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Transforming Economies, Technology Transfer and Multinational Corporations Strategies[1]

*Xavier Richet**

Abstract: Foreign direct investment inflows in European transition economies, although limited in volume, plays a strategic role in restructuring and developing new businesses, in integrating these economies to the world economy, in bringing in technology, know-how and management skill. Entry on these new markets either through acquisition and merger, either through greenfields depends of different barriers, asset specificities, market regulations. In spite of important entry and transaction costs, foreign investors favour direct investment with full control of local assets allowing them to attain more easily their different objectives: market share, cost reduction, integration of local units in the global or regional strategy of the company.

JEL classification: F2, L1, L2, P5

Key words: technology transfer, institutional change, FDI

Introduction

This article investigates the impact of economic transformations, especially that of privatisations, industrial reorganisation (re-capitalisation and liquidation of assets, entry of new operators) and post-socialist economies opening on the adaptation of domestic firms and their exposure to the new competitive environment, on the one hand, and policies undertaken by these economies to attract the foreign capital, necessary to upgrade their enterprises, on the other hand.

One studies, more particularly, the role of foreign direct investment (FDI), from the point of view of the contribution of technological and managerial skills to speed up the transformation, to favour the spin off in the industrial neighbourhood and networks, and to ease the access of transforming economies to the world market. FDI

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* Xavier Richet is at the Université de la Sorbonne Nouvelle, Paris, France.

– a powerful engine for globalisation – facilitates the integration of recipient firms into the regional-continental strategies of multinational corporations. The integration dimension is, however, more difficult to observe in countries where minority joint ventures (JV) are privileged by host government, in order to keep the control of their assets (China, Russia). This kind of cooperation can lead, as it is the case in China, to increase, in an exponential way, industrial exports towards developed economies but recipient firms maintain their control on the major part of the capital, on the production, and, sometimes on the marketing of goods. This, generally, entails considerable delays on the adaptation of local enterprises, makes the access to world markets on segments with high value added more difficult and has a more limited impact on local spin offs. In return, the internal market dimension (horizontal integration by market extension), by producing volumes, is not to be neglected by foreign firms that invest, even if they meet important barriers to entry and have to face high transaction costs before being able to generate profits.

We start from the following hypothesises: the opening and the transformation of these economies give the opportunity to multinational corporations to establish new facilities, to extend their market shares and to benefit from advantages in terms of factor costs. As a result, FDI contributes directly to upgrade the most competitive sectors of these economies if they are allowed to come in. In a still unstable economic and institutional environment, FDI plays a catalyst role, even if its inflow in the area (Central and Eastern Economies) remains very low in comparison with other destinations (developed market economies, China). In spite of attractive policies set up to entice investors, multinational corporations (MNC), even in countries where joint-ventures operate since a long time, face important transaction costs, although they reach more quickly their growth, profitability and integration objectives in comparison with strategies followed by domestic enterprises with often constrained resources. The entry mode, either by acquisition, greenfield investments or by joint-ventures creation, leads to different results in terms of transaction costs reduction, control and profitability.

It is necessary to mention three other important points:

1. The countries considered developed, during the previous decades, under the socialist ownership, a consequent level of industrialisation according to particular industrial logics, control and organisation methods, which constitute another important problem for the adaptation of their productive assets to the western standards.

2. Penetration of MNCs in these regions aims at integrating firms into their production and distribution networks (horizontal and vertical integration). It implies a new hierarchical relation between foreign and recipient companies, the latter losing gradually their control on a part of their core business in favour of the acquiring

company. This explains the reluctance of some governments to accept the takeover of their firms by foreign buyers, favouring joint-ventures strategies, or more simply, by limiting foreign MNCs entry in the capital of the local companies, which they regard as strategic. This last solution isn't the most effective in terms of adaptation speed, maturing of the investment, the development and the diversification of the production range, as one can notice it in Russia, for example, where limited joint-ventures creation in strategic sectors is today preferred to assets acquisition by foreign buyers (Richet 2002). Contrary to Hungary (Mihalyi 2001), countries like Poland and the Czech Republic have favoured a mode of privatisation which have put foreign investment at bay for a certain period of time. In contrast, non-strategic sectors can become very quickly profitable for foreign investors (cf. the cases of agro-business, drinks indsutries), which destabilize local production by appreciably increasing their market shares. China applied this principle, at first, before authorizing the creation of J.Vs., which can be, today, totally held by foreign investors. But it allows pulling substantial advantages by associating the modernization objective of a part of the production apparatus while continuing to benefit besides, indirect support under subsidies form from their governments.

3. Finally, the foreign capital presence in these countries has quiet often followed industrial cooperation developed under the former socialist system. Business connections developed during industrial cooperation, legal context changes, and finally, new markets growth opportunities have favoured this new investment form, especially in Eastern Europe countries, and in particular in Hungary[2].

