

# FDI TOWARDS CENTRAL AND EASTERN EUROPEAN COUNTRIES: A GUIDE ON A RECENT ISSUE IN EUROPEAN ECONOMICS

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## Abstract:

This paper, presenting an overview of the determinant and pattern theories of Foreign Direct Investment (FDI), tries to outline the nature of the investments' flow towards Central and European Countries (CEECs), mainly undertaken by Multinational Enterprises (MNEs), and the structural characteristics of this process in manufacturing industries.

It is claimed that while EU accession appeared to be a pre-requisite for starting FDI in CEECs, determinants behind MNEs' investment strategies were different depending on the particular industry. Moreover, it seems that in certain industries a "Flying Geese" pattern of investment is actually taking place.

**Keywords:** Theories of FDI, multinational enterprises, relocation of production, Central and Eastern European Countries.

**Jel codes:** F21, F23, L60.

## 1. INTRODUCTION

FDI by European firms from the old EU-15 as well as new investment flows by overseas companies in Central and Eastern European Countries (CEECs) has recently become a subject of great interest in European economics.

This trend is nowadays particularly popular because of the 4th EU enlargement exactly in direction of the CEECs, planned and designed by the European Commission keeping in perspective the possibility of an industrial restructuring process mainly (but not exclusively) in manufacturing.

Indeed, industrial restructuring, first of all along the lines of the competitive advantages of the integrating countries, has taken place. Companies began to internationalize (or off-shore) economic activities, relocating productive processes towards foreign subsidiaries<sup>1</sup> which normally are represented by cheaper locations (Hunya and Sass, 2005): for example, Lego, the Danish owned toy manufacturer, starting from 2004 moved some production from Denmark to Czech Republic and subsequently, in august 2005, announced that all activities

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<sup>1</sup> Statistically, a firm is termed "foreign subsidiary" when more than 10% of the equity share are owned by a foreign enterprise (Hunya, 2006; Rojec and Damijan, 2008).

in Switzerland would be relocated to Czech Republic, Romania and Bulgaria; Delphi Packard Austria, subsidiary of the U.S.-based automotive components group Delphi Corporation announced that it would cut its Austrian workforce<sup>2</sup>. Nonetheless, vertical restructuring was not the only determinant in the decision of a FDI strategy by firms. In certain industries, in fact, Multinational Enterprises (MNEs) used FDI as an instrument to relocate productive activities in CEECs to pursue different objectives like market access and new market creation.

Within the context of FDI, some questions play a central role:

- does the relocation via FDI causes the fall of home country production, exports and employment having a substitution effect upon domestic processes (Galgóczy et al., 2005).
- what are the structural characteristics of the FDI flows.

Whereas the first issue is of particular interest for investing countries (EU-15, but also other investing countries like Japan, U.S.A. and Korea), the second issue represents the main issue for CEECs as FDI recipient countries.

While most attention in the recent literature has been devoted to the first question, i.e. to the influence of FDI on investing countries' production and employment, the aim of this paper is, presenting an overview of the theories relative to determinants and patterns of FDI and making use of this theoretical scheme as a basic tool for the descriptive analysis in manufacturing industries, to discuss the second issue and try to derive from the existing analysis a plausible explanation for the growth in the figures concerning FDI towards CEECs. A brief sketch related to which industries are at core of the process is also provided.

The rest of the paper is organized in the following way. Section 2 shortly review and discuss various FDI theories concerning both determinants and patterns. In Section 3 a descriptive analysis of the MNEs' determinants of the FDI strategy and patterns in CEECs in this last years is presented. Finally, Section 4 concludes.

## **2. THEORIES OF MNES: DETERMINANTS AND FDI PATTERNS**

FDI is generally used as a "trend" indicator: it denotes the intention of an entrepreneur (mainly a MNE) from country A to acquire a lasting interest in assets in country B, including management and control in all forms, e.g. network of contacts, marketing, but also technology etc.

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<sup>2</sup> For a survey of cases concerning relocation both in western Europe and in CEECs, see Eurofound (2006).

But how does an entrepreneur take the decision regarding the start of international business? What are the determinants that could explain the international activities (which FDI represents one of the most important) concerning MNE and push firms to go international? And which path do investments follow over time? There are many theories trying to explicate particular and sometimes complementary aspects of the reasons why firms engage in trans-border activities and the development of the same. This section represents an attempt to concisely illustrate these theories.

