 | 2133 | 2689 | 3062 | 3343 | 4262 |
| Real estate, business services | 887 | 1565 | 2380 | 2672 | 3435 | 5629 | 6798 |
| *Total* | *15306* | *19738* | *21048* | *25543* | *29758* | *33239* | *40426* |

Source of data: Hungarian National Bank (MNB [web])

In table 2 we can see FDI by industries in Hungary. There are several interesting trends behind the numbers. First, nearly all industries show dynamic growth rates, due to mainly reinvested earnings. Second, there are new areas in the FDI landscape where the growth rates are even higher: the most prominent are finances, and other business services (including software services). Investment stock in these areas had become fourfold in 6 years, and reached a remarkable 25 percent share in all FDI stocks. This fact illustrates a new trend towards industries with higher technological level seeking relatively cheap but highly skilled workforce. Diagram 3 shows the technological breakdown of Hungarian exports.

Diagram 3

Technological breakdown of Hungarian exports

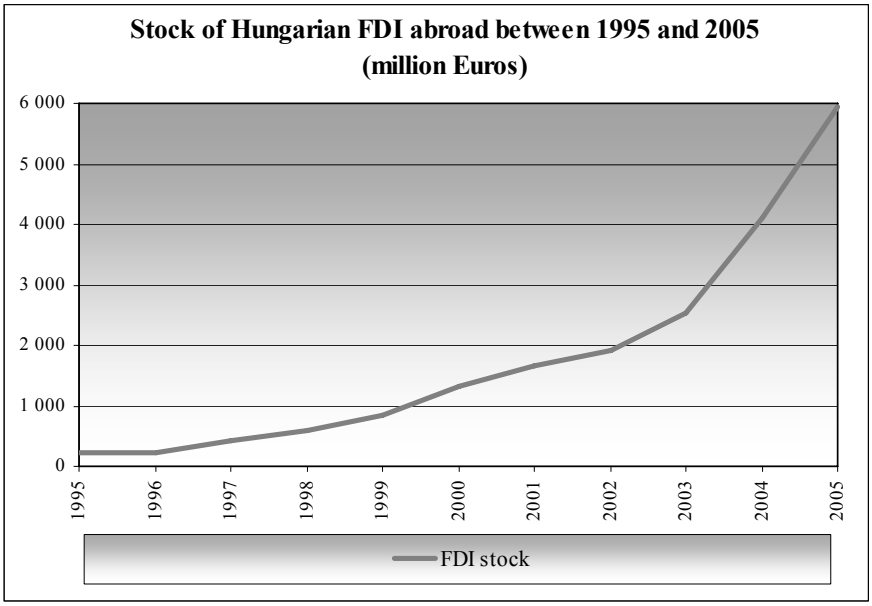



Source of data: Hungarian Statistical Office (KSH [web])

## Hungarian Investments Abroad

The level of economic development in a country is well demonstrated by the ability of domestic businesses to invest abroad. Although for a decade in Central and Eastern Europe transition countries had been almost exclusively targets of inward FDI, from the late 90s some of them have shown also signs of growing FDI outflows. In the beginning challenges of the systemic change, and all the difficulties arose in the process didn't enable domestic enterprises to spread their influence across borders, so it was only at the end of the millennium when substantial outward investments were made. Economic history teaches us that countries in the catching up process begin to invest abroad very soon after the first huge wave of inward investments.

Diagram 4




Source of data: Hungarian National Bank (MNB [web])

Hungary was the first country in the region that began to invest larger amounts of capital abroad, less than 10 years after the fall of the iron curtain. Values of Hungarian outward investment stock are shown in diagram 4. The main targets of these investments (with more then three quarters of all stocks) are the countries in the CEE region: Slovakia, Macedonia, Croatia, Poland, Bulgaria, and Romania. Because the Hungarian economy is relatively small, we can't expect that outward investments are to a great extent diversified. On the contrary, it is much more probable that only the biggest companies have the power to expand abroad. And, indeed, this is the situation in Hungary: the biggest investors are shown in table 3. It is also evident that beside the low number of companies with outward FDI the number of industries is even lower. We can find substantial FDI only in three industries: oil industry, finances, and wholesale trade. Although capital outflows are

relatively small compared to those of from more developed countries, they seem quite significant in regional context.

Table 3

Largest Hungarian companies investing abroad

| Company | Industry | Country |
|---|---|---|
| Dunapack | Paper and paperboard | Poland, Ukraine, Croatia, Romania, Bulgaria |
| Magyar Telecom | Telecommunications | Macedonia |
| Mol | Refined petroleum products | Slovakia, Croatia |
| Pannonplast | Rubber and plastic products | Romania, Ukraine |
| OTP Bank | Financial intermediation | Slovakia, Bulgaria, Croatia, Romania |
| Richter Gedeon | Pharmaceuticals | Poland, Romania, Ukraine, Russia |
| Synergon | Business and management consultancy activities | Czech Republic, Croatia |
| Videoton | Electronics | Bulgaria |
| Zalakerámia | Ceramic tiles and flags | Croatia, Romania |

Source: Túry [2005].

The amount of FDI outflows is very important not only because of the activities of the largest Hungarian multinational companies, but also because of two other reasons. First, regional position of a country is largely determined by its economic power, which is tightly linked with the power of its largest companies. In this sense Hungary can have a very influential role in shaping regional economic processes through outward FDI. Second, income from affiliates can largely improve the current account, which can be very important in the future. Although so far this contribution hasn't been too significant (a little more than 700 million euros in 2005), we expect it to rise dramatically in the years to come. Another important feature may be the continuing expansion of small and medium enterprises. This prospect is not surprising at all because of cultural similarities and the Hungarian minorities in neighboring countries. Industries like food processing, tourism, retail trade, health care, and other services where knowledge of the place and the language is of great importance can offer the most possibilities for these enterprises.

**Concluding Remarks**

Both economic history and theory show us that foreign capital has been indispensable in the process of modernization. The double challenge that occurred in the late 80s for countries in Central and Eastern Europe seemed extremely difficult to answer. But most of them tackled all the problems with remarkable success, creating the bases of market economies and democracies simultaneously. Rapid privatization and institution building signed the way of Hungary, the first mover in the transition process, and – as a consequence – strong capital inflow (mostly FDI) occurred. The domination of MNCs has become evident by now, and as a marker of development outward investments began to rise, too.

How to deal with these phenomena? Should a small open economy take steps to induce even more foreign capital inflows, or is it time instead to help small and medium enterprises rather than MNEs? What about outward investments? Are they truly fingerprints of a mature economy, or should we treat them as a consequence of unique positions of some huge Hungarian enterprises. How to handle regional inequalities which are only increased by the activities of multinationals? These and other questions (including the need of reducing vulnerability) show that there are no clear answers to the problems caused by the processes we analyzed in this paper. It is now evident that the linkages between economic development and FDI are very strong, and we hope that policy makers will find the right approach to the problems through a coherent foreign economic strategy. Perhaps this review helped them in some extent.

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