In spite of the high stock of accumulated human capital, of steady scientific and industrial policies, often directed towards military objectives, CEECs, very early, remained technologically dependent from the West to stock up with patents, to develop whole industries (the automotive industry, for example) without being able, later, to integrate the technology and to diffuse it in the industrial neighbourhood and networks for civil goods production. So, it is important to analyse the current industrial transformations in the CEECs at the light of these asymmetries, which make more difficult the transition process. To the first challenge constituted by the technological gap, one can add a second one, mobilising upstream human and scientific resources in order to use them downstream in the production of goods and services to the population. The presence of FDI, especially in manufacturing and high technology sectors contribute to fill this gap, but raises new questions connected with appropriation and control: are the post-socialist economies only foreign capital receptables, or do they have the possibility of mastering and controlling new activities, with stronger value added, and of so having the potential to become future competitors of western firms[3]? Can this be made more easily by selling the capital in its totality or by promoting industrial cooperation? In this new competitive context, are they latent competitive advantages, which can develop, especially by drawing

from the relatively high human resources, and allow a later know-how re-appropriation and autonomy of the regional and local industrial systems and be able to play in the yard of the big? Section 2 analyses the link between institutional changes, companies adaptation and the role of industrial cooperation with western firms in transition economies; in section 3, the question of the MNCs entry mode in these economies is discussed and assesses the impact on restructuring domestic enterprises.

Institutional Changes and Industrial Reorganisation

The New Outlines of the Firm

With the systemic changes, the former centralized model and its entire related industrial organization, are questioned: monopolization, high level of internalisation, protection from the competition through numerous tariffs, administrative and technical barriers, nature of the national innovation system. The development of market mechanisms and competition forces , by reducing the distortions linked to the socialist industrialisation, by favouring assets and workforce transfers between various sectors[4], by allowing new firms entry, have led to transform the industrial structure. The current transition in Eastern countries focused, at first, on the mode of privatisation of assets and on the exit of inefficient firms. The socialist industrialisation favoured the development of heavy industry, mining and engineering goods, for the sake of rapid industrial recovery, prestige and power matters. By dividing up research and development activities from production and marketing functions, it generated significant delays in product, process as well as in organizational innovations and products design. Lack of competition and decision-makers priorities towards heavy industry developments are responsible for the low global performance of these economies and the high level of wastes and shortages. The only sectors in which the ex-USSR innovated and was often ahead of its competitors were the military sector and that of the spatial conquest, areas where the competition with the United States was strong and acted as a significant stake. These advantages resulted, downstream, in the development of civil innovations as it is generally the case in developed market economies. Today, the Russian military aeronautics sector tries to maintain its market shares chasing their former customers to continue to sell them, often at very low prices, military technology, which is of quite high level but not easily adaptable to meet Western standards. On the other side, there are few incentives and possibilities to create niches allowing this industry to benefit from its know-how. The same case can be found in the civil aircraft industry. Facing the duopoly situation of the two major world aircraft manufacturers. Russian

constructors, up to now, have for only prospect, to become subcontractor of Airbus and Boeing (Richet 2002).

The industrial reorganization, which comes along with public assets privatisation policies in post-socialist economies, is aiming aim at several objectives:

- The 'de-specialisation' of numerous companies and their 're-specialisation' on a narrower production range (size economy), and the search for a critical size (the minimal scale of efficiency) compatible with the reorientation of these industries on new markets.
- The outsourcing of a part of activities, which comes along with the search for new specializations favouring subcontracting, either by dividing up former trusts or facilitating the entry of new operators (SMEs, companies networks).
- The re-capitalisation enterprises to finance the investments necessary for their modernization and their expansion. Their growth is slowed down by the absence of domestic resources in capital and requires the inflow of foreign capital. Both the control and financing system of state enterprises have contributed to under-value the assets of these enterprises as their financing was decided and managed from above and then where no markets to value them.

Figure 1: Aspects of Enterprises Transformation

Socialist entreprise	→	Competitive private enterprise
Low productivity Inputs and production volumes determined by the plan	Defensive adaptation, size decrease	High productivity resulting from the competitive environment Adaptation of the production volumes and of the inputs to the demand and to the costs
Bargaining of the plan Products at the end of their life cycle Passive financial transactions Plan realization Vertical and horizontal integration	Strategic reorganisations	Strategic management Products at the beginning of their life cycle Financial and accounting management Marketing New limits of the firm
Centralised decision process Culture of the plan, technical perfection of the quantified objectives	Organisational changes	Responsibilities delegation Competitive culture based on the costs-advantages analysis, incessant improvement of the production value

Source : K. Meyer (1998)

So, the industrial reorganization had to go along with radical changes of both firms objective functions with organisational, managerial and strategic changes (Figure 1). This has been difficult to achieve in a relatively short lapse of time, if one takes into account the numerous barriers to entry and to exit, but also institutional mechanism shortcomings and the political behaviour of the different interest groups

concerned. The inflow of foreign capital through FDI, has represented for many transition economies, the favourite way to speed up the transformation of their productive assets and the development of services.

For Western firms, their presence in Central and Eastern is connected to a strategy of penetration and conquest of new markets (horizontal integration), and also of reallocation of resources to benefit from advantages in terms of factors costs (vertical integration). A greater part of them have chosen to acquire majority shares in local companies where property rights allowed it, majority control being an advantage on fifty-fifty control and industrial cooperation. For East European companies, acquisition by foreign buyers appears, at best, as a possibility to access to the world market, at worst, as a mean to avoid a pure and simple bankruptcy[5].

It is however important to note that some local firms with a strong competitive advantage, or still benefiting from indirect supports from their governments (tax system, non-refundable or unpaid loans) have been able to develop internationalisation strategies at regional and sometimes European levels, while remaining the main shareholders. Some firms of the area, such as MOL, in Hungary, have taken majority participations in firms of the region (Croatia, Romania, Slovakia, Poland); others, as Aeroflot intends to create start-up companies in Western Europe, to benefit from markets deregulation and to enter more profitable routes with higher returns. Generally, East European firms which have encountered some development in the region are either firms (or banks) under the control of Western firms which invested the neighbouring markets from their new regional bases, either former socialist firms, 'already outsourced' under the former system, because of the nature of their activities (energy, transport, oil, natural gas) (UNCTD, 2001, Financial Times, 2002).

Paradoxically, if FDI in transition economies plays a significant stimulating role to accelerate the transformation process and to re-insert transition countries into the world economy, the zone is far from being the favourite destination as most FDI are realized among developed countries or directed towards the other new market economies (Tables 1 and 2).

Institutional changes, and especially the institution of new property rights, the transformation of the state firms in privatised joint-stock companies, the adoption of a bankruptcy law, an investments code and a legislation generally more favourable to the FDI[6], are prerequisite to attract foreign capital (Figure 2). Liberalisation of factors and products prices, the development of capital markets, the almost-convertibility of currencies have reduced transaction costs and eased capital movements in direction of these countries. Macroeconomic stabilization and micro-economic adaptation policies have imposed a stronger financial and competitive constraint on firms, urging them to adapt themselves quickly to the new environment. But, along this process, most of these firms have developed new specialisation with lower added

Table 1: Foreign Direct Investment Inflow in Central and Eastern Europe (end-of-year balance, USD millions)

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Croatia	13	102	110	109	486	347	835	1445	1086	1325	970
Czech Rep	983	563	749	2526	1276	1275	3591	6234	4943	4820	8000
Estonia	80	156	212	199	111	130	574	222	324	343	300
Hungary	1471	2328	1097	4410	2279	1741	1555	1720	1090	2103	2559
Latvia	na	50	279	245	379	515	303	331	400	170	250
Lithuania	na	30	31	72	152	328	921	478	375	439	395
Poland	284	580	542	1134	2741	3041	4966	6348	8171	6502	5000
Slovakia	*100*	*107*	*236*	*194*	*199*	*84*	*374*	*701*	*2058*	*1460*	*4000*
Slovenia	*113*	*111*	*131*	*183*	*188*	*340*	*250*	*144*	*110*	*339*	*553*
CEE & the Baltic States	*3044*	*4027*	*3388*	*9070*	*7810*	*7800*	*13368*	*17622*	*18557*	*17500*	*22027*
Albania	20	45	65	89	97	42	45	51	141	204	153
Bulgaria	41	40	105	98	138	507	537	789	1003	641	800
Bosnia & Herz.	na	na	na	na	0	740	113	112	25	165	300
FR Yugoslavia	0	0	24	12	12	18	175	27	175	446	70
FYR Macedonia	73	87	341	417	415	1267	2079	1025	1051	1154	1200
Romania	73	87	341	417	415	1267	2079	1025	1051	1154	1200
South Eastern Europe	*134*	*172*	*535*	*616*	*662*	*2574*	*3049*	*2094*	*2545*	*2739*	*2723*
CIS	*135*	*642*	*1079*	*3445*	*4400*	*5780*	*5463*	*4651*	*2152*	*4168*	*6221*
Total	**3314**	**4840**	**5002**	**13132**	**12872**	**16153**	**21871**	**24367**	**23254**	**24407**	**30971**

Source: *Transition Report* 2002

value content that can weaken them in the long run with the notable exception of Hungary (followed by Slovenia) where the added value of exports reflects the more capital intensive specialization through FDI located in the country.

Table 2: Distribution of World FDI Inflows, 1986-2001 (in %)

Region	1986-1990	1991-1992	1993-1998	1999-2000	2001
Developed Countries Western	82.4	66.5	61.2	80.0	68.4
Europe	38.4	46.0	33.7	51.9	45.7
European Union	36.2	45.3	32.1	50.2	43.9
United States	0.2	1.2	0.3	0.8	0.8
Japan	34.6	12.7	21.7	22.6	16.9
Developing Countries Africa	17.5	31.2	36.3	17.9	27.9
Latin America et Caraïbes	1.8	2.2	1.8	0.8	2.3
Asia and the Pacific	5.0	11.7	12.3	7.9	11.6
Central and Eastern Europe	10.6	17.4	21.2	9.2	13.9
Memorandum	0.1	2.2	3.5	2.0	3.7
Least developed countries	0.4	1.1	0.6	0.4	0.5

Source: UNCTAD, FDI/TNC database

The development of institutional reforms did not totally reduce uncertainty, nor opportunistic behaviour, not to mention corruption in the region. The level country-risk explains the weak penetration degree of FDI in lagging countries (Romania, Bulgaria), even if at the micro-economic level, this risk can be compensated with advantages linked to the first-mover strategy which can durably prevent the entry of followers, notably when first-mover acquires at once a significant percentage of market shares (cf. VW-Skoda in Czech Republic, Renault in Slovenia, Romania).