### *2.1. MNE: determinant theories*

The determinants of MNEs' management decisions regarding why, how, and where to move internationally are of various nature and, of course, could change over time.

At the end of the 80s-beginning of the 90s, FDI was an instrument for MNEs to prevent taxation on international trade. MNEs established production plants in those locations where an important demand for their goods was given and where it was predicted the formation of economic blocs, for instance, the creation of custom unions, the increase of tariffs and non-tariff barriers, etc. Recently, other determinants seem to be more significant to locate a subsidiary in a foreign country or to delocalize productive activities (and/or services) than the mere participation within an economic bloc.

The decisional process related to the start of international activities and the choice of a new location are generally treated in a quite simple way in public debates. In reality, these are complex phenomena. Firms undertaking the decision to change their previous locations, as well as firms that want to take decisions in order to start international business, have in mind a set of qualifications that the new location must satisfy. Many choices have to be faced (e.g. strategy about distribution) and many variables could affect the final decision. The complexity of the international environment that the management has to deal with is roughly boundless; and decision makers have not a perfect knowledge of all the variables influencing international business.

The behavioral economics approach of Hosseini (2005) moves exactly from the perspective that the management is formed by individuals having both bounded rationality in the decisional process and limited information about the international environment when the choice to go international and to make FDI is undertaken. The decision model based on behavioral economics reflects the capacity-difficulty (C-D) gap model of Heiner (1983; 1985): in this approach, the FDI decision (or whatever other form the international activity will take place) is undertaken if

$$B(P, E) > T(E)$$

The left-hand side of the inequality represents the reliability ratio, namely the ratio of the probability that to make a FDI (or other international activities) is correct (FDI assures a gain) relative to the probability of incorrectly making FDI when this is an incorrect decision. This ratio depends both on the perceptual capabilities of the management ( $P$ ) and the environmental complexity ( $E$ ). Instead, the right-hand side represents the tolerance limit, that is, the ratio between the risk-adjusted expected losses over the risk-adjusted expected gains of making FDI. As long as new information are available, these are processed by the management and, depending on their reliability, the decision process will be modified<sup>3</sup>. Not all managements have the same capability to process Information. Hence, following this approach, the internationalization of economic activities neither will be taken in the same way by all firms, nor it will be taken by all firms. The decision of making FDI is carried out only by those firms for which the previous inequality holds and it is not undertaken by firms with a C-D gap. If decision makers do not have a C-D gap, there are not difficulties to infer new information. Consequently, it is not possible to commit mistakes. This is the situation faced by the standard neoclassical optimizing model hypothesis.

Hence, when neoclassical models are considered, the decision regarding to start international business is always correctly undertaken. But, what are the main features that may push a firm to become a MNE? Depending on different characteristics, diverse models of MNEs could arise.

An attempt to explain the existence of a MNE is given by the financial theory based upon the portfolio diversification theory (Brainard and Tobin, 1992): a firm becomes a MNE because of the uncertainty surrounding firm activities determined by the fluctuations in the rate of returns on capital invested in different countries. Additionally, firms could make investment in other countries to acquire firm specific assets to avoid the exchange rate risks due both to appreciation and depreciation of the national currency of the firm involved in international operations. However, the financial approach seems to explicate the existence of MNEs in limited cases. MNEs' activities are not only of financial nature. Depending on the identification of the main determinant and nature of operations of their affiliates within a country, it is possible to distinguish principally four types of FDI (Dunning, 1996):

1. market-seeking (demand oriented) FDI: these investments are basically undertaken in search of new markets. A firm starts to replicate the same production process (horizontal FDI, HFDI) in a foreign country either to have a better access to host-country markets, replacing trade; or with the intention of

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<sup>3</sup> For the analytical details see Hosseini (2005).

taking advantage of the affiliate as an export platform in such a way to allow for a higher degree of penetration within additional adjacent markets which are expected to grow, complementing trade;

2. efficiency-seeking FDI: in this case, investments are related to the organization of a vertical (vertical FDI, VFDI) division of labor between home and host country in order to exploit factor endowment differences, optimizing value chains. Hence the rationale of this kind of FDI is cost minimization<sup>4</sup>. It is possible for the MNE to concentrate the production of a good, or of some components, in a foreign location and successively export back to home country; in general, these investments are complementary to trade;
3. resource-seeking FDI: these investments are due mainly to the availability and cost of the resources in the target location; the goods are often exported abroad subsequently;
4. strategic asset-seeking FDI: this kind of investments are conducted in order to protect and increase ownership specific advantages such as property rights, specialized management capabilities, ability to innovate, marketing systems etc.

