How to Attract FDI and Maximize Its Benefits

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Introduction

Many countries around the world compete fiercely to attract foreign direct investment (FDI) which is reflected in the fact that there exist more than 160 national and over 250 sub-national investment promotion agencies. Policymakers, especially those in transition and developing countries, hope that FDI inflows will bring much-needed capital, new technologies, marketing techniques and management skills. Although all of these potential benefits of FDI are viewed as important, particular emphasis is placed on the contribution of FDI to increasing productivity and competitiveness of the domestic industry.

The aim of this paper is to review recent evidence on the potential of FDI for enhancing the competitiveness of a host country through technology transfer and to consider ways in which host countries can maximize these benefits. In other words, the paper asks why attracting FDI is worthwhile and how to go about it.

The first part of the paper examines the potential of FDI to enhance the competitiveness of domestic industries in the host country. First, it argues that given the characteristics of firms undertaking FDI, it is reasonable to expect that FDI will serve as a conduit of knowledge across international borders. Second, it reviews the evidence on the direct effect of FDI on the recipient firms. Third, it discusses what kind of knowledge spillovers may be expected to result from FDI and what kind of spillovers are unlikely to take place. And finally, it argues that allowing foreign entry into services sectors may be an important way of reaping benefits from FDI inflows.

The second part of the paper reviews the determinants of FDI inflows and discusses ways in which New Europe's Economies (NEEs) may enhance their ability to attract FDI. In addition to the conventional determinants of FDI such as market size and labor costs, it highlights the importance of transport and trade facilitation infrastructure, governance and labor market flexibility. It argues that the benefits of proximity to the European Union (EU) will not be fully realized without sufficient progress in these areas. Finally, it discusses recent evidence on the effectiveness of investment promotion activities.

Technology transfer is only one of the ways through which FDI contributes to better performance of the host economy. Providing access to foreign market and integrating the host country into global production

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and distribution networks is another important channel enhancing the competitiveness of the host economy. It is not discussed in this study, as it is the focus of the companion paper (Javorcik and Kaminski, 2006).

Why FDI presents potential for technology transfer

A basic tenet of the theory of the multinational firm is that such firms rely heavily on intangible assets, such as new technologies and well-established brand names to successfully compete with local firms that are more familiar with the host country environment (e.g., Markusen 1995). More recent theoretical work focusing on heterogenous firms also suggests that multinationals come from the upper part of the productivity distribution of firms in their country of origin (Helpman et al. 2004). Both of these predictions have been confirmed by the empirical literature which has found that firms undertaking FDI tend to be more R&D- and advertising-intensive, employ a higher share of skilled workers and exhibit above average productivity (see Markusen 1995; Helpman et al. 2004; Arnold and Hussinger 2005; and Girma, Görg and Strobl 2004).

Multinationals are also responsible for undertaking a large share of the global R&D efforts. In 2002 700 firms, 98 percent of which are multinational corporations, accounted for 46 percent of the world's total R&D expenditure and 69 percent of the world's business R&D. Given that there exist about 70,000 multinational corporations in the world, this is a conservative estimate. In 2003, the gross domestic expenditure on R&D by the eight Eastern European members of the EU at 3.84 billion dollars[3] was equal to about half of the R&D expenditure of the Ford Motor (6.84 billion), Pfizer (6.5 billion), DaimlerChrysler (6.4 billion) and Siemens (6.3 billion) during the same year. It was comparable to the R&D budget of Intel (3.98 billion), Sony (3.77 billion), Honda and Ericsson (3.72 billion each) (see UNCTAD 2005).

Limitations to arms-length trade in technology are also a motivation for firms to undertake FDI. For instance, it may be difficult to sell technology without revealing all the details to the potential seller before the transaction takes place. Moreover, insufficient protection of intellectual property rights may make arms-length trade in technology an unattractive option. Indeed Mansfield and Romeo (1980) find that the transfer of technology is more rapid within wholly owned networks of multinationals' subsidiaries than to joint ventures or licensees. Aggregate data reveal a similar pattern–more than 80 percent of global royalty payments for international transfers of technology in 1995 were made from subsidiaries to their parent firms (UNCTAD 1997).

While most of the R&D activity undertaken by multinational corporations remains in their home country, recent years have witnessed a growing internationalization of R&D efforts. According to the data collected by UNCTAD (2005) in their 2004-5 survey of the world's largest R&D investors, the average respondent spent 28% percent of its R&D budget abroad in 2003, including in-house expenditure by foreign affiliates and extramural spending on R&D contracted to other countries. 62.5 percent of business R&D conducted in Hungary was undertaken by foreign affiliates. The corresponding figure for the Czech

[3] As the 2003 figures were not available for Lithuania and Slovenia, the 2002 data were used for these countries.

Republic was 46.6%, while in Poland and Slovakia foreign affiliates accounted for 19% of business R&D.

In sum, FDI presents an important channel of technology transfer across international borders. Given that the differences in technological sophistication between industrialized economies and transition countries, these countries stand to benefit from knowledge transfer through inflows of foreign direct investment.

Direct Effect of FDI

Anecdotal evidence suggests that multinational companies have an advantage over local firms, which allows them to offset the extra cost of operating in distant and unfamiliar markets. And indeed many empirical studies have shown that foreign affiliates outperform local firms in a host country. However, is the superior performance of foreign affiliates due to the intrinsic advantages of foreign ownership or are foreign investors simply good at picking the best performing local plants as acquisition targets? To examine the causal link between foreign ownership and plant performance Arnold and Javorcik (2005) apply propensity score matching to plant-level data from the Census of Indonesian Manufacturing covering the period 1983–96. The matching technique creates the missing counterfactual of an acquired plant had it remained under domestic ownership. It does so by pairing up each plant that will receive FDI in the future with a domestic plant with very similar observable characteristics operating in the same sector and year. Propensity score matching is then combined with a difference-in-differences approach. The causal effect of foreign ownership is hence inferred from the average divergence in the productivity growth paths between each acquired plant and its matched control plant, relative to the pre-acquisition performance.

The results suggest that foreign ownership has profound effects on the operations of FDI recipients. After receiving FDI plants improve their performance measured in terms of total factor productivity. The estimated increase in plant productivity is quite large, reaching about 34 percent in the third year of foreign ownership. About half of the positive productivity effect is realized during the year foreign investment takes place with the rest occurring during the following two years. This effect is larger than the 14 percent differential found in the UK by Conyon et al. (2002). However, as the productivity gap between domestic plants and multinational companies is most likely considerably larger in a developing country than in the UK, finding a bigger effect in a developing country context is not surprising. The findings are robust to extending the time horizon under consideration to five years of foreign ownership. The results indicate that receiving FDI leads not only to an immediate boost to productivity but that the improvements continue to take place in subsequent periods.

The productivity improvements found in the Indonesia plants receiving FDI take place simultaneously with increases in investment outlays, employment, wages and output, thus suggesting an on-going restructuring process. Plants receiving foreign investment also become more integrated into the global economy by exporting a larger share of their output and sourcing a larger share of their inputs from abroad.

Intra-industry Spillovers From FDI

The finding that foreign ownership has a positive effect on the productivity of recipient plants suggests that FDI inflows may present potential for knowledge spillovers to other local firms. Spillovers from FDI take place when the entry or presence of multinational corporations increases the productivity of domestic firms in a host country and the multinationals do not fully internalize the value of these benefits. Spillovers may take place when local firms improve their efficiency by copying technologies of foreign affiliates operating in the local market either through observation or by hiring workers trained by the affiliates. Another kind of spillover occurs if multinational entry leads to more severe competition in the host country market and forces local firms to use their existing resources more efficiently or to search for new technologies (Blomström and Kokko, 1998).