In most countries of the region, the presence of foreign firms and the development of industrial cooperation before the transformation have played a significant role in the transfer of know-how. In the autarkical framework favouring the military sector, science and technology were not oriented towards the development of civil productions (Dycker, 1998, von Hirschhausen and Bitzer, 2000). Industrial cooperation with capitalist firms, to develop particular segments, or whole industries (motorcar, chemical complexes) allowed, in numerous cases, to partially reduce this gap without always entailing a process of technology and products appropriation and enrichment[7].

Needs and Assimilation of Foreign Technology

In a narrow sense, technology transfer concerns the exchange of information, techniques, and know-how from a company towards another one in order, for the recipient, to receive new manufacturing processes, to develop new products. Receipting technology does not inevitably imply mastering it. The economic history of socialist economies (cf. the rush in the acquisition of western equipments in Poland in the seventies) and developing economies (cf. the delivery of turnkey factories in Algeria illustrate some of the many failures in assimilating and mastering Western technologies)

Figure 2: FDI Factors of Attractiveness and Aversion for the Foreign Firms in the CEECs

Attractiveness factors	Aversion factors
Factors costs	Political stability
Know-how	Legal and institutional infrastructures
Economic Environment	Property rights, enterprises governance
Markets expansion/creation. Access to the market	Corruption
Strategic movement:	Nature of the firms, of the trade-unions
- bargaining with the State and\or with the trade-unions	Weak markets' scope
- oligopolies games (first mover advantage, pursuit, threatens)	Limited purchasing power
Vertical integration	Business climate
Technology access, enterprises access	
Alleviation of the barriers to the exports and to the imports	
Political incitation of the host country, of the country of origin, of the international institutions	

Source: X. Richet (1997)

It also encounters great successes, up to now rarely matched, by the aforesaid economies, as Japan or South Korea where the industrial imitation and the assimilation of technologies sometimes obsolete but latter enriched through the so-called 'reverse engineering' strategy has been at the origin of a fast industrialization (also with the massive and cheap inflow of Western capital and the technical assistance of Western firms in the context of the cold War and the containment policy which was conducted by Western powers. The single transfer does not necessary come along with direct investments if host firms know how to appropriate generic technologies (Figure 3). It implies the existence of local conditions allowing its appropriation in terms of technical and organizational domination, and then its enrichment in products, or in processes as well as in the industrial system in general (Ruffier, 1996).

Figure 3: Technology Transfers Tools and their Impact on the Reduction of the Technological Gap

	Products	Markets	Management
FDI	High	High	High
Joint venture	High/medium	High	High /medium
Sub-contracting	Medium	High	Low
Exportation	Medium/low	High	Low
Alliances	Medium/low	Medium/low	Low
Licenses	Medium/low	Low	Low

Source: Radosevic in Dycker (1998)

In a wider sense, the technology transfer comes along with cooperation along time, which takes the form of joint-ventures start-us and covers wider segments of production. The transfer does not concern exclusively the technology in itself but also the organizational and managerial context into which it is integrated. An industrial cooperation gives the possibility to foreign investors to benefit from often-favourable conditions especially when governments show themselves 'friendly' towards them (tariffs to protect them from new competitors entry, low level of tax system, sale of lands at interesting prices). In return, there are some risks linked technology transfers, which raise foreign investors transaction costs.

Among these, one finds:

- The difficulty to identify reliable local partners (protection against opportunist behavior): nature and reliability of acquired information on the technical level, market shares, performances, existing agreements, workforce qualification, and concerning the company with which one wishes to cooperate[8].
- Various obstacles, the local bureaucracies requirements, corruption of the local decision-makers.
- The instability and the failure of the legal system. The protection rights of foreign firms transferring their technology remains widely insufficient[9].
- The financial evaluation of the results of the technology transfer especially when currencies are inconvertible.
- The risk that the partner becomes a competitor as soon as it has mastered the imported technology (see Kia and GM in South Korea)
- The difficulty to enforce the quality level, in case of re-exportation towards western markets, when the local know-how within the joint venture or upstream, at suppliers level, does not allow a fast assimilation of the transferred technology (China, Russia) (Richet, 2001, 2002).

Technology transfer entails relatively high transaction costs, which can reduce, and even cancel the advantages of the cooperation and sometimes entail sunk costs for the investor (cf. Peugeot in Canton), at least in the first years of the investment. Transfer via acquisition and especially the building up of new firms (Greenfield investment) reduce transaction costs (the costs generated by the three C: contacts, contracts, control), maintaining the incoming firm's advantages while benefiting from the reallocation advantages. Firms can more easily and rapidly attaint the break-even point, but it implies an important level of irreversibility with high cost to step out.

In an even wider definition, the technology transfer creates positive externalities by the spreading of the know-how in and out the firm through subcontracting networks and in the local industrial neighborhood. Conversely, the district effect constitutes great incitation for FDIs location (cf. western cities of Hungary as Sékesféhervar, Györ which get a big part of the FDI pouring in the country, Bratislava and its neighborhood in Slovakia).

Barriers to Innovation

Case studies conducted in several countries illustrate the difficulties inherent to the technology transfer in post-socialist economies, mostly in spite of efforts made in the field of research and development or, of an indisputable advantage in the areas of the basic research and of its applications towards strategic and military features (ex-USSR). The industrial organization of these economies (hierarchical structure, monopolization) and the resulting the forms of control have contributed to create important barriers to innovation, to imitation and to spreading, which made particularly difficult the transformation of their national innovation system. As a by-side effect, he durable non-exploitation of human resources can easily lead to its fast devaluation. In the case of joint-ventures setting, one observes the limited impact of the transfer on the internal organization: the imported technology does not necessary contribute to the integration of all functions within the company. One can notice the cohabitation, sometimes in the same workshop or in the same production unit, of western origin new machines and of old machines, used prior to the information technologies revolution and to the production automation.

This necessarily limits the coherence and the performances of the production line which adjust on the least efficient technology system.

The incapacity of the firm to appropriate and to enrich the acquired technology is largely explained by the impact of the systemic constraints generated by the mode of property and the organisation of economic activities. At the firm level, the acquisition of technologies by means of transfer was limited to some departments and had almost

no organizational impact, as it did not contributed to transform the firms' strategy on its traditional markets.

Figure 4: Characteristics of the Socialist Innovation Systems

Innovative firms were mainly motivated by the need to resolve the difficulties from the supply-side

Important gap between domestic inventions and foreign innovations

Relatively high waste rate

Process innovations prevailed on products ones both for resources scarcity and demand constraints

Weakness of the financial incentives to develop innovations in spite of the great autonomy given to researchers

Strong limits concerning the decision freedom and resources invested by firms to develop innovations

Enterprises choices tended to favour scale economies and quantity and not specialization and quality

The technological gap in strategic technologies areas - armaments, space conquest, and nuclear energy - was gradually reduced

The technological gap did not reduced in the civil technologies areas: engineering, chemistry, electricity and electronics

Entry and spreading were particularly slow in information technologies and biotechnologies

Performances, in the technological levelling, were generally weak in comparison with Japan and new industrial nations

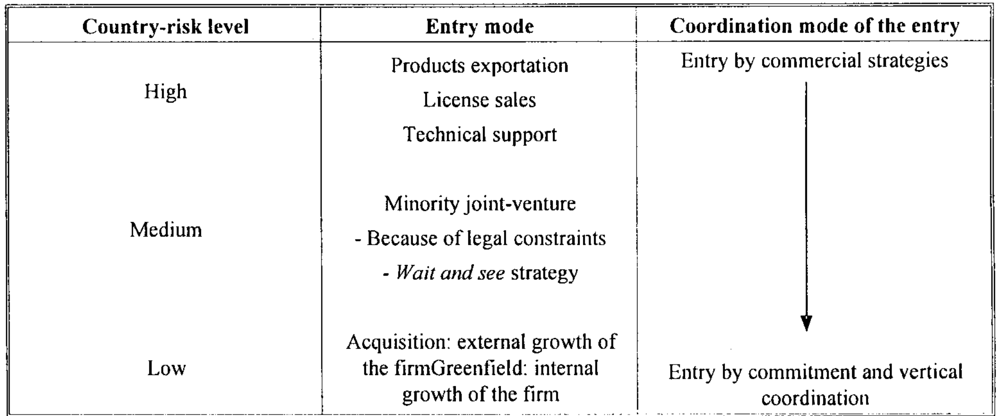
The growth rate of total factors productivity was low and decreasing

Sources: from S. Gomulka (1985) and Hanson and Pavitt (1987)

Entry Mode and New Firms Development

Entry on new markets takes various forms of assets control and depends on the nature of the investment (asset specificity), organisational complexity, the legal environment of the host country, many factors which influence the incoming firm commitment level. (Figure 5). First movers can deter the entrance of followers which can favor more classical ways for penetrating the market. The most advanced countries in their transformation have reduced the country risk level and most of them have beneficiated of rapid and relatively high levels of capital inflows. Other countries in which reforms have been delayed or have been undertaken later, have maintained a higher country-risk.

Figure 5: Entry mode, Country-Risk and Commitment



Country-risk level	Entry mode	Coordination mode of the entry
High	Products exportation License sales Technical support	Entry by commercial strategies ↓
Medium	Minority joint-venture - Because of legal constraints - *Wait and see* strategy	
Low	Acquisition: external growth of the firmGreenfield: internal growth of the firm	Entry by commitment and vertical coordination

Figure 6: FDI:Costs-Advantages Analysis for the Recipient Country

Costs
- Appropriation of the best assets by foreign investors. The State only keeps unprofitable companies or firms that cannot easily be restructured. This phenomenon generates negative reactions from the public opinion towards foreign investors. Dualism in terms of financing and of adaptation speed with simultaneous existence of hard (foreign capital control) and soft constraints (State control) on companies; - Drastic reduction of employment in the first reorganization stage; growing, in a second stage, with the expansion of the business.- Increase of competition destroys local productive units which benefited from protectionist measures; - Creation or perpetuation of monopoly positions of adominant firm in a sector. The new investors, in that case, try to maintain the existing advantages or to create some new ones; - Giving up of some production ranges of acquired firms both to rationalize the production and to destroy products competing with the parent company;- The repurchase of a competitor in order to close and evict it from the market of the recipient country with productive capacities destruction; - Assets despoliation in case of s sale below the real value. It is however necessary to take into account the assets valuation difficulty; - Adaptation of employees to the new firm culture; - Some significant fiscal losses (tax holidays); - The financing by the State of foreign investments projects in order to attract the investors, without certainty of the investors' arrival.

Advantages
Foreign capital creates positive externalities linked to: - the injection of capital, technology, know-how and competences;- the access to international markets; - the increase of the local firms exports capacities; - the increase of work productivity;- the increase of productive capacities; - the increase of intermediary products demand;- higher rate of profits reinvestment; - the dismantling of monopoly position; The question of the FDI impact on the local industrial development isn't so clear-cut: the competitive pressure weakens local productive units but, some of them benefit from positive externalities.

Source: from J. de Sousa and X. Richet (2000)

Foreign direct investment entry is divided in acquisition of existing companies, new investments of greenfield-type (creation of *de novo* companies, totally controlled by capital providers) (figures 6 and 7), and inter-enterprises cooperation (Joint-ventures). Each presents many advantages but also some costs for host countries. In countries where property rights and the legal environment were deeply transformed[10] (Hungary, Poland, Czech Republic) and where clear property rights have been established, in a first step, FDI is fairly shared between these three directions. Later, it concentrates towards greenfield-type investments when potential profitable companies have been acquired and returns on investments have shown their first results (cf. VW, Audi, Schlumberger, Suzuki in the Czech Republic and in Hungary) or when the economic and legal environment has been transformed and has allowed this form of control. In the case of acquisitions, however, it is unusual that the recently controlled assets are self-sufficient to achieve objectives set up by investors or to answer the local market growth. Investors are then conducted to undertake brownfield type investments, i.e. to restructure a part of the purchased company and to make, latter, greenfield-type investments with capacities increase (Meyer and Estrin, 2000) (table 3).

These various modes of control haven't the same impact on the strategy, the adjustment, the reorientation of the exports of these companies. The acquisition (majority purchase of a firm assets) gives full control to the new owner who, generally face more or less high transaction costs.

In contrast, greenfields investments reduce transaction costs, by directly and quickly transferring the technology, production lines, the managerial know-how in new facilities.

Directly and indirectly (subcontracting), this kind of investment has a positive impact on job creation, while an acquisition is generally characterised by fast and massive lay-off, even if, afterward, it is necessary to hire more employees when the development of the activity requires new investments (Schlumberger in Hungary). Most greenfields, especially in manufacturing industry, are directed to the world market by fitting into the world or regional strategy of parent foreign companies.

These investments are generally at the origin of the development of high value added exchanges flows towards developed market economies as it is the case, for example, for Hungarian exports. Table 3 shows the relative importance of acquisitions on cooperation (JV). Where the property rights are established and the 'comfort' of the investment (everything that contributes to protect the investment) are not ensured, the joint-venture type prevails (Romania).

Figures 7: Costs-Advantages of the Direct Investment Modes

Acquisition	
Advantages	Costs
Repurchase of an existing firm at an underestimated price and with a strong valuation and profit potential of some part of the assets. Access to supply and distribution networks, to technical competences. Integration in the firm global strategy. Fast adaptation of the production range.	High transaction costs High reorganization costs for some assets Confrontation and negotiation with the internal coalition (managers, employees, municipalities, local banks) of the firm Additional costs of upgrading to meet the critical size, leading to brownfield-type investments.
Greenfield	
Advantages	Costs
Building of a new production unit, on the basis of the technology possessed by the company, perfectly integrated into the growth potential of the firm in the recipient country. Weakness or absence of internal coalition.	The company pays the real acquisition price. Difficulty to attract the qualified workforce subjected to more difficult employment conditions; significant workforce turn-over. High cost of a supply network creation.

Table 3: Foreign Investments made by European Union in 1998, by Investment Type

	Czech Rep.	Hungary	Poland	Bulgaria	Romania	Total
Acquisition	370	315	389	20	33	1136
Greenfield	81	57	127	10	52	327
Joint-venture	132	169	124	27	172	624
Total	583	541	649	57	257	2087

Sources: L. and F. Toubal (2001)

The mode of control is directly linked to the strategies pursued by MNCs. These can be divided in three categories:

- Domestic market penetration with market shares growth (horizontal integration),
- Market penetration and nearby markets investment strategy (horizontal integration)

- Integrating of the East European partner in the global strategy of the foreign firm (vertical integration).

In the three cases, the investment decision is a strategic step, which constitutes a threat for the followers. The first mover strategy allows benefiting from advantages that the follower cannot obtain or acquire with more difficulty (market shares, acquisition of the best company in monopoly position, control of subcontractor). These advantages are strengthened when host countries grant fiscal and/or tariff advantages (increase of custom duties) to western investors as it has been the case for several manufacturing industries, (especially in the car manufacturing) before these countries became associated to the EU and start their negotiation for their further membership. Following firms, which could not benefit from the first mover advantage, develop price strategies, buying market shares and developing their after-sales services as the car maker Renault has done in Poland and in Hungary. Volkswagen strategy to take the control of Skoda highlights this point. The German firm negotiated with the various constituents of the company (trade-unions, managers), with government bodies (Ministry of Industry, Czech government). The commitment of the German firm and the expected returns on investment made the difference with its direct competitor's plan, Renault[11] and from the Czech Ministry of the industry projects, which wanted to give up producing cars and to concentrate on spare parts production. The objective of the German car-maker, besides taking a dominant position on the Czech market, aimed at integrating the Czech company into the motor group global strategy, and to exploit Skoda brand image in Eastern Europe.

In many cases, the takeover by acquisition of one or several enterprises puts acquiring firms in a monopoly or in an oligopoly situation on domestic markets (Nestlé in Hungary). The takeover of the Hungarian company Ganz Árammérö by the French firm Schlumberger allowed it acquiring both the production site of electricity meters and the control of the electricity distribution.

Local firms takeover by MNCs incites firms to restructure and to become profitable very quickly. Several case studies showed that there was a strong correlation between the control mode, the profitability and the exports flows. Generally, firms with foreign participation are more profitable than domestic ones without foreign capital, companies 100% held and with a majority foreign participation are more profitable than those with minority participation or directed towards local markets table 4). In the first case, which reflects the integration in the global strategy, exports flows are higher. In the second and especially in the third case, the profitability is linked to the reorganisation speed of the acquired company but also to the level of the internal demand.

Whatever the reason is that leads to invest, firms which invest in the region restructure local companies more quickly and deeply transform their behaviours,

even if numerous factors slow down this process as the result of different case studies conducted on firms' samples suggests it. The main factors, whose importance can differ from a country or from a sector to another, are the following:

- Infrastructures weakness,
- Workforce doesn't fit
- Absence or weakness of the business environment
- Organisational problems of local firms,
- Finance
- Reliability of local partners,
- Floppy legal environment and political instability.

Table 4 : Comparison of Domestically, and Foreign-owned Companies in Poland, 1993-1998

Item	1993	1994	1995	1996	1997	1998
Share of exports in total sales (%)						
Domestic enterprises	19.7	13.9	15.5	16.7	15.5	16.2
Foreign affiliates	21.8	27.6	24.3	25.8	26.9	29.3
Value of exports per employee (in fixed prices, 1993), thousand PLN						
Domestic enterprises	9.0	5.6	7.5	8.0	9.6	10.1
Foreign affiliates	6.6	10.5	17.5	23.3	29.2	35.7
Share of energy costs in total sales (in per cent)						
Domestic enterprises	3.6	3.6	3.2	3.3	2.5	2.7
Foreign affiliates	1.4	1.4	1.1	1.0	1.2	1.2
Share of investment outlays in total sales (in %)						
Domestic enterprises	5.1	4.5	5.6	6.1	6.4	7.9
Foreign affiliates	11.9	10.7	9.7	8.8	9.8	12.0
Investment outlays per employee (in fixed prices, 1993), in PLN						
Domestic enterprises	2.3	1.8	2.7	2.9	4.0	4.9
Foreign affiliates	3.6	4.1	7.0	7.9	10.7	14.7

Source: S. Minski (2001)

Strategic Movement and Regional Integration

The control of firms purchased by the western buyers has consequences both upstream and downstream, with the reorganisation and the development of supplying and subcontracting networks. This generally concerns all the companies which find themselves, at the beginning of the transformation, in a legal, industrial and financial no man's land, but especially strongly externalized firms, which depend from outsourcing for their supplying. It is naturally the case of the car industry, and also of

the agro-business industries, and large-scale distribution sector. For other companies, as General Electric, which acquired the Hungarian firm Tunsgram, the objective consisted in integrating a competitor which had low production costs and which would have been able to enter easily on the world market of the electric light bulbs. The reorganisation of the firm led to standardise the production and to prevent the development of an internal competition by stopping the production of some products. In other cases, for example in the paper industry in Hungary, the Austrian buyer quickly closed the local firm in order to eliminate a potential competitor and increase its market shares by improving and increasing the use rate of his own equipments. For Schlumberger, the acquisition of Ganz Árammérö (construction of electricity meters) answered a triple objective: to implant itself in Eastern Europe by taking the control of a company which presented fast profits prospects, to absorb a real competitor that the firm met frequently on third markets, to avoid a follower by taking a dominant position on the local market. After reducing the production line and concentrating it on a standard range - the company produced previously in very small series- and significantly reduced employment, the firm began to make profits and stated a Greenfield investment. Regarding market shares, the buyer closed the access to markets where Schlumberger was already present[12].

Investment strategy on one domestic market can we used as a spring board for the conquest of nearby markets, was chosen by several MNCs operating in various sectors, with varying successes. Electrolux's establishment in Hungary, with Lehel's repurchase allowed the Swedish firm to expand in nearby countries in which the Hungarian enterprise had a part of its outlets. Danone set up a double strategy: a strategy of markets conquest on each country of the region (with today the retreat from the Hungarian market because of reorganisation of the whole group) and a regional strategy by assigning to each national company a specialisation in a products range to supply the other markets of the region. In contrast, for some companies, strategies to enter in the region have failed or were more difficult to realise. One can quote the cases of Bull and Thomson, two big French companies, which negotiated with the Hungarian State, firm Videoton (at the beginning of the 90s), a firm known for its computer and telephony products, and for TV sets manufacturing. The initial projects foresaw the joint-ventures constitution with the aim of taking advantage of Videoton's expertise and of its networks in the neighbors' economies, especially in the former USSR. Bureaucratic and political obstacles[13], on one side, the opening of other countries, particularly (CIS markets), on the other side, entailed the failure of the ambitious initial projects, and the French firms contented themselves with smaller units turned towards marketing at the domestic level.

Conclusion

FDI in the CEECs, although modest compared with other regions of the world, plays a significant role in the modernisation of the productive assets in the region. It constitutes a recovery tool by contributing to adjust the industrial structure in various sectors. CEECs, albeit facing specific constraints, have a master card in comparison with other emergent economies: their level of industrialisation, human resources, technical and scientific knowledge. In this sense, the adaptation to the market mechanisms should be, a priori, easier. However, the industrial organisation , the mode of resources allocation which prevailed, have durably shaped the industrial structure, agents' behaviours and the mastery of technology.

Western firms use various entry modes, which depend, both on their activities, on the nature of their assets, on the type of networks into which they are inserted, on the one hand, and on attraction policies and various competitive advantages of host countries, on the other hand.

Multinational corporations establishment through acquisitions or the building of new units has a direct and indirect effect on local industrial networks, by integrating subsidiaries into the whole group strategy. On the contrary, in the case of cooperation, the transfer can take more time; the entrant firms' motivations are different. It remains that the foreign capital plays an essential role in the upgrading, developing and integrating local industries, of which few, in the region, are capable, by themselves, to face and support the competition from big western industrial groups.

NOTES

[1] I thank, for their annotations on a preliminary version of this paper, Jean-Joseph Boillot, Frédéric Bourassa, György Csaki, José De Sousa, Csaba Mako. Opinions and possible errors remain mines

[2] It is necessary to mention the ' running with the pack ' (or the Panurge's sheep effect) of the entry on a new market: the follower (followers, in fact) saves on the transaction costs borne by the first mover; he can so enter and bear a much weaker cost, by basing itself on the commitment degree of the first mover. This can lead, in some cases, to some disappointments. For example, in Vietnam, one counted not less than 10 automotive assemblers while the capacities of only one of them were enough to meet the local reliable demand.

[3] Finally, a political factor should be pointed out, although it is not considered here. The privatisation by sales to foreign buyers is a kind of despoliation, in the case of acquisitions (in fact, a double despoliation: sale at low price of an asset on which the local populations had no control because of State property and of a lack of political mechanisms allowing to express the collective choices) because of the absorption, by foreign buyers, of whole parts of their industries. But is it better to sink with the Titanic or to embark on a boat, which can face storms and is fitted out with lifeboats? It is true that in some countries, as

Russia, the assets self-appropriation by limited fractions of the 'technical nomenklatura' was even more cynical and did not generate this kind of offence on behalf of a disappointed population.

[4] In 1990, the fraction of the active population employed in the Polish industry was superior to 50% while it was included between 23 and 27% in the most developed market economies.

[5] In some cases, firms' managers to be privatised, a rope around the neck, as the burgesses of Calais, went to negotiate the merger - acquisition with foreign buyers, often former customers or partners (interview with a manager of one big Hungarian electric machines firm bought back by an Italian state firm which has since sold back its assets to a Hungarian financial group).

[6] But, this last can evolve with time. It was relatively late in Czech Republic and in Poland, where the adopted methods of privatisation privileged the mass redistribution of assets to the population and limited the entry of foreign buyers.

[7] Dacia in Romania, with the R12 model's production, Lada in Russia with the Fiat 128's models, the Lada, illustrate how host countries reproduced western makes which where quickly obsolete abandoned in France and in Italy under the competitive pressure while these models were produced during more than two decades in both countries.

[8] A good indicator of this difficulty can be read in the statistics presented by some countries (China, Vietnam) which show the contractual involvement and the capital really released by the investors, sometimes with significant margins. One can interpret the importance of these margins as a measure of transaction costs supported by the western company in its first negotiation stage.

[9] For example, when Citroën negotiated with the firm Red Flag of Wuhan (Hubei) the implementation of a joint-venture, it proposed and revealed a car prototype, which was not yet developed in France. Idem for the Alcatel-Vietnam Telecom's joint-venture (interviews of these companies managers by the author). The fact of revealing the technology does not mean the fast appropriation of the technology (J. Ruffier, 1996).

[10] Many firms can delay their investment or adopt a policy of wait and see, by waiting for a change of the FDIs legislation. For example (cf. table 1), the FDI really started in Czech Republic and in Poland only when the first wave of mass privatisations has been achieved. These privatisation methods did not offer possibilities to the foreign investors to enter in, came to its end in the first country and when the government stopped considering most of the country's companies as strategic and so as not eligible to receive foreign capital, in the second one.

[11] At first, Renault was not really motivated to invest in the region at this period. The firm came out of a long reorganization in France and launched small cars (Clio) while the markets of the Eastern Europe were applicants of superior and intermediate models. The company was already present in South Central Europe (Slovenia) and in western Turkey. The governance system of the company, - the company was still under the majority control of the State - explains that the firm negotiated, after an official journey of the President of the Republic in Prague, with some kind of reserve with its Czechs partners without real will to conclude an agreement.

[12] Interview of the manager by the author

[13] The firm, former fleuron of the socialist era, which was specialized in the production of civil and military telephony, electronics, television, was sold ' by apartments ', some left by 'cronyism' and at very low price to a Prime Minister's relation of this moment.

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