**The role of FDI in transition**

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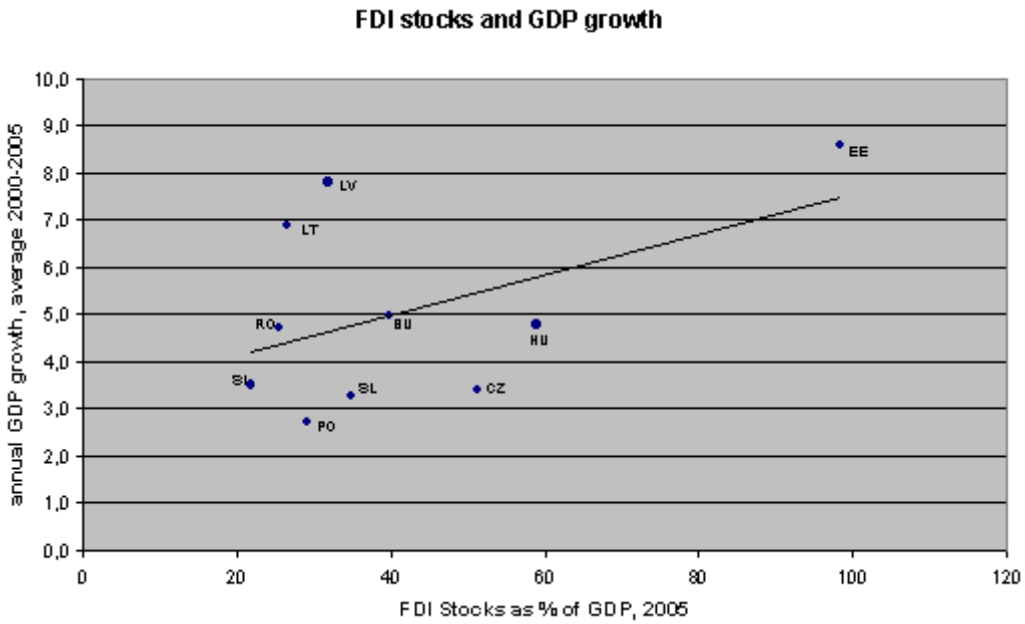
Es gilt das gesprochene Wort.

Ladies and Gentleman,

It is a particular pleasure for the Oesterreichische Nationalbank and myself to welcome you to the second day of our Conference on European Economic Integration. I hope you enjoyed yesterday's presentations and stimulating discussions – and the delicious dinner – as much as I did and I am convinced that today's contributions will be also highly interesting.

Today, one focus of our conference will be the impact of FDI on the host country, which has already been explicated by Prof. Lipsey in his Keynote lecture yesterday. I would like to briefly review the relevance of FDI for Central and Eastern European host countries in transition.




A frist glance at the data confirms the impression that there might be some relationship between GDP growth in transition economies and relative size of the FDI stock. For example, Estonia received FDI of more than 98% of GDP until 2005 – this is the highest share out of a sample of 10 CEECs – and recorded an average annual real GDP growth of 8,6% in the period 2000–2005. On the other hand, Sloveniaaccounted for a FDI stock of 21,9% of GDP and had a comparatively slow annual growth of 3,5%. It is of course clear that there are other factors at work too that promote growth in the transition countries and the causality in this relation is at least disputable.

| | FDI Stocks | | GDP growth Ø 2000–2005 |
|---|---|---|---|
| | 2005, in mio EUR | 2005, as % of GDP | |
| Estonia | 10,371 | 98.4 | 8.6 |
| Hungary | 51,737 | 58.9 | 4.8 |
| Czech Republic | 50,404 | 51.2 | 3.4 |
| Bulgaria | 8,531 | 39.8 | 5.0 |
| Slovakia | 13,000 | 34.8 | 3.3 |
| Latvia | 4,035 | 31.9 | 7.8 |
| Poland | 70,000 | 29.1 | 2.7 |
| Lithuania | 5,446 | 26.5 | 6.9 |
| Romania | 20,130 | 25.4 | 4.7 |
| Slovenia | 6,000 | 21.9 | 3.5 |

*Source: Eurostat, WIIW.*

In general, there are three ways a host country is affected by the inflow of FDI:

- Increase in the capital stock

Most fundamentally, an inflow of capital will benefit any country in which this factor of production is scarce. FDI can compensate the lack of sufficient investment by residents and, according to the basic neoclassical growth model, the resulting higher capital/labor ratio raises national welfare measured as GDP per capita. For this kind of positive effect to arise, it is sufficient to assume foreign and domestic capital to be homogenous.

- Higher Productivity

Moreover, foreign-owned firms tend to operate more productively than domestic firms; therefore an increase of FDI causes overall productivity in the host country to increase. The empirically well documented higher productivity of foreign firms is typically ascribed to the superiority of foreign technology imported by host countries through FDI; hence, foreign and domestic capital are heterogeneous.

- Positive Spillovers

Finally, the higher productivity of foreign-controlled firms might spill over to the rest of the economy. While the notion of "spillover" might imply that these effects occur more or less automatically, specific channels of transmission need to be in place for spillovers to materialize. Among the channels identified by economists are the knowledge transfer via employees who change from foreign firms to domestic ones, the spreading of production

standards imposed on foreign firms' domestic subcontractors, or simply the increase of competition resulting from the entry foreign firms into previously sheltered markets. The amount of spillovers depends on both the policies that the host country applies and the business strategies that foreign investors pursue.

### Increasing the capital stock in transition

At the beginning of the transition process in Central and Eastern European countries (CEECs), capital scarcity was indeed predominant in the area. Although saving rates tend to be rather high in centrally planned countries, it is fair to say that the accumulated funds were not invested in the most efficient way. After the regime change, a good portion of the existing capital stocks depreciated, and as involuntary saving ceased and consumption opportunities increased, domestic investment became too low to keep up with the emerging need for capital formation. One way to finance the gap between households' willingness to save and firms' need to invest was the inflow of FDI. To give a few figures, the decade after 1992 saw an annual net inflow of FDI funds to the Czech Republicof approximately 5% of GDP on average, a figure even topped by the equivalent of 6% GDP in the case of Hungary. Since 1998, the CEECs have been able to fund their current account deficits almost entirely through FDI. For the current year, the EBRD projects net FDI inflows to even exceed the current account deficit in the Czech Republic, Polandor Slovenia. While some of these additional funds were used to finance mergers and acquisitions, we can assume that FDI also contributed to capital formation. I should add, perhaps, that a 2004 World Bank study[1]) provides evidence that an increase in M&A also leads to an increase in greenfieldinvestment.

The rather constant inflow of FDI into CEECs during their transition process in the 1990s helped to integrate them into the framework of the international division of labour. The UNCTAD's Transnationality index[2]), which takes into account FDI inflows, FDI inward stocks, value added and employment of foreign affiliates, ranks five new EU member states among the top ten developed countries identified for 2006.

Austrian firms have been among the most active investors during the transition process in the CEECs. In 2003, Austrian outward FDI to the CEECs were higher than the FDI flows to the then 15 EU member states for the first time.

### Higher Productivity

The productivity increasing effect of FDI is not limited to transition economies. We can even observe some degree of productivity gap between foreign-owned and domestic-owned firms within countries with a similar capital endowment, for example Griffithand Simpson (2001)[3]) find for the UKthat foreign-owned have always significantly higher labour productivity than those under domestic ownership. Given that most FDI projects are launched by large firms that might be able to reap economies of scale and by firms in capital-intensive manufacturing sectors which typically exhibit above-average productivity rates, the stimulation of productivity rates by FDI inflows is not surprising. Djankov and Hoekman (2000)[4]) confirm this effect for the Czech Republicand Konings (2001)[5]) does the same for Bulgaria, Romaniaand Poland.

The most acknowledged source for the productive advantage of firms established or controlled by FDI is their improved access to more efficient technologies. In this context the term technology refers to a broad range of items from the most recent machinery to more efficient management techniques. The decision of a foreign firm to transfer new technologies to a host country hinges crucially on a set of factors; yesterday Prof. Moran mentioned the decisive discrimination between import substitution and export-oriented FDI and their different effects on the growth potential of the host country. I would like to briefly mention another aspect: The absorptive capacity of the host country.

**Absorptive Capacity**

The term absorptive capacity refers to the ability of an economy to gather new technologies and successfully implement them into the production process. In this sense, emphasis is placed not on the capacity to generate innovations, but on the capacity to absorb processes that have been innovated elsewhere. The most important factor for the absorptive capacity is the quality of domestic human capital, whose importance for the growth effects of FDI was already stressed by Borensztein et al. in 1998[6]). In this respect the new Member States of the EU had a great advantage in their transition process, namely the high skills of the human capital available in these countries, notwithstanding the fact that some observers deplored that there were "too many rocket scientists and too few marketing clerks"[7]) around. But the stock of human capital was obviously sufficient for many foreign firms to smoothly transfer their latest technologies downstream. Actually, some empirical studies (for an overview, see Riess and Uppenberg, [2004][8])) conclude that a smaller technology gap between two countries involved makes for stronger productivity enhancing effects of FDI. Therefore, the new Member States can expect to continue to profit from FDI inflows even when their transition processes have been more or less completed.

At the same time, when trying to measure the productivity effects of FDI, we might be confronted with an endogeneity problem. Firms investing in foreign countries might try to "skim the cream," which means they probably choose to take over the most productive companies, leaving less efficient plants to domestic owners. So, for example, last year's Transition report by the EBRD stated that foreign-owned firms exhibit higher levels of efficiency, and related that fact inter alia to their acquisition of better-performing domestic firms in transition countries. Camposand Kinoshita (2002)[9]) especially account for endogeneity and causality problems in their panel regressions on 25 CEECs and CIS countries and find robust positive effects of FDI.

**Positive Spillovers**

Finally, transition economies might benefit from FDI when innovative technologies or, in general, knowledge introduced by a foreign investor spills over to the domestic firms. I have outlined some of the transmission channels of these spillovers before. Empirically, it is not easy to track down spillover effects of FDI in Central and Eastern Europe, but I am positive that some of the presentations in today's session on the host country effects of FDI will shed new light on this issue, so I look very much forward to hearing what Jan Svejnar (University of Michigan), Julia Wörz (Vienna Institute for International Economic Studies), Maria Antoinette Silgoner (OeNB) and Ksenia Yudaeva (Centre for Strategic Research, Moscow) have found. Regarding the fact that all new Member States are small, open economies and therefore should employ an export-led growth strategy, we also might expect foreign-owned firms to dedicate substantial parts of their production for exports. As they have to compete on world markets, one might expect the foreign investors to transfer their latest technologies to the host countries. Hence, the FDI inflows should induce positive spillovers of a reasonable magnitude.

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[1]) Calderon, C.; Loayza, N.; Serven, L., (2004), "Greenfieldforeign direct investment and mergers and acquisitions – feedback and macroeconomic effects ", World Bank Research working paper 3192.

[2]) UNCTAD World Investment Report 2006.

[3]) R. Griffith, H. Simpson (2001), "Characteristics of foreign-owned firms in British manufacturing", IFS Working Papers 01/10.

[4]) S. Djankov and B. Hoekman, (2000). "Foreign investment and productivity growth in Czech enterprises". World Bank Economic Review, (14:1), pp. 49–64.

[5]) J. Konings, (2001), "The effects of foreign direct investment on domestic firms: evidence from firm level panel data in emerging economies". CEPR Discussion Paper 2586.

[6]) E. Borensztein, J. De Gregorio, Jong-Wha Lee, (1998), "How Does Foreign Direct Investment Affect Economic Growth?", Journal of International Economics, Vol. 45, No. 1, June, pp. 115–35.

[7]) N. Campos, A. Dabusinskas, (2002), "So Many Rocket Scientists, so Few Marketing Clerks: Occupational Mobility in Times of Rapid Technological Change", CEPR Discussion Paper 3531.

[8]) A. Riess and K. Uppenberg, (2004),"The internationalisation of production: moving plants, products, and people", EIB Papers, Vol. 9, Nr. 1 2004.

[9]) N. Campos, Y. Kinoshita, (2002), "Foreign Direct Investment as Technology Transferred: Some Panel Evidence from the Transition Economies", CEPR Discussion Paper 3417.