Although this classification is not completely clear and unambiguous, it allows to make a first schematization<sup>5</sup>.

When also the strategic issue is considered, the industrial organization theory offers some additional insights to explain the existence of MNE and the meaning of making FDI. A first theory is represented by the market power approach, elaborated by Hymer (1976), which argues that MNEs first of all exist to remove international competition among firms and to increase returns from utilization of special advantages. A second possibility is represented by the "follow-your-leader" ("me-too" hypothesis) theory: MNEs undertake international business in order to minimize risks and protect their market position. Hence, when a new market opens, a firm operating within an oligopolistic market will follow the domestic leader where it will place his plant. Strictly related is the "exchange of threats" theory: in an international oligopolistic competition with rivalry within the same industry, to make a FDI could be explained as an exchange of threats between firms (tit-for-tat strategy) regarding business moves by foreign rivals: firms observe the actions of their rivals and successively they counter react.

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<sup>4</sup> Obviously, cost reductions have to outweigh trade costs (factor cost differential).

<sup>5</sup> In fact, there could be cases of overlapping: HFDI may also be influenced by cost differentials, as it will be seen below in the case of the product cycle theory; development of new products, that represents one of the first stage of some productive process, can be carried out by R&D departments present in more than one country; as mentioned earlier in the main text, export platform subsidiaries not only serve the host country but also neighbors, and hence at same time replicate domestic process but are complementary to trade.

It follows that for industrial organization theories the existence of MNEs is primarily due to the presence of structural market imperfections. But market imperfections could be given also by the transaction costs: in this case a firm could decide to undertake FDI because of incomplete contracts and the subsequent ex-post contractual opportunism (hold-up), missing markets etc. Hence, a firm could become a MNE to internalize (internalization theories) the supply of production's inputs (Grossman and Helpman, 2002). This occurs when intra-firm cooperative association within the same group is more efficient than relations between individual firms, that is, to collaborate with input suppliers is cheaper than to buy the same input furnished by markets.

The knowledge-capital (KC) model developed by Markusen (1997, 2002) tries to make a partial synthesis, incorporating both vertical and horizontal FDI: FDI are not driven by reasons related to market access or factor endowments but, rather, FDI and the "birth" of a MNE are driven both by factor costs and market access reasons. HFDI and VFDI are treated as special cases of the KC model. The structure of the MNE and the type of international activities are determined by the relative endowments and prices of the productive factors<sup>6</sup>.

Also the eclectic paradigm of Dunning (1977, 1988, 1995, 1996, 2003) try to encompass the previous theories concerning the existence of MNE. According to this author, the decision to go international and make trans-borders activities by a firm is the result of a joint mix of three independent factors (O-L-I paradigm):

1. the control of income generating owner-specific (O) advantages like tangible and intangible assets, management capabilities, organizational and marketing systems, innovation capabilities, property rights, structures;
2. location (L) specific advantages of the target country such as market size, anti-dumping laws, tariff, transportation costs, factor endowments etc.;
3. internalization (I) advantages, namely how firms consider to internalize activities rather than get involved in arm length operations.

The O-L-I paradigm claims that the combination and the configuration of these three factors delineate which firms become MNEs, the time and where they will establish their activities. Nonetheless, the strategic aspects of this choice represent one of the endogenous variables that may affect the O-L-I configuration of a MNE<sup>7</sup>.

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<sup>6</sup> in the KC model the productive factors are only skilled and unskilled workers.

<sup>7</sup> The eclectic paradigm is also correlated with the portfolio theory via location (L) advantages: in fact, financial market conditions and risk factors are important determinant in the investment decision process (Dunning, 2001).

In addition, there are at least three more dimensions that a firm takes into account when decides to make international activities (Jovanović, 2006):

1. overall cost minimization;
2. availability of the requested technology in the host country;
3. taxes and fiscal incentives: these have, in general, a small impact in the decision to undertake FDI, but they have a significant impact in the location choice when these are similar.

Although not completely exhaustive, the theories presented until now offer a first broad perspective on which could be the determinants<sup>8</sup> influencing the decision to undertake international activities and in particular FDI. However, until now it was depicted only the decisional process to become MNE, but the patterns of foreign activities, and in particular of FDI, that could arise were not described. This will be done in the next subsection.

## 2.2. FDI patterns

How do FDI flows evolve and move from one country to another? In which way are these flows related to firms' strategies? To give an explanation of these phenomena are generally used both microeconomic and macroeconomic arguments, each theory stressing more one aspect or one another. Below the main theories are briefly sketched.

A first, microeconomic oriented, justification of FDI pattern and movement across countries is due to an enormously influential article written by Raymond Vernon (1966), in which he described a natural product life cycle. The greatest part of new goods is firstly manufactured in the country where they are initially developed. When the product reaches its mature stage and its production techniques are finally standardized and characterized by high labor intensity, the role played by R&D becomes less important while a decisive role is assumed by wage level cost. Accordingly, the production locations are passed (generally by MNE) from high wage countries on to low wage countries which presents a comparative advantage in such a matured product via FDI.

Micro variables as factor endowments and intangible assets and macro elements like trade and industrial policy are instead combined in the "Flying Geese" (FG) model initially presented by Akamatsu (1961; 1962) and subsequently developed in various works by Kojima (1970; 1973) and Kojima and Ozawa (1984). The FG model aims to explain the catching-up process of industrialization in de-

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<sup>8</sup> A wider and more comprehensive list of determinants to start international activities could be found in Jovanović (2006, 256-257).

veloping open economies which consists of a basic pattern, where a country that enters in to an international economic relationship with an advanced country (the "lead goose") grows and restructures a typical industry passing through the following five stages (Dowling and Cheang, 2000):

- Stage 1: a new industrial product is introduced via imports from the advanced lead country for consumptions, while the developing country exports toward advanced economies their primary products; some domestic production starts;
- Stage 2: domestic production of the imported goods gradually starts to substitute imports from advanced countries, due to the fact that concentration of purchasing power on these goods makes domestic production profitable, stimulated by domestic government; foreign investors start to invest but in small amounts;
- Stage 3: domestic production increases; strong exports to other countries of these consumption goods that now are domestically produced and starting production of capital goods; inward FDI becomes significant as the same industry in lead country has lost its comparative advantage and has started to relocate to follower countries;
- Stage 4: domestic production of consumption goods slows down in face of increasing costs and intensified competition from late-starting countries; exports decline or decrease, due to the fact that these goods are now produced in other less advanced countries; inward FDI falls as investors are attracted to late-starting countries; capital goods domestically produced starts to be exported;
- Stage 5: loss of competitiveness and relocation of production to late-starting countries.

A variant pattern of the model describes the way in which the production is rationalized and industries are diversified and upgraded from consumer goods to capital goods or from simple to sophisticated goods, promoting national development.

The regional transmission of the FG scheme of industrialization is facilitated by FDI intended to support trade between the countries that belong to the same region: an investing country's disadvantageous production is relocated toward a host country which presents a comparative cost advantage<sup>9</sup>. In accordance with the regional spread of the FG industrialization, the structure of the industry and exports in each country converge into a more or less similar pattern. It follows that intra industry promotion is important to circumvent trade conflicts and to increase regional integration, leading, generally, to an agreed specialization of economic activities within a regional bloc.

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<sup>9</sup> This argument is very similar to the "product-life theory" previously presented.

Countries' changing international position as they passed through different stages of development is also explained by the "Investment Development Path" (IDP) model which represents an extension of the O-L-I paradigm. The concept of the IDP was presented in 1975 by Dunning and Buckley<sup>10</sup> and subsequently integrated by various contributions (e.g. Dunning, 1981, 1988, 1993; Dunning and Narula, 1996; Narula, 1996; Dunning et al., 2001). The basic hypothesis of the IDP model is that, as long as a country passes from different stages of development, its O-L-I advantages configuration, faced both by potential foreign-owned investing firms and by its domestic firms that might invest overseas, can change and it is possible to identify both the conditions making for the change and their effect on the trajectory of the development of a country.

It is generally assumed that in the first stage of the IDP a country have neither inbound nor outbound investments due both to insufficient locational attractions and because of few or no ownership advantages possessed by domestic firms. Depending on resources, government policy, the organization of activities, and firms' strategies, the O-L-I configuration could change in such a way to attract inward investment in the structural sectors of the economy like resource-based sectors, traditional and labor-intensive manufacturing sectors, trade and distribution, transport and communications.

Subsequently, depending on the extent to which a country is able to create a sufficiently transparent and stable legal environment, commercial infrastructure and business culture, and depending on its government's policy toward inward direct investments, the locational attractiveness will probably grow and it will gradually affect both supply and demand conditions for the products provided by foreign firms (and their market internalization) to reach competitive advantages.

Next, as countries attain a certain degree of economic maturity, the O-L-I configuration faced by domestic firms may be such that their inclination to engage in outward direct investment exceeds that of foreign-based firms to engage in inward investment. This will happen depending on firms' strategies and national government's policies to create competitive advantages for domestic firms and to make domestic locations attractive both to domestic and foreign investors.

Finally, the last stage of IDP is reached when there is a degree of convergence between countries' development levels and economic structures. This stage is characterized by a fluctuating balance between outward and inward direct investment where firms engage in FDI not only to exploit their existing O advantages in a foreign location, but also to augment these advantages by acquiring complementary assets or capturing new markets. Also at this stage the role of government is of critical importance in influencing both the quality of L-specific

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<sup>10</sup> This concept was presented at a conference of the U.K. chapter of the Academy of International Business.

advantages and in setting the competitive environment for their domestic firms to efficiently take advantage of the opportunities offered by an internationally integrated economic environment (Dunning and Narula, 1996; Narula, 1996)<sup>11</sup>.

After the presentation of the theoretical models, next section is devoted to collect the most recent descriptive analysis concerning the raise of FDI in direction of CEECs in these last years. Two facts, apparently disjoint but in reality interconnected, seem to have given an acceleration to this phenomenon: the entry of several CEECs in the EU and a consequent industrial restructuring process, mainly in manufacturing. It will be seen which of the previously presented models could give a plausible explanation of this phenomenon.

### 3. FDI TOWARDS CEECS

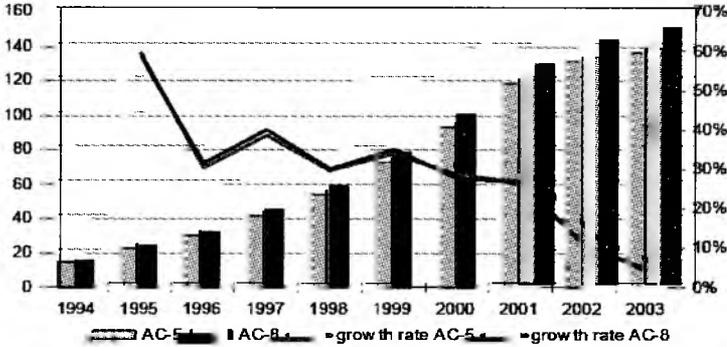
The process of integration between new and "old" member states of the European Union started in the early 1990s immediately after the fall of the "iron curtain", well before the official enlargement in may 2004, when the EU passed first from 15 to 25 countries and now, with the recent accession of Romania and Bulgaria in 2007, 27 countries.

At the beginning, the transitional process from centralized towards market economies was crucially supported by bilateral free trade agreements for the recovery of the Central and Eastern Europe economies. In particular, the period 1993-2000 was characterized by an increase in the share of intra-industry trade in labor and resource intensive sectors, suggesting that this kind of trade was mainly supported by MNE in sectors where there was a reshuffling of global value chains leading, in the case of European MNE, to an European division of labor which now involves countries at different levels of development (Sachwald, 2005).

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<sup>11</sup> The main diversity between the FG model and the IDP is in a different macro-economic perspective. While the FG model is interested in answering the question why does one country export certain types of goods and import other kinds of goods, the IDP model is concerned with explaining whether a particular country is a net importer or exporter of particular types of goods or of all goods and the stocks and flows of international investment. Most of these investments are owned and controlled by MNEs and trade conducted *within* MNEs is different from trade between independent parties. Hence, organizational issues do inject the need for a set of analytical tools different from those offered by traditional trade theory. Instead, the FG model applies a strictly neo-classical framework of thought to explain a phenomenon that is outside that framework of thought.

Figure 1. Evolution of the stock of FDI in accession countries (excluded Cyprus and Malta in AC-8) (billions of Euro left scale and rate of growth right scale)

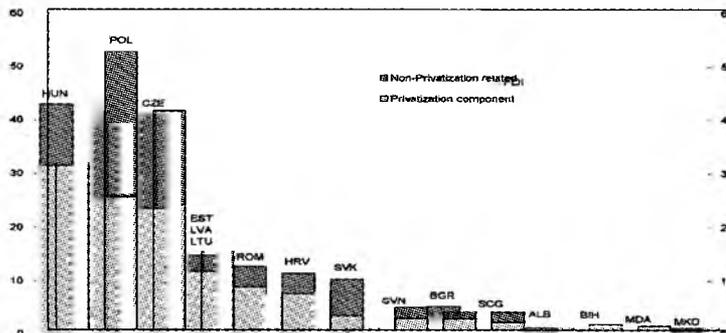


Source: Sachwald (2004) based on WIIW calculation

It seems difficult to imagine that when the European Commission started to plan the 4th enlargement towards CEECs, it had not in mind to put the basis for an European industrial restructuring. In that respect, enlargement appears to have given a contribution to globalization tendencies that would have taken place without it. In a nutshell, it is not trade by itself but industry restructuring and increasing integration of production processes across borders that are driving the process of relocation of productive activities.

Nonetheless, after a sharp increase in the earlier '90, then until 2000-2003 the figures regarding FDI in direction of CEECs presented relatively low and slowly growing levels in manufacturing and service (Figure 1). In those years, FDI were mainly driven by the completion of large privatization deals (Figure 2). But the subsequent full membership in the EU of some CEECs (May 2004) affected different factors, principally institutional (Kalotay, 2006):

Figure 2. Privatization and non-privatization related FDI stock, 2003 (in billions of dollars)



Source: Demekas et al. (2007) based on UNCTAD database and EBRD

- political framework and international treaties: full right to participate in the decision making mechanism of the EU adjustment of bilateral investment and double taxation treaties to comply EU standards ;
- “acquis communautaire”: commitment to the adoption of the full body of the EU laws, improving business environment and attractiveness of accession countries, even if the cost of doing business in the CEECs increases due to the leveling to EU labor and environmental standards;
- free movement of goods and services: an important condition for efficiency and asset seeking investors;
- EU funds: participation in the EU budget.

This new institutional environment influenced directly or indirectly the decision by European MNE to undertake FDI and, as a consequence, the flow of FDI towards CEECs in the subsequent years.

Although in the earlier years before the EU accession FDI in CEECs were to small with respect to penetration in the old EU members, these flows nowadays are increasing in a relatively sharp manner (UNCTAD, 2004;2005;2006;2007) and part of these flows are related to the decisional process of relocating productive activities by MNEs. This process, as sketched above, is related to different kinds of situations, depending also on the particular activity of the MNEs themselves, but generally could be exemplified by certain circumstances (Pedersini, 2006):

- a long-term trend whereby certain activities face a steady decline in a particular country and domestic production is substituted by imports either from foreign competitors or domestic producers relocated abroad;
- a reorganization of MNE production among different plants located within different countries, optimizing their value chains, depending on internal company structures as well as on the opportunities provided by local conditions;
- a decision of discontinuing production in one location and transferring it to a new one abroad, capturing local advantages.

It seems that the EU enlargement, with the improved and less risky legal, institutional and business environment, was a pre-condition for European location in certain industries<sup>12</sup>. In fact, these elements were fundamental both for the stability and security of a long-term relationship like an investment and for a better application of national policies, due to the supervision of the European Commission. Moreover, high productivity of labor (adjusted for wage levels, that make

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<sup>12</sup> American and Japanese MNEs, mainly in the electronic and car industries, located their subsidiaries in the CEECs principally because of the availability of high skill workers and the forecasting of the EU accession. At an earlier stage, those affiliates were used as export-platform branches.

these countries highly competitive), in addition to favorable access to EU funds, made CEECs attractive for efficiency seeking FDI by European MNEs.

In reality, the picture is more complex. It is possible to differentiate between firms that are incumbents, firms who plan to establish affiliates in the enlarged EU and firms planning to expand their activities within CEECs. For incumbents (principally MNEs) that were already operating into the EU 27, the enlargement has presented the opportunity to a gradual and continuous reorganization and consolidation of the previous activities, while for newcomers and firms planning expansion activities, enlargement offered both strategic asset seeking (primarily in IT and R&D) and huge possibilities of efficiency and market access resources (in particular for electronic manufacturing and car automotive industries). For the latter, the main benefit of the EU enlargement is represented by more competitiveness.

It follows that, depending also on firm strategies, in these last years manufacturing has known an increasing vertical specialization via FDI between EU 15 and the new CEECs members which pattern seems to resemble the FG model. Nonetheless, in some sectors, the investment strategy passed from a simple market access to more complex reasons.

In the years before the 4th EU accession, FDI trends within the European regional bloc do not seem to reflect perfectly the FG shape (Kalotay, 2004). In principle, in the European region, rich countries, with higher GDP per capita, are specialized on high functions; middle income countries are concentrated in middle level coordinating and knowledge intensive production; and low income countries are basically specialized in low tech manufacturing. Instead:

- inward FDI are still blocked in the group of high income countries;
- outward FDI of middle income countries towards low income countries were to low;
- the FDI flows do not reflect completely the relative advantage of different locations.

Some years after, first with the negotiations and then with the EU accession by Bulgaria and Romania, FDI trends seem to keep in perspective a closer form to FG model (Kalotay, 2007; Damijan and Rojec, 2007; Rojec and Damijan, 2008).

The CEECs restructuring process was supported by massive inflows of FDI (Hunya, 2006; Crespo and Fontoura, 2007; Havlik, 2007)<sup>13</sup>. In fact, the structural

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<sup>13</sup> However, recent studies focused on European MNEs pointed out that relocation of international activities is not the most common type of restructuring; but they are, actually, only the third most common type (Galgóczy et al., 2005; Pedersini, 2006; Kalotay, 2004,

trends of FDI in CEECs manufacturing, which comes primarily from EU-15, is increasingly in the medium tech industries, while the attractiveness of CEECs for FDI in low tech industries seems to be gradually decreasing<sup>14</sup>.

Now it seems to be a FG pattern of FDI in CEECs, in the sense that labor intensive low tech FDI is increasingly replaced by medium tech FDI, with the most obvious effects visible in motor vehicles, electronic and electro technical industries where most exports come from foreign-owned or foreign-dominated firms.

While highly export oriented efficiency-seeking FDI are progressively directed in medium high and high tech industries with high and increasing attractiveness for overseas investors (a situation which looks like the third stage of the FG model presented in the previous section), foreign subsidiaries in medium-low tech industries have stagnating structural shares, both in terms of value added and exports, high but stagnating export propensity, and high and still increasing foreign penetration reflecting that these industries are somewhere at the end of the third – beginning of the fourth stage of the FG model (Rojec and Damijan, 2008).

Table 1: Manufacturing foreign affiliates a value added, exports, export propensity and foreign penetration b in CEECs in 1993 and 2001, change in percentage points

	<i>Value added</i>	<i>Export</i>	<i>Export propensity</i>	<i>Foreign penetration</i>
<i>High tech industries</i>				
1993	4,8	5,6	43,4	19,8
2001	10	15,3	72,4	61,7
Change	5,1	9,7	29,1	42
<i>Medium-high tech industries</i>				
1993	35	48,2	58,6	20,7
2001	32,6	42,3	72,8	53,9
Change	-2,4	-5,9	14,2	33,2
<i>Medium-low tech industries</i>				
1993	18,7	12,1	44,7	12,7
2001	25,3	13,1	44,9	46,5
Change	6,6	1	0,3	33,8
<i>Low tech industries</i>				
1993	41,5	34,1	32,9	17,4
2001	32,2	29,3	43,9	41,1
Change	-9,4	-4,8	11	23,7

a Enterprises with 10% or higher foreign equity share.

b Value added, exports and foreign penetration relative to 6 CEECs (Czech Republic, Estonia, Hungary, Poland, Slovenia, Slovakia); export propensity relative to 4 CEECs (Estonia, Hungary, Poland, Slovenia).

Source: adapted from Rojec and Damijan, 2008 and based on WIIW, 2004.

2006): European MNEs rather prefer internal restructuring, even if the structural characteristics, the potential for international business and the direction of international activities with the EU accession may change, and indeed is changing, in the next years (Hunya and Schwarzappel, 2006; UNCTAD, 2005).

<sup>14</sup> Industry classification in four groups (high, medium high, medium low and low tech) is done accordingly to the OECD (2005) classification.

At the same time, the previous specialization on low-tech labor- and/or energy-intensive industries observed at the beginning of the 1990s (see e.g. Havlik, 1995) is rapidly diminishing in CEECs. FDI in low tech industries approach to Stage 4 or is already in the early Stage 4 of the FG model. The share of low tech industries is decreasing in terms of value added and stagnating in terms of exports. Export propensity and foreign penetration are still in a slow increase (Table 1).

In the next future, it is expected that EU-15 will increasingly relocate their low tech and low wage industries either to Bulgaria and Romania or towards countries outside the EU-25, like China or the new EU border countries like Ukraine, Moldavia etc. (Kalotay, 2007) while CEECs are expected to be recipient of medium tech and some lower-end segments of high tech industries (Rojec and Damijan, 2008).

However, as previously mentioned, in some industries the investment decision evolved from an initial purpose of a simple market access to more complex strategies: in these industries, FDI follows a pattern that presents elements of different theories. An example could be represented by the automotive industry.

The European automobile industry has been increasingly integrated since the birth of the CEE and subsequent EU enlargements have extended the geographical opportunities for such integration. Since the years immediately after the fall of the Berlin Wall, the CEECs have been progressively integrated into the "European motor industry". German carmakers were the first adopting an investment strategy in CEECs with the relocation of production activities, due both to geographical proximity and to the crisis experienced by this sector of the German economy in the early 1990s, which obliged carmakers to reduce their production costs to recover international competitiveness. Additionally, competition in the automotive industry in that period was changing, passing from a domestic competition based on exports to a world competition built on production functions organized at regional and global levels. At the same time, transition countries passed from location of old production equipment and markets for mature models to location for leading-edge production capacity and for potential new product markets.

Subsequently carmakers, which considered CEECs as new product markets in the early 1990s, switched to a "build-where-you-sell" strategy, sometimes using these countries (in the case of Japanese and American carmakers) as a production location to serve all European markets and to avoid tariffs (tariff jumping). FDI in CEECs allowed European carmakers (after German, also French and Italian carmakers started to be involved in investment projects in these countries) both to optimize their costs through a product specialization strategy (selecting competitive production locations) and to rationalize their value chain making use of disaggregating and reengineering strategies.

European carmakers are still continuing with value chain disaggregating and reengineering strategies in CEECs in view of competitive pressures from Japanese and Korean producers as well as the possible emergence of China and India as automotive exporters. In addition, European carmakers are starting to invest in improving the level of qualification and training of their workers. Furthermore, because of product specialization and the supply of new products at a significantly lower price, European carmakers are pursuing both a penetration strategy in new segment of the pre-existent market and a "new market creation" strategy, based on heterogeneous production capabilities within Europe (Sachwald 2004; Radošević and Sachwald, 2005).

Summarizing, MNE in the car industry have used FDI in CEECs following a huge set of objectives: market access, cost and rationalization of their value chains, but also new market creation. Value creation in the European automotive industry occurred and EU enlargement has raised the European auto industry competitiveness. Nonetheless progresses are needed as long as global competition becomes fiercer. In this perspective, lower costs and higher flexibility in work organization seem to be strong assets for CEECs production sites, especially because some of the plants are recent and use up to date technologies and organization principles.

#### **4. CONCLUSION**

The course of action leading to the integration of CEECs with the "old" member states of the European Union began with the fall of the "iron curtain". Bilateral free trade agreements have been crucial for the recovery of CEECs economies. In the same years, the flow of FDI in direction of CEECs, after a sharp increase in the earlier '90, presented relatively low and slowly growing levels, mainly driven by the completion of large privatization transactions.

But first negotiations and then full membership in the EU affected institutional factors within CEECs, influencing directly or indirectly the investment decision by European MNEs (but also Japanese and U.S.) in these countries. It gives the impression that the EU membership acted for these countries as a strong element in reducing the environment uncertainty and increasing the stability of the business and legal system, representing somewhat a pre-requisite to make investments in CEECs. As in the Behavioral Economic approach, the EU accession seems that operated a reduction in the margins of errors in undertaking the investment decision by the management of MNEs in CEECs.

Then, depending also on firm strategies, in these last years manufacturing has known an increasing vertical specialization (resource access) via FDI between EU 15 and the new CEECs members. The pattern seems to resemble the FG model, but in some sectors like the car industry, the investment strategy was

initially dictated from a simple market access that subsequently evolved towards more complex strategies including market access, cost and rationalization of value chains, and new market creation.

As a consequence, FDI in CEECs, even if it seems to reproduce in many sector of manufacturing a FG model (and in certain sectors this is taking more and more this pattern of evolution), are not driven exclusively by restructuring. In next years, it will be of interest to study the development of FDI flows in CEECs to better outline the picture after the EU accession.

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