The existing literature on this subject is of three kinds. First, there are case studies, which are often very informative and include a wealth of valuable information (see, for instance, Moran, 2001) but because they pertain to particular FDI projects or specific countries, they cannot be easily generalized. Then, there is a plethora of industry-level studies, most of which show a positive correlation between foreign presence and the average value added per worker in the sector. Because most of them rely on cross-sectional data, their disadvantage is the difficulty in establishing the direction of causality. It is possible that this positive association is caused by the fact that multinationals tend to locate in high-productivity industries rather than by genuine productivity spillovers. The positive correlation may also be a result of FDI inflows forcing less productive domestic firms to exit and/or of multinationals increasing their share of host country market, both of which would raise the average productivity in the industry. Finally, there is research based on firm-level panel data, which examines whether the productivity of domestic firms is correlated with the extent of foreign presence in their sector. Most of these studies, however, such as Aitken and Harrison (1999) on Venezuela, Djankov and Hoekman (2000) on the Czech Republic, Zukowska-Gagelmann (2000) on Poland, and Konings (2001) on Bulgaria, Romania, and Poland, cast doubt on the existence of spillovers from FDI in developing and transition countries. The researchers either fail to find a significant effect or produce evidence of negative horizontal spillovers, that is, the effect the presence of multinational corporations has on domestic firms in the same sector.

As Aitken and Harrison (1999) point out, the finding of a negative effect may be explained by the fact that knowledge spillovers within an industry may be counterbalanced by the competition effect. As domestic firms lose market share to foreign entrants, they experience lower productivity since their fixed costs are spread over a smaller market. The existence of the competition effect is reflected in the perceptions of local firms collected in the surveys conducted on behalf of the World Bank in the Czech Republic and Latvia.[4] As illustrated in Figure 1, 48 percent of the interviewed Czech firms believed that

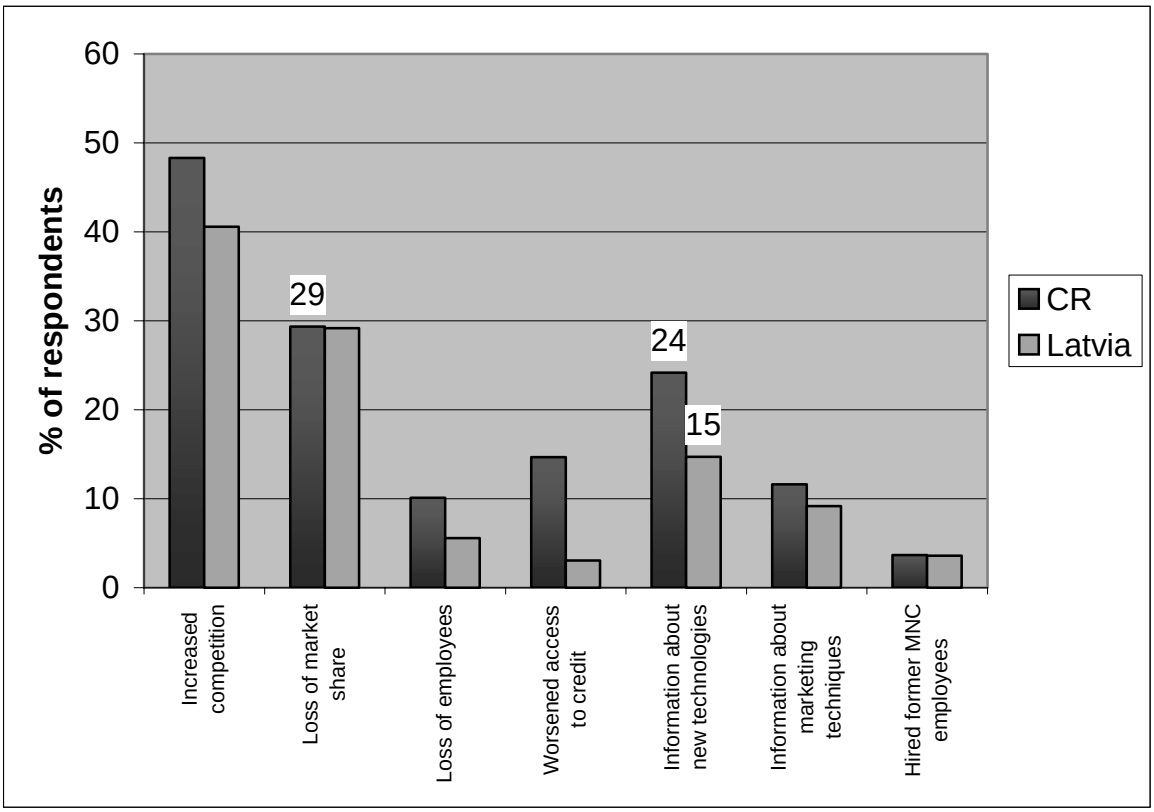
[4] The enterprise surveys, presented in this chapter, were commissioned by the Foreign Investment Advisory Services (FIAS), a joint facility of the World Bank and the International Finance Corporation, in Latvia and the Czech Republic during 2003. Both surveys were conducted by professional polling companies through face-to-face interviews at respondents' offices. All respondents were guaranteed full anonymity. In Latvia, 407 firms were interviewed and 52 percent of respondents were located in the capital city of Riga while the rest were located around the country. Of the 407 firms, 67 percent of respondents were private domestic firms, 19 percent privatized state-owned companies, 2 percent were firms remaining in public hands. and 11 percent were firms with foreign capital participation. In the Czech Republic, 391 local companies and 119 multinationals were interviewed. About 21 percent of the respondents were located in the capital city of Prague while the rest were located across all regions of the country. All of the companies included in the survey were private. In both countries, the surveys focused on the manufacturing sectors.

the presence of multinationals increased the level of competition in their sector. The same was true of 41 percent of Latvian enterprises. About 29 percent of firms in each country reported losing market share as a result of FDI inflow. Six to ten percent of firms lost employees to multinationals. Finally, 15 percent of Czech firms and 3 percent of Latvian enterprises believed that foreign presence worsened their access to credit.

There is also some evidence in favor of knowledge spillovers taking place through a demonstration effect. Almost 25 percent of respondents in the Czech Republic and 15 percent in Latvia learned about new technologies from multinationals. Similarly, 12 percent and 9 percent of respondents in the Czech Republic and Latvia, respectively, benefited from learning about new marketing techniques by observing multinationals. The movement of labor, however, seems to have been less prevalent as only 4 percent of firms in both countries reported hiring workers previously employed by multinationals.

The relative importance of the positive and negative forces differs between the two countries. For instance, while 29 percent of firms in both countries believed they lost market share to multinationals, only 15 percent of Latvian firms seemed to benefit from the demonstration of new technologies compared to 24 percent of Czech companies. This may not be surprising as the Czech Republic has made greater progress in reforming its economy and thus its firms may be better prepared to take advantage of knowledge spillovers.

Figure 1: *Perceived Effects of FDI in the Czech Republic and Latvia*



Source: Javorcik and Spatareanu (2005a).

Inter-industry Spillovers From FDI

It is possible, though, that researchers have been looking for FDI spillovers in the wrong place. Since multinationals have an incentive to prevent information leakage that would enhance the performance of their local competitors, but at the same time may benefit from transferring knowledge to their local suppliers, spillovers from FDI are more likely to be vertical than horizontal in nature. In other words, spillovers are most likely to take place through backward linkages, that is, contacts between domestic suppliers of intermediate inputs and their multinational clients, and thus they would not have been captured by the earlier studies.[5] It is also plausible that spillovers from multinational presence in upstream sectors exist thanks to provision of inputs that either were previously unavailable in the country or are technologically more advanced, less expensive, or accompanied by provision of complementary services.

Using firm-level panel data from Lithuania Javorcik (2004) demonstrates that the productivity of Lithuanian firms is positively correlated with the extent of potential contacts with multinational customers but not with the presence of multinationals in the same industry or sectors supplying intermediate inputs. The magnitude of the effect is economically meaningful. A one-standard-deviation increase in the foreign presence in the sourcing sectors is associated with a 15 percent rise in output of Lithuanian firms in the supplying industry. The productivity effect is found to originate from investments with joint foreign and domestic ownership but not from fully-owned foreign affiliates, which is consistent with the evidence of a larger amount of local sourcing undertaken by jointly owned projects. Similar results have been obtained by Schoors and van der Tol (2001) in the context of Hungary, though as their analysis relies on cross-sectional data its results should be treated with caution.[6] Maurice Kugler (2000) also finds intersectoral technology spillovers from FDI in Colombia. However, he does not distinguish between different channels through which such spillovers may be occurring (backward versus forward linkages).

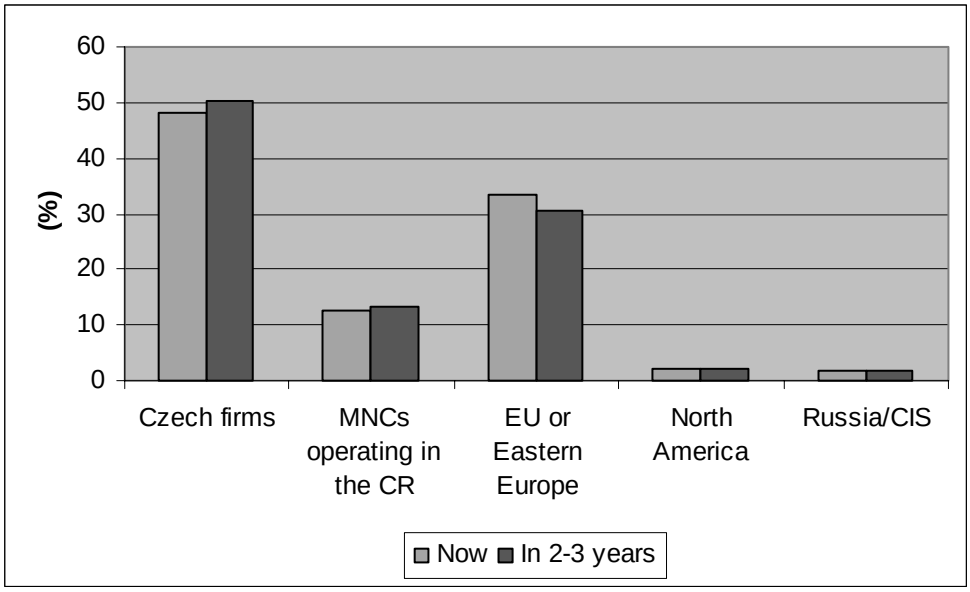
In order to understand how vertical spillovers take place, it is useful to examine factors driving the sourcing pattern and the decision making process of multinationals. The 2003 survey conducted by the World Bank among 119 majority-owned foreign subsidiaries operating in the Czech Republic representing almost all manufacturing sectors can be helpful in this respect. The survey results suggest that multinationals are actively engaged in local sourcing in the Czech Republic. Ninety percent of respondents reported purchasing inputs from at least one Czech company.[7] The median multinational in the sample had a sourcing relationship with 10 Czech suppliers while a multinational in the top quartile with at least 30. Czech companies were the most important supplier group, followed by other European suppliers (located in the European Union or Eastern Europe) and then other multinationals operating in the Czech Republic. The amount sourcing from North America, Russia and other Commonwealth of Independent States (CIS) was very limited.

[5] For a theoretical justification of spillovers through backward linkages, see Rodriguez-Clare (1996) and Markusen and Venables (1999). For case studies, see Moran (2001).

[6] Maurice Kugler (2000) also finds intersectoral technology spillovers from FDI in Colombia. However, he does not distinguish between different channels through which such spillovers may be occurring (backward versus forward linkages).

[7] Note that the question specifically asked respondents not to include suppliers of services, such as catering or cleaning..

Figure 2: *Share of Intermediate Inputs Sourced by Supplier Type*



Source: Javorcik and Spatareanu (2005a).

When asked about the current share of inputs purchased from each type of suppliers (in terms of value), multinationals indicated sourcing on average 48.3 percent of inputs from Czech enterprises, as compared to 33.3 and 12.6 percent from firms in the European Union/Eastern Europe and multinationals located in the Czech Republic, respectively (see Figure 2).[8] The share of inputs coming from the other regions appeared to be negligible. Since the average figures do not always give an accurate impression, it is worthwhile to report some more statistics. Of the 114 multinationals, 55 answered the question and reported buying at least 50 percent of their inputs from Czech suppliers. More than 10 percent of respondents acquired all of their intermediates from Czech enterprises. The sourcing patterns of multinationals appear to be quite persistent, as there is a large correlation (.9) between the share of local inputs sourced at present and that expected in the next 2 to 3 years.

The multinational's decision to choose one type of supplier over another was driven by several factors. The top reasons reported for cooperating with Czech suppliers included: low prices (71 percent); geographic proximity, which allowed for a better relationship with a supplier (64 percent); savings on transport costs (56 percent); and savings on import duties (44 percent). Sourcing from foreign firms located in the Czech Republic was primarily driven by the fact that these firms were global suppliers of the multinationals (45 percent) and offered more competitive prices (45 percent), higher quality products (29 percent), or products not available from Czech firms (29 percent). As before, savings on transport costs (34 percent) and benefits of proximity (30 percent) mattered as well. Finally, importing inputs from abroad was primarily driven by using a parent company's global suppliers (46 percent), implementing the decision of the parent company (37 percent), unavailability of particular products from Czech firms (36 percent), or desire to purchase higher quality inputs (30 percent). In 80 percent of cases, management at

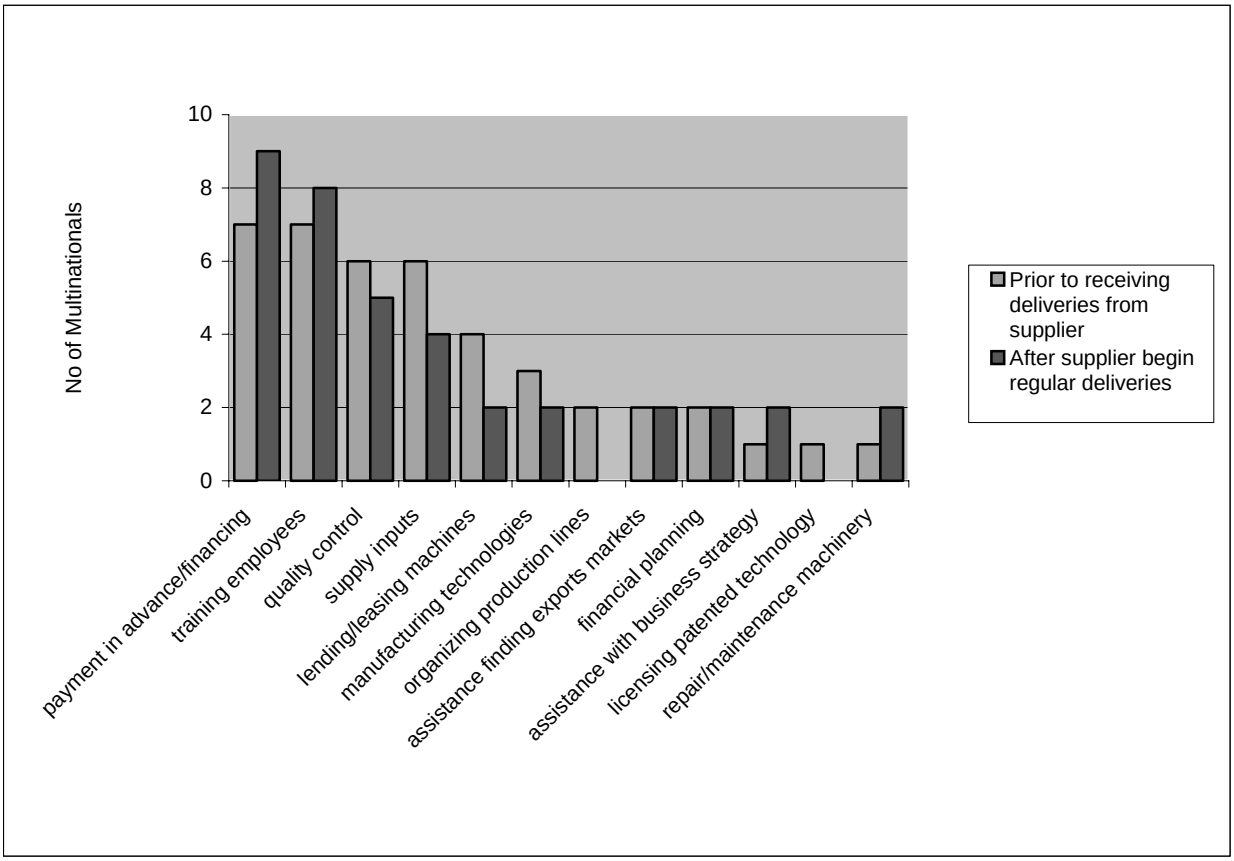
[8] Note that multinationals with no sourcing from a particular group of suppliers are included in that group's average.

the multinational plant in the Czech Republic rather than foreign owners based abroad made the sourcing decisions.

When asked about the reasons for not sourcing more from Czech firms, multinationals pointed to the lack of suitable products (38 percent), the inability of Czech firms to make timely deliveries (19 percent), and local firms' lack of funding to become a supplier (16 percent). The fact that the decision to source from suppliers other than Czech firms is in many cases due to lower quality of goods sold by domestic firms suggests that for many local firms upgrading their products is a precondition to supplying multinationals.

The composition of inputs sourced by foreign customers again highlights the importance of having a high quality product and the necessity of frequent upgrading, both of which are essential to a supplier's success with a multinational. Almost half of all inputs purchased by multinationals consisted of parts and components or final products (on average 32.4 and 15.6 percent, respectively). Raw materials constituted 36 percent and packaging 14 percent of purchased inputs.

Figure 3: *Assistance Extended by Multinationals Operating in Czech Republic to Domestic Suppliers*



Source: Javorcik and Spatareanu (2005a).

While multinationals have high requirements vis-à-vis their suppliers, 20 percent of them also offered some type of support to the Czech companies they source from. Advance payment and financing were the most popular form of assistance. Employee training and help with quality control ranked second and

third, respectively, which again reflect the importance of input quality in the multinational sourcing decision. Other types of assistance included: supplying inputs, lending/leasing machinery, providing production technology, financial planning, organization of production lines, business strategy, and finding export markets (see Figure 3).

While the incidence of direct assistance to suppliers is not very high, its impact should not be underestimated. The benefits of support provided by multinationals to their local suppliers have been documented in numerous case studies from around the world (see Moran 2001). The following example from the Czech Republic may also serve as an illustration. After a Czech company, which makes castings of aluminum alloys for the automotive industry, signed its first contract with a multinational customer, the staff from the multinational visited the Czech firm's premises for two days each month to assist with the quality control system. Subsequently, the Czech firm applied these improvements to its other production lines (not serving this particular customer), thus reducing the number of defective items produced and improving overall productivity.[9] Without doubt, such assistance contributes to the improved performance of the suppliers observed in the Czech Republic and other countries. Moreover, knowledge transferred to one local supplier may leak and benefit other firms operating in the same industry.

In order to become suppliers to multinationals, local companies must already exhibit superior performance. According to the survey, the key factor that allows Czech companies to make sales to multinationals is having a product of suitable quality. This view is consistent with the fact that 80 percent of survey respondents sell the same product to both multinationals and local customers and only 5 percent of respondents sell an improved version of the product to multinationals and its basic version to local customers. Only 21 percent of firms reported developing the product specifically for the multinational customer and in only 5.5 percent of cases the multinational helped in the development process. In 26 percent of firms the product was developed in-house, and only 4 percent of companies developed products based on technology licensed from abroad.

While Czech suppliers appear to be engaged in product upgrading, a vast majority of such activities is based on their own efforts. More than a quarter of multinationals reported that the complexity and/or quality of products bought from the Czech suppliers increased during the two years before the study. In more than half of the cases, the supplier made improvements independently of the multinational. In the remaining cases, the improvement was a result of the multinational imposing higher requirements on their suppliers. Only in a handful of responses (15 percent) did multinationals indicate that the change was a direct result of the assistance provided to the supplier.

Having a suitable product is a necessary but not a sufficient condition for becoming a supplier. Many multinationals perform technical audits of their prospective suppliers and/or require quality certification, such as ISO 9000.[10] The technical audits, while not considered by multinationals as a form of assistance,

[9] Source: Interview with company management conducted by the author in the Czech Republic in May 2003.
[10] ISO 9000 is a quality standard which has become an international reference for quality requirements in business to business dealings. It refers to what the organization does to enhance customer satisfaction by meeting customer and applicable regulatory requirements and continually to improve its performance in this regard. For more details see www.iso.org.

may be invaluable to prospective suppliers since they may point out operational deficiencies they were previously unaware of. The same may be true of the ISO certification process. The pressure from multinationals is often the driving force behind obtaining the quality certifications, as 17 percent of Czech companies surveyed reported getting an ISO certification *in order to become* suppliers to multinationals. These firms constituted 40 percent of all companies reporting having such a certification.

The survey results also suggest that multinationals make a deliberate effort to transfer knowledge to their local suppliers, although its extent and form vary by country. For instance, 33 percent of the suppliers in Latvia and 14.6 percent in the Czech Republic reported receiving various forms of assistance from their multinational customers.[11] Given the fact that credit constraints faced by local companies were mentioned by multinationals as one of the factors preventing them from sourcing more inputs locally, it is not surprising that advance payment and financing topped the list in both countries. It was followed by leasing of machinery and employee training in the Czech Republic and supplying inputs and organization of production lines in Latvia. Other forms of assistance were related to quality control, obtaining license for new technology, and production technology.

While there is some evidence of technology transfer taking place (through leasing of machinery, assistance with production technology, or new technology licensing), the picture is consistent with the earlier observation that most companies in the Czech Republic acquire production technology on their own. Thus, the knowledge transfer is more likely to pertain to general business practices rather than specific technologies. Knowledge transfer takes the form of employee training, help with quality control, organization of production lines, or inventory management. While fees are charged for some forms of support, the majority of it is free.

Effects of FDI Inflows into Services Sectors

The studies mentioned above focus on FDI inflows into manufacturing sectors. However, FDI inflows into services industries may be beneficial to the host country as well. Foreign investors may improve and expand the set of available producer services and introduce international best practices. By doing so, they may also induce domestic competitors to make similar improvements. Given the limited scope for using cross-border trade to substitute for domestically produced services inputs, the performance of downstream sectors may be tied more directly to the quality and availability of services supplied by providers operating domestically than is the case for physical intermediate inputs. Furthermore, the availability of high quality efficiently supplied services, especially backbone services (transport, telecommunications, ports management) is critical to participation in a new division of labor driven by global production networks based on production fragmentation. This is so, simply because interaction among “production blocs” of border-spanning production networks is particularly vulnerable to delays and disruptions between individual stages of the supply chain due to weaknesses in service links.

[11] To make the results comparable between the two countries, in this case suppliers were defined as local firms selling to multinationals operating in their country or abroad.

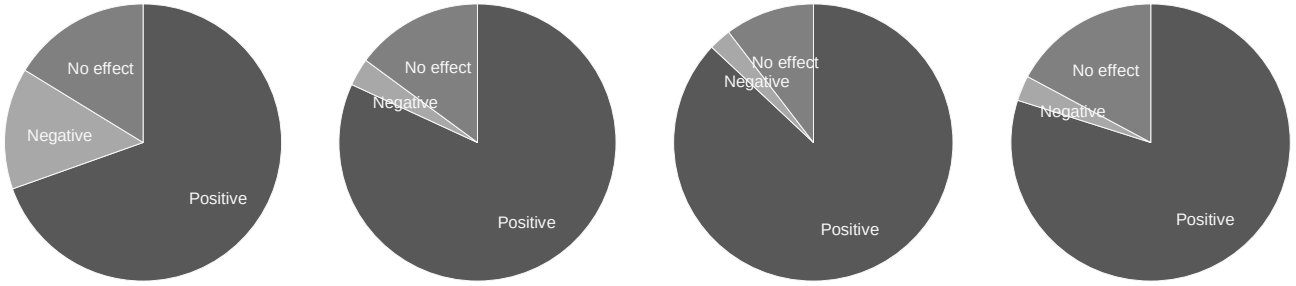
A greater choice of services providers may in turn affect the performance of manufacturing sectors in three ways. First, entry of internationally successful players into services industries may lead to higher quality and reliability of services. For instance, international phone communications or electricity provision may become more reliable due to new investments in infrastructure or credit decisions may be made faster as competition among banks increases. This will in turn limit disruptions to production and decrease the operating costs in downstream manufacturing sectors. Second, new services may become available as a result of foreign entry. Examples include new financial instruments, multi-modal transport services or digital value-added services in telecommunications. Availability of such services may allow manufacturers to introduce productivity-enhancing changes to their operations, such as receiving production orders on line or setting up on-line bidding systems for suppliers. Third, services liberalization may lead to a wider availability of services that were previously restricted to certain groups of users, such as expanding internet coverage into rural areas or the availability of business services to smaller firms. The improved access may in turn enhance competitiveness of smaller or remotely located enterprises.

The results of a firm survey conducted by the World Bank in the Czech Republic in 2004 show that Czech firms perceive the effects of services liberalization as positive. A vast majority of respondents reported that liberalization of services industries contributed to improvements in quality, range and availability of services inputs in their country. The positive perceptions ranged from 55% of respondents asked about the quality of accounting and auditing services to 82% for telecommunications. With regards to the variety of products offered, the positive views of liberalization varied between 56% of respondents evaluating accounting and auditing services to 87% of respondents asked about telecommunications. The corresponding figures for the effect on services availability ranged from 47% in accounting and auditing to 80% in telecommunications (see Figure 4).

To formally examine the link between services liberalization and the performance of services users, a recent study (Arnold, Javorcik and Mattoo, 2006) relates total factor productivity of manufacturing firms to the state of liberalization in upstream services sectors. The study uses firm-level panel data from the Czech Republic for 1998–2003. The reliance of each manufacturing sector on each services sector, assessed on the basis of the national input-output matrix, is used as a weight to create manufacturing sectors' exposure to services reform. The study uses several proxies to capture the extent of liberalization in services sectors. The first measure is a set of policy reform indices published by the European Bank for Reconstruction and Development. Time-varying indices are available for banking, telecommunications, electric power, railway transport, road transport and water distribution. The other measures capture a particular aspect of liberalization: (i) the extent to which foreign investors have entered Czech services industries, proxied by the share of an industry's output produced by foreign-owned companies; (ii) the progress of privatization in services industries, proxied by share of an industry's output produced by private companies; (iii) the level of competition in services industries, measured by the market share of the four largest providers. The empirical specification also includes a comprehensive set of controls for other channels through which increased openness may affect firm performance.

Figure 4. *Firm Perceptions about Services Reforms in the Czech Republic: Survey Results*

Perceived Impact of Liberalization of Telecommunications Sector on

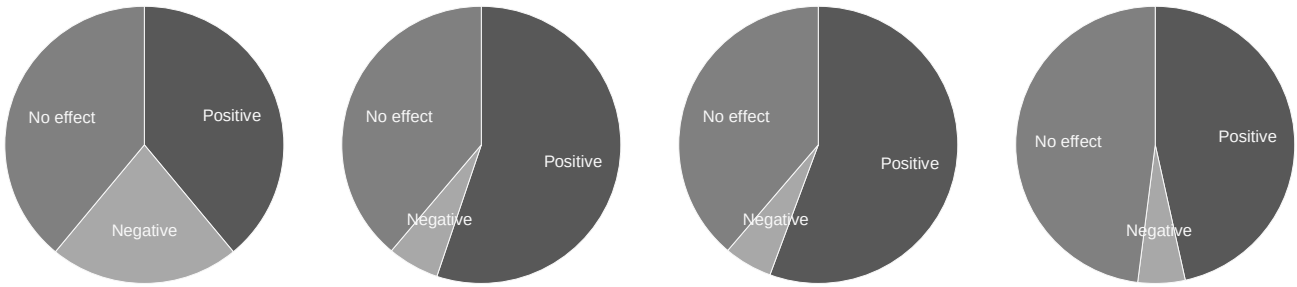


Prices | Quality | Range of Services Offered | Availability of Services

Perceived Impact of Liberalization of Banking Sector on

Prices | Quality | Range of Services Offered | Availability of Services

Perceived Impact of Liberalization of Accounting Sector on



Prices | Quality | Range of Services Offered | Availability of Services

Perceived Impact of Liberalization of Insurance Sector on

Prices | Quality | Range of Services Offered | Availability of Services

Perceived Impact of Liberalization of Transport Sector on

Prices | Quality | Range of Services Offered | Availability of Services

Source: Arnold, Javorcik and Mattoo (2006).

The results demonstrate a positive correlation between liberalization in services sectors and the productivity of manufacturing firms relying on services inputs. A positive and statistically significant relationship is found for the policy reform index, the presence of foreign providers in services sectors and the extent of privatization in services industries. The relationship between the presence of foreign providers in services sectors and the performance of manufacturing firms relying on services inputs is the most robust. These findings are consistent with services sector liberalization, as manifested by FDI inflows into the sector, being associated with improved availability, range and quality of services, which in turn contribute to improved performance of manufacturing firms using services as inputs.

Taken together, the results of these three studies highlight the potential of FDI for enhancing competitiveness of host economies through productivity improvements and technology transfer.

How Can NEEs Attract More FDI Inflows?

FDI inflows are commonly classified into those driven by search for natural resources, search for markets and search for cost savings. From the perspective of NEEs, natural-resource seeking FDI is not particularly interesting because of limited natural resource endowments in most of the NEEs and the fact that little can be done to change it. Hence, this section will focus on the other two types of FDI.

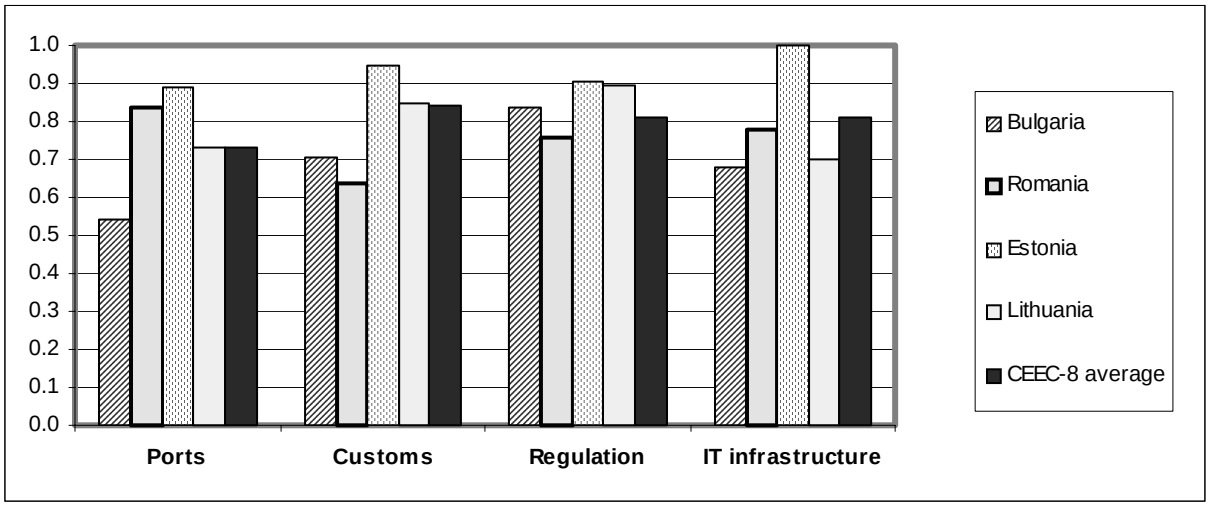
Turning to market seeing FDI, almost all careful empirical studies have found a positive relationship between a host country's market size and the volume of FDI inflows. The importance of market size puts smaller economies at a disadvantage relative to larger countries. However, this disadvantage can be remedied through participation in regional trade agreements as demonstrated by recent research. For instance, Head and Mayer (2004) find a positive correlation between entry of Japanese firms into the European Union and the market potential measures which aggregate demand from multiple EU regions adjusting it for distance. Given that NEEs are part of the EU, they have already benefited from the access to the large market of the EU and can count on doing so in the future.

However, the benefits of being part of the EU can be reduced or enhanced by the quality of the transport infrastructure and other aspects of trade facilitation such as port efficiency, customs environment, regulatory environment, and IT (Information Technology) infrastructure.[12] NEEs have a long way to catch up with the EU-15 in this respect. Figure 5 presents the values of trade facilitation benchmarks in terms of performance of the EU-15 (1.00) for CEEC-8 (new Central European EU members), two best performers among them (Latvia and Lithuania) and two EU candidate countries—Bulgaria and Romania. Significantly lower quality of services explains poor performance of Bulgaria and Romania in attracting FDI in supply chains of large multinational corporations, as demonstrated in their limited participation in global producer-driven networks (see Javorcik and Kaminski, 2006). The importance of transport infrastructure and trade facilitation as a determinant of FDI is confirmed in a recent econometric analysis

[12] Port efficiency refers to the quality of infrastructure of maritime ports and airports; customs environment to direct customs costs as well as administrative transparency of customs and border crossings; regulatory environment to the country's approach to regulations and their quality; and IT infrastructure to the extent to which an economy has the necessary domestic infrastructure (such as telecommunications, financial intermediaries, and logistics firms) and is using networked information to improve efficiency and to transform activities to enhance economic activity.

by Amiti and Javorcik (2005). The authors show that the proximity to ports, size of port facilities and the availability of railways affect foreign entry into Chinese provinces. They also demonstrate that entry of foreign firms is driven by access to the market in the host province and to a much lesser extent by the proximity to markets in other provinces. This latter finding can be explained by the poor quality of distribution infrastructure and the informal barriers to inter-provincial trade in China.

Figure 5: *Trade Facilitation Benchmarks for Selected Countries Against the EU-15 Average Level*



Source*:* see Kaminski (2006).

FDI motivated by cost savings is sensitive to differentials in labor costs. However, what matters is unit labor costs, that is wages adjusted for productivity rather than wages alone. Thus low cost labor force with little human capital may not always be appealing to foreign investors. NEEs enjoy a significant cost advantage relative to the EU countries particularly with respect to skilled labor, which combined with growing skill endowment makes them well positioned to attract efficiency seeking FDI in medium to high technology sectors. As illustrated in Table 1 below, the proportion of economically active population with secondary education is actually higher in NEEs than in the EU-15. Together with relatively low values of the indicators of labor market participation for most NEEs, this suggests a significant potential for the expansion of skilled labor intensive production. Indeed, as Marin (2004) shows, Austrian and German corporations tend to outsource their skill intensive activities to Eastern Europe. This does not apply only to Austrian and German corporations but MNCs coming from other countries as well (Javorcik and Kaminski, 2006).

By the same token, NEEs are not competitive vis-à-vis Asian countries in low technology sectors, with the exception of high-end time-sensitive products. Just like is the case with market seeking FDI, the cost advantage of the NEEs may be reduced by high costs of doing business associated with worse governance or excessive regulation. It can be enhanced, however, by increases in skill endowment through investments in education and R&D.

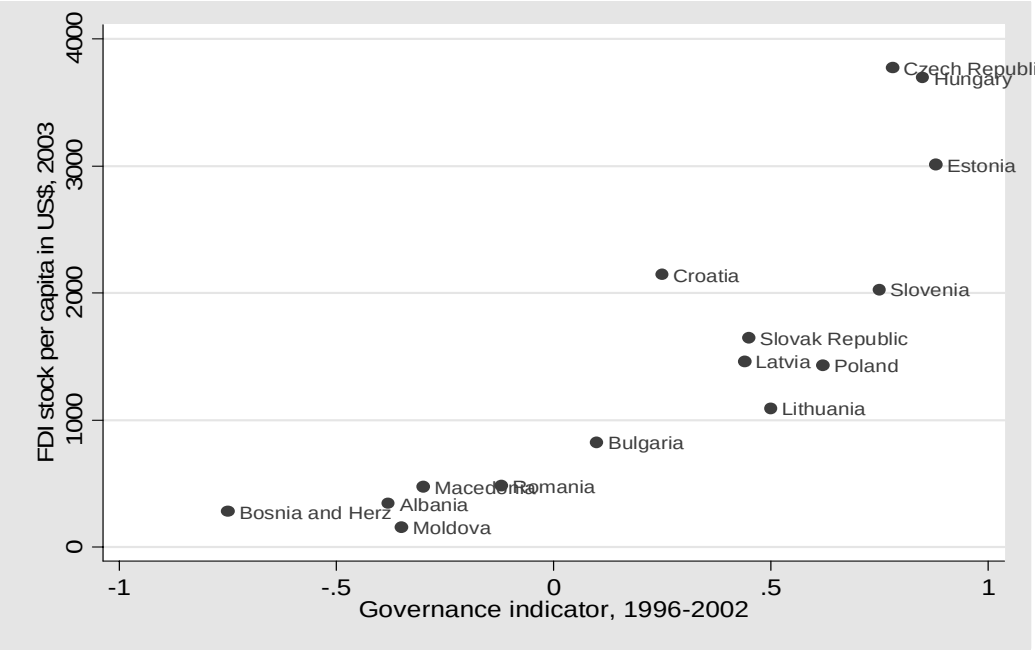
Table 1: *NEE's endowments in comparative perspective: selected indicators in 2003*

	Land, km^2 per capita	Land use, arable land (% of land area), 2001	Economically active population with secondary education (%)	Economically active population (% of total population)	Labor Market Partici-pation /a	Electricity production (kwh per capita), 2002	Electricity consumption (kwh per capita), 2002	Natural Resources Index, 2004 /b
Bulgaria	0.014	40.0	***55.3***	42.0	49.2	5,424	3,056	0
Czech Republic	0.008	39.8	**79.2**	50.0	59.3	7,484	3,882	0
Estonia	0.031	16.0	58.1	48.9	58.7	6,278	3,099	0
Hungary	0.009	**50.1**	65.7	41.2	49.8	3,559	***2,074***	0
Latvia	0.027	29.7	65.8	48.5	57.5	***1,700***	1,929	0
Lithuania	0.019	45.2	63.2	47.4	58.2	5,108	2,498	0
Poland	0.008	45.9	70.9	44.4	54.7	3,770	1,595	1
Slovak Republic	0.009	..	79.1	48.7	60.2	6,028	4,222	0
Slovenia	0.010	***8.6***	63.2	49.0	56.5	***7,480***	**5,998**	0
Romania	0.010	40.8	60.2	44.4	54.7	2,463	4,979	1
EU15 /c	0.014	24.3 /1	44.4 /2	47.1	56.7	7,073	6,086	

Notes: All data are for 2003, unless otherwise specified; 1/ Excluding Luxembourg; 2/ Excludes France (secondary education data not available); 2002 data used for the Netherlands.
/a ILO Methodology: Economically active population divided by total population over 15.
/b Falcetti et al. EBRD 2004. Countries are rated from 0 to 2, 2 being the highest.
/c Simple average.
Sources: EUROSTAT, WDI 2004.

To keep and enhance their advantage as an attractive FDI location, NEEs are likely to benefit from a four-prong strategy. First, as argued above, they should catch up with old EU-15 in terms of trade facilitation. Second, NEEs should aim to catch up with old members of the EU in terms on governance and transparency. As illustrated in Figure 6 below, transition countries with better governance have been more successful in attracting FDI inflows. This is not surprising, given the fact that lack of transparency and high incidence of corruption act as a tax on foreign investors and deter them from investing (see Wei 2000, Smarzynska and Wei 200).

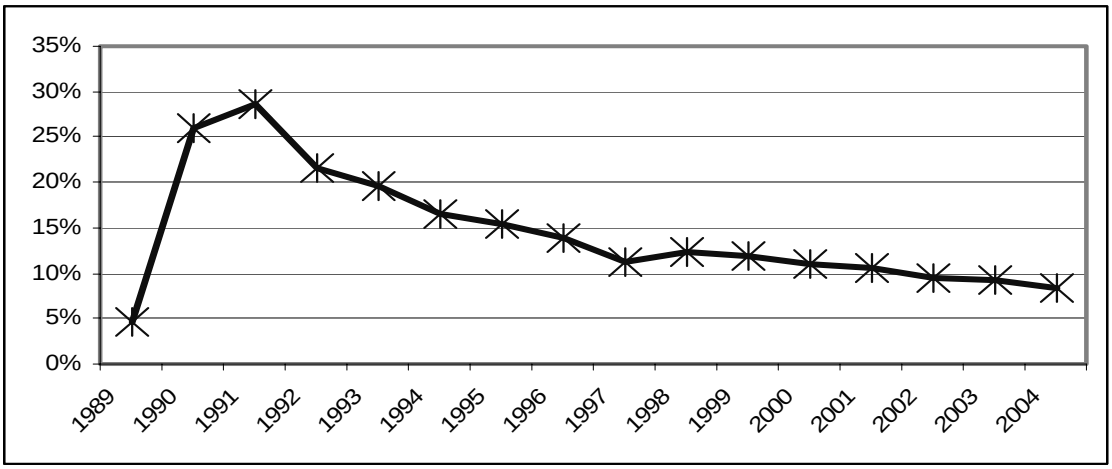
Figure 6: *Quality of Governance Matters for FDI Inflows*



Source: IMF's *International Financial Statistics* for FDI data.

While differences among NEEs in quality of governance persist, they have been gradually converging upwards in terms of establishing competition-supporting institutions, which has significant implications for the choice of strategy to attract FDI, as discussed below. The prospect of EU accession contributed to the change in domestic policies as well as acceleration in structural, second generation reforms in the second half of the 1990s. Countries excluded from the first group of invitees to launch accession negotiations in 1996, most notably Slovakia, but also Bulgaria and Romania later revised their privatization programs and returned to the reform path. Hungary's opening of so-called strategic sectors, banking and telecommunications, in 1995 to foreign investments prompted similar moves in other NEEs. In consequence, the variation in progress in transition significantly declined, as captured by the values of the coefficient of variation (ratio of standard deviation to average) of EBRD structural reform indicators in 1989-2004 (for an explanation of indicators, see note to Figure 7).

Figure 7: *The variation in progress in reforms in CEEC-10 in 1989-2004 (in percent)*



Note: Progress in transition, as assessed in the EBRD Annual Transition reports, is the sum of annual 'grades' ranging from 1 to 4.5 derived as follows: areas covered by the EBRD were divided into two groups: one encompassing first generation reforms (price liberalization, foreign trade and exchange rate regime, small privatization) and the second covering second generation reforms (average of scores on large privatization, government and enterprise restructuring, banking reform, security markets and non-bank financial institutions). For each country, averages are calculated. The final annual score is a weighted average of first and second generation reforms with a weight of 0.1 assigned to the former and 0.9 to the latter.

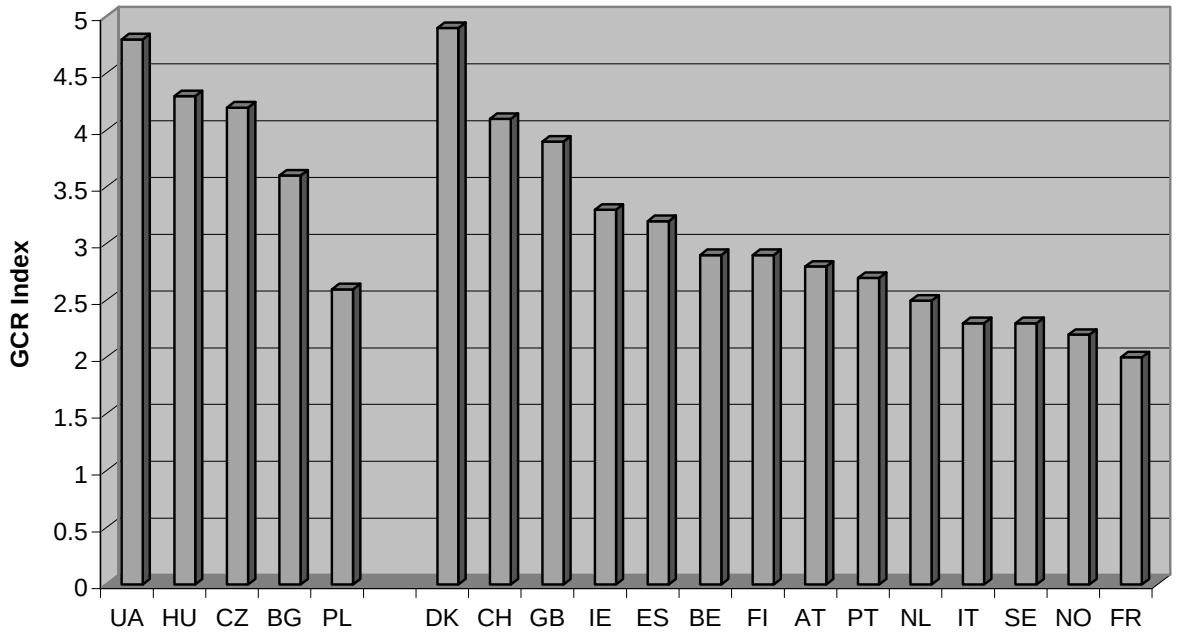
Source: *EBRD Transition Report*, various years, European Bank for Reconstruction and Development, London.

The combination of these developments has led to an increase in FDI, with the achieved progress in economic reforms as a major variable explaining the variation in flows to NEEs. While in 1993-95 the value of correlation coefficient between cumulative inflows of FDI per capita and the progress in economic transition (see note to Figure 7 above) was 60 percent, it rose to 82 percent for 1993-2000 and 86 percent in 1993-2003. Considering differences in GDP per capita and the size of economies in terms of population, this is a surprisingly strong positive correlation between reforms and FDI inflows. Its lower value for 1993-95 can be explained by relatively low FDI inflows to three initial radical reformers: Poland due to the unresolved servicing of its private foreign debt, the Czech Republic and Slovakia due to the choice of the mode of large scale privatization that deliberately excluded foreign investors. Poland's agreement with the London Club, the change of government in Slovakia in 1998 and the change of policies towards foreign investors in the Czech Republic in response to negative GDP growth in 1997-99,

all appear to have contributed to even larger correspondence between FDI inflows and steps forward in transitioning to a modern market economy. Furthermore, Bulgaria and Romania, after almost a decade of aborted reforms, have undertaken serious effort prior and after the EU decision to begin accession negotiations with these countries in December 1999.

As a consequence, the positive link between progress in economic reforms and FDI flows has become even stronger corroborating findings of empirical research showing that that liberal reforms provide a more powerful explanation of variation in FDI flows to former centrally-planned economies than to other developing countries,[13] although there are many other factors involved as the early success of Hungary illustrates. With NEEs gradually converging in terms of closing the institutional gap vis-à-vis highly developed market economies, the challenge they face in competing for FDI inflows is to go deeper to make themselves attractive to foreign investors. Research suggests that the area promising to be the most effective to achieve this goal is liberalization of labor markets (Javorcik and Spatareanu 2005b).

Figure 8: *Global Competitiveness Report Index of Labor Market Flexibility*



Notes: Index of Flexibility of Hiring and Firing Practices from the *Global Competitiveness Report 2001-2002* (published jointly by the Geneva-based World Economic Forum and the Center for International Development at Harvard University. The index quantifies the average response to the survey question: "Is hiring and firing of workers impeded by regulations or flexibly determined by employers?" It takes on the value of 7 for a very flexible labor market and 1 in the case of the most rigid ones. It is based on the views of "business practitioners" in each country, hence it captures both laws on the books and their enforcement.

Hence, the third element of the strategy should include allowing greater flexibility in labor regulations relative to the conditions prevailing in the old members of the EU. As illustrated in Figure 8, there is a lot of variation in this respect both within the old and the new Europe. A rigid labor market which limits the

[13] See, for instance, Claessens et al. (1998), Garibaldi et al. (2002), Broadman et al. (2004).

ability of foreign affiliates to adjust the size of the labor force is likely to be less attractive to foreign investors than a location with a similar level of wages and greater labor market flexibility. This is the conclusion of recent work by Javorcik and Spatareanu (2005b) who examine labor market flexibility affects foreign direct investment (FDI) flows across 19 Western and Eastern European countries. Their analysis uses firm level data on new investments undertaken during 1998-2001. The study employs a variety of proxies for labor market regulations reflecting the flexibility of individual and collective dismissals, the length of the notice period and the required severance payment along with controls for business climate characteristics. The results suggest that greater flexibility in the host country's labor market in absolute terms or relative to that in the investor's home country is associated with larger FDI inflows.

The final component of the strategy should focus on FDI promotion efforts in the form of image building, FDI generation, investor servicing and policy advocacy rather than financial and tax incentives favoring foreign investors over domestic firms. The latter recommendation is due to EU regulations restricting the use of incentives aimed solely at foreign investors and to the fact that the jury is still out on the effects of taxation and fiscal incentives on FDI flows (Blonigen, 2005 and Desai et al. 2004). Subsidizing foreign investment is often justified with knowledge spillovers from FDI that are expected to benefit local producers. As this externality is not captured by foreign investors, they will tend to underinvest which calls for government intervention. However, as we have seen from the literature review above, the scope of such spillovers is limited to inter-industry effects so it is unclear whether the externality is large enough to justify the subsidies.

FDI promotion

Most countries use Investment Promotion Agencies (IPAs) as a key part of their strategy to attract inflows of foreign direct investment. There exist more than 160 national and over 250 sub-national IPAs (UNCTAD 2001). Creation of IPAs is a relatively new phenomenon as only a handful of these agencies existed twenty years ago (Morisset 2003). The theoretical justification for the public support for investment promotion is based on a market failure. Potential foreign investors must incur a cost in order to gather information about the potential returns available in alternative investment locations. This cost may be increased by the fact that local firms and other foreign investors operating in these locations may actually have an incentive to restrict information flows in order to prevent the entry of potential competitors. As argued by Greenwald and Stiglitz (1986), markets for information are fundamentally different from other markets and in the presence of imperfect information they may not produce Pareto efficient outcomes. By disseminating information about potential investment opportunities in its country, an IPA can enhance the availability of information to potential foreign investors and facilitate more efficient capital allocation.

Activities of IPAs tend to focus on four areas: (i) national image building, (ii) investment generation, (iii) facilitation services for potential investors, and (iv) policy advocacy (Wells and Wint 1990). By means of promotional campaigns designed to build a positive image of their country as an investment destination and by linking foreign investors with potential joint venture partners or suppliers, IPAs serve as a conduit

of information and contribute to diminishing the market failure described above. IPAs also lower the entry costs for potential foreign investors by assisting investors in complying with administrative procedures. Finally, IPAs may contribute to increasing the profitability of foreign investment projects in their country by advocating improvements in the business climate or preferential treatment for foreign investors.

In 2002 the average budget of an IPA was US$585,500 in a low income country, US$1,237,000 in a middle income economy and US$9,382,100 in a high income country. Seventy-six percent of IPA budgets came from governments. A typical IPA in a developing or a transition country was about 10 years old and was a public body, constituting part of a ministry or an autonomous agency. The median agency employed ten professional staff. It typically concentrated most financial resources on image building (38% of spending), followed by investment generation (29%), investor services (25%) and policy advocacy (8%) (Morisset and Andrews-Johnson, 2004).

Recent empirical studies have documented a positive correlation between investment promotion activities and FDI inflows. This was the conclusion of the seminar work by Wells and Wint (2000) based on case studies, structured interviews with individuals involved in investment promotion and an econometric analysis of 50 industrial and developing countries. This result was confirmed by subsequent work by Morisset (2003) who employed the results of a survey conducted by the Foreign Investment Advisory Services (FIAS) among 75 IPAs worldwide. The most rigorous study to date by Charlton and Davis (2004) focused on the question whether IPAs had been more successful in attracting FDI inflows into industries they explicitly target. The study was based on industry-level data on FDI inflows into 28 OECD countries during the 1980-2000 period combined with information on targeted industries collected through a survey of IPAs. Using the difference-in-differences specification, the authors found that targeting of an industry by the IPA increases the FDI into that industry by 60 percent.

Conclusions

This paper focused on two questions: why attracting FDI is worthwhile and how to go about it. Its major findings can be summarized as follows: First, receiving FDI has a positive direct effect on the erformance of the previously domestically owned plants. This suggests that FDI inflows are associated with transfer of technology and know-how and thus may present potential for productivity spillovers to other firms in the host country.

Second, presence of multinationals has two opposing effects on domestic firms operating in the same sector. On the one hand, it increases competition in the sector which in the short and medium run may lead to local firms losing part of their market share and thus facing an increase in their average cost. In the long run, the increased competitive pressures may force less productive local firms to exit thus raising the average productivity of the industry. On the other hand, foreign presence may lead to knowledge spillovers through demonstration effects and movement of labor, thus enhancing the performance of local enterprises. The relative magnitudes of these effects depend on the circumstances specific to host countries such as the initial level of competition, quality of the business climate and skill endowment.

Third, positive externalities associated with FDI are not limited to the industry of operation. Presence of multinationals in downstream sectors tends to increase the productivity of local producers in the industries supplying intermediate inputs. FDI inflows into services sectors and the resulting increase in the quality, availability and range of services may enhance the productivity of manufacturing firms relying on services inputs.

Fourth, having reached macroeconomic stability and increased their market size through accession to the European Union, New Europe's economies have become an attractive location for FDI inflows. However, the benefits of being part of the EU can be reduced or enhanced by the quality of the transport infrastructure and other aspects of trade facilitation such as port efficiency, customs environment, regulatory environment and IT infrastructure. Similarly, further increases in FDI inflows can be achieved through improvements in governance and a regulatory environment, an area where NEEs still lag behind the EU.

Fifth, to keep its attractiveness to efficiency seeking FDI, NEEs should aim to provide a more business-friendly environment than that prevailing in the EU, particularly with respect to labor market flexibility, and should continue to build up the skill level of their workforce.

Finally, efforts to attract FDI inflows may be aided by well orchestrated FDI promotion efforts, focusing on building a positive image of the country, efficient servicing of the existing investors, pro-active investment generation and policy advocacy. Offering financial and fiscal incentives exclusively to foreign investors is neither acceptable under the EU regulations nor desirable as there is no convincing evidence that the benefits of doing so would exceed the costs.

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