

# Dimensions of Competitiveness: FDI and Environmental Problems in Central Eastern Europe

—Focusing on Poland and Hungary—

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## 1. Introduction

In the Western perspective (shared to a lesser degree in the Eastern, host countries), foreign direct investment (FDI) was to play a major role in the post-communist transition. In this conception, FDI would significantly supplement official (national and international) assistance programs in providing the investment capital and the technical and managerial know-how that the former planned economies required to deal with the negative legacies of communist rule. Important among these legacies was damage to the environment caused by development strategies emphasizing rapid, resource-intensive industrialization. The inherited environmental problems in Central Europe ranged from the serious to near catastrophic.

The purpose of this paper is to explore briefly the impact of foreign direct investment on the environment in Central Europe and the implications for regional competitiveness. We have chosen to focus on Central Europe because both of these aspects of the transition have assumed significant proportions there in the transition period. We are also interested in the implications of these relationships for the international competitiveness of the Central European economies.

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## 2. The links between FDI and environmental problems

Before proceeding, let us briefly review the potential links between the two factors in the Central European context. These are more complex than one might anticipate, and there is no clear a priori case for arguing that FDI diminishes environmental problems in host countries. Nor is it clear that the environmental legacies have a net impact, positive or negative, on FDI flows in the area. Ultimately, the various hypotheses outlined in the paragraphs that follow can only be substantiated empirically.

Environmental problems would seem to create strong demand for new capital and technology. Even in the communist period, the need to import Western technology in order to alleviate some of the more pressing environmental problems formed the basis for joint ventures between state socialist enterprises and capitalist firms in those countries (Hungary and Poland) that permitted limited forms of foreign investment at the time. In a typical example of the 1980s, a Canadian private firm entered into a joint venture with a Hungarian state partner to provide technology and know-how for a waste treatment plant. In the transition period, this need has continued, and has provided impetus for seeking foreign capital participation in the privatization of state enterprises to deal with their environmental legacies.

Another link between FDI and the environment is the question of the attractiveness to investors of locations where environmental standards are low. The general empirical validity of the so-called "pollution haven" hypothesis is open to question. In the decades preceding the transition, there was a tendency on the part of both West European firms and governments to look to Eastern Europe as a potential location for activities which were too environmentally sensitive to meet rising home-country environmental standards. After Chernobyl, however, there has been greater recognition of international environmental interdependence and Eastern locations no longer look so attractive as they once did.

If the "pollution haven" hypothesis holds in a given case, then FDI clearly compounds the environmental difficulties of the host country. Even if the host country cannot be regarded as a "haven", environmental problems can result

when by its nature FDI serves to support and expand activities that pose a significant potential environmental risk. A disastrous example in early 2000 was the cyanide spill in the upper reaches of the River Tisza, which spread through Hungary to the lower Danube. Foreign investment in the Romanian gold mine that was the source of the spill and the technology and know-how it presumably brought with it did not prevent the poisoning of the river system.

At the same time, ecological factors can create obstacles to potential foreign investment. In negotiating the acquisition of a former state enterprise selected for privatization, a foreign investor must try to ensure that the liability for any environmental damage already caused by that enterprise is clearly defined, and is not simply passed on. Hungary, which has been the Central European leader in harnessing foreign capital for the attainment of privatization goals, again provides examples. A Swedish firm that acquired the country's leading refrigerator company was able to reach an agreement which deducted the anticipated costs of cleanup from the purchase price. Ultimately, however, it was forced to undertake additional, unanticipated expenditures to clean up the waste disposal sites.

In sum, environmental problems can act as both a stimulus and a deterrent to FDI. At the same time, FDI may lessen or worsen environmental problems in host countries. The net effect of these various influences can be very difficult to sort out, even in individual cases.

### **3. Trends and characteristics of FDI in Central Europe**

Four countries in Central Europe, the Czech Republic, Hungary, Poland and Slovakia, have attracted the bulk of FDI that has flowed in the 1990s to the region once formed by the Soviet Union and its European allies. According to the EBRD's estimates presented in Table 1, the four Central European countries received 53.3% of the \$81 billion in cumulative FDI inflows to 25 transition economies (Central and Eastern Europe and the former Soviet Union) over the period 1989–98).

There has been a notable upsurge in FDI to Central Europe since 1995. From 1995 to the end of the decade, combined annual inflows to the four countries rose from \$6.4 billion to an estimated \$12.1 billion. As a result their

**Table 1** Inflows of FDI in the Central Eastern Europe (CEE) and the former Soviet Union

	Cumulative FDI-Inflows (US\$ million) 1989-98	FDI-Inflows per capita (US\$) 1989-98
Albania	423	132
Bulgaria	1,323	159
Croatia	1,997	444
Czech Republic	9,957	967
Estonia	1,382	953
FYR Macedonia	242	121
Hungary	16,459	1,627
Latvia	1,604	642
Lithuania	1,534	415
Poland	15,066	389
Romania	4,510	200
Slovak Republic	1,762	326
Slovenia	1,192	596
Central/Eastern Europe and Baltic States	57,451	184
Armenia	328	89
Azerbaijan	3,102	408
Belarus	456	45
Georgia	526	98
Kazakhstan	5,661	372
Kyrgyzstan	332	72
Moldova	330	76
Russia	8,901	61
Tajikistan	130	22
Turkmenistan	762	157
Ukraine	2,626	52
Uzbekistan	533	23
Commonwealth of Independent States	23,687	34
Total	81,138	80

(Source) World Development Report 1999, United Nations, Geneva.

combined stock of FDI (as measured by cumulative inflows) more than doubled in four years, from \$19.7 billion to \$43.2 billion.

Hungary was well ahead of its neighbors in attracting substantial amounts and has continued to benefit by significant and stable, annual inflows. As a result, Hungary stands out from the others in terms of per capita FDI stock (as measured by cumulative inflows); see Table 1. But, in the last two years of the decade, inflows to the other three countries surged; they more than doubled in 1998 alone. Preliminary data for 1999 indicate that the higher levels attained in 1998 have been maintained in 1999.

Industries classified as potentially high polluting are generally identified as chemicals and allied products and primary and fabricated metals. These industries were given priority in the industrialization plans of Central European communist regimes and have been the source of most of the region's inherited environmental problems. They do not, however, appear to have been the target for much of the region's inward FDI in the 1990s. Comparative data on the industrial structure of FDI inflows to Central Europe are difficult to come by. The service sector, underdeveloped in communist times, has typically received larger amounts of FDI than has the manufacturing sector. In Hungary, in 1976, the share of pollution-intensive industries (as defined above) in the total inward stock of FDI was about 17%. This is well below the share that has been found for many developing countries.

#### **4. Competitiveness, FDI and accession to the EU**

Many of the countries of Central and Eastern Europe (CEECs) have made application for EU membership and have begun negotiations with the European Commission. Besides various efforts to take the "acquis communautaire" into their national legal, economic and social systems, there are many specific problems under discussion between the parties such as environmental regulation problems, quantity of steel production, application of the CAP (common agricultural policy), nuclear power stations, etc.. The transitional period for import duties is almost over and many industrial products are now imported into CEECs without import duties. This has opened their domestic industries to more severe competition, especially small and medium-sized

branches, while those countries' rates of unemployment are generally still higher than most EU countries'; see Table 2.

As the import duties among the member countries have not been abolished yet, while those on almost all the imports from EU member countries have been abolished already by this time in accordance with the Europe Agreement, CEECs' imports from EU member countries have gradually increased in spite of decreased percentage of the mutual imports; see Table 3.

**Table 2.** Growth Rates of Real GDP and Unemployment Rates in Central Eastern Europe and the EU (1996–98)

	Growth Rates of Real GDP			Rates of Unemployment		
	1996	1997	1998	1996	1997	1998
Bulgaria	-10.2	-7.0	3.0	12.5	13.7	12.2
Czech Republic	3.9	1.0	-2.7	3.5	5.2	7.5
Hungary	1.4	4.5	5.1	10.5	10.4	9.1
Poland	6.0	6.9	4.8	13.2	10.3	10.4
Romania	4.0	-6.9	-6.6	6.6	8.8	10.3
Slovakia	6.5	6.6	4.4	12.8	12.5	15.6
Slovenia	3.5	4.5	4.0	14.4	14.8	14.6
Austria	2.0	2.5	3.3	4.3	4.4	4.4
Belgium	1.3	3.0	2.9	9.7	9.2	8.8
Finland	3.6	6.0	4.7	14.6	12.7	11.4
France	1.6	2.3	3.2	12.3	12.5	11.8
Germany	0.8	1.8	2.3	10.8	11.7	10.7
Ireland	7.4	9.8	9.5	11.6	9.9	7.8
Italy	0.7	1.5	1.4	12.0	12.1	12.3
Luxemburg	3.0	4.8	4.7	3.0	2.8	2.8
Netherlands	3.1	3.6	3.8	6.3	5.2	4.0
Portugal	3.2	3.7	4.1	7.3	6.8	4.9
Spain	2.4	3.5	3.8	22.2	20.8	18.8
Denmark	3.5	3.5	2.3	6.8	5.6	5.1
Greece	1.8	3.2	3.5	10.4	10.4	10.3
Sweden	1.3	1.8	2.9	9.6	9.9	8.2
United Kingdom	2.4	3.2	2.1	7.7	6.5	6.3

(Source) United Nations, World Economic and Social Survey 1999, Trends and policies in the world economy, New York, 1999.

**Table 3.** Direction of Eastern Europe's Exports (F.O.B., 1995–98)

	World	Devd.	EU	US	Japan	EIT	EE	CIS	RF	Devg
	Bn. \$	%	%	%	%	%	%	%	%	%
1995	113.3	63.1	56.4	2.5	0.3	26.6	17.9	7.9	4.8	9.0
1996	126.5	63.2	56.6	2.5	0.3	27.2	17.6	8.0	4.8	9.1
1997	137.2	66.0	60.6	2.8	0.4	26.5	16.3	8.6	5.1	7.3
1998	149.9	67.0	60.6	3.4	0.5	26.1	16.5	7.8	4.1	6.7

(Source) op.cit.

**Table 4.** Direction of European Union's Exports (F.O.B., 1995–98)

	World	Devd.	EU	US	Japan	EIT	EE	CIS	RF	Devg
	Bn. \$	%	%	%	%	%	%	%	%	%
1995	1752.7	76.8	50.4	10.0	2.7	3.6	2.2	1.0	0.8	17.2
1996	1785.1	76.9	50.4	10.3	2.8	3.9	2.3	1.1	0.8	17.7
1997	1942.5	74.4	49.1	10.6	2.6	4.2	2.4	1.3	1.0	18.4
1998	2021.5	75.2	50.1	11.3	2.0	4.5	2.6	1.3	0.9	17.3

(Source) op.cit.

This is true even of the case of the CEFTA countries, which had agreed to mutually abolish their import duties.

In the above-mentioned context, we may safely say that such extra costs as needed in installing pollution-preventive devices as required by the EU environmental laws will make CEECs' less competitive against imports from the EU as well as the rest of the world, especially those from the lower environmental standards elsewhere, without being helped financially by international institutions such as EU, EBRD, PHARE, etc..

In the case of Poland, its Seim (diet) has already passed the new environmental law in accordance with the EU's environmental guideline. Under the new law, it is required that new factories must adopt "BAT" (best available technology) so that environmental pollution may be minimized. Up till now, of course, Polish factories have made various efforts to decrease pollutions so that payment of the fees and charges to be paid on PPP (pollutors pay principle) on environmentally polluting emissions and discharges. The money thus raised have been used as supportive financing for improving pollution-abating devices under favorable conditions. The institutions in

charge of such affairs are National Fund for Environmental Protection and Water Management (NFEP&WM, or NFOSiGW in Polish) and its voivodship counterparts. They had been set up during the socialist regimes and the other CEECs have also similar institutions and they holds meetings from time to time to exchange informations. Thanks to those efforts but also the economic recession that has reduced operations in big factories, pollutions in CEECs have much decreased since the opening of their markets to international competition, and people now can swim in the seashores of the Baltic Sea, excepting in the areas neighboring the mouths of large rivers.

Such “BAT” requirement for CEECs will, sooner or later, make almost impossible such formerly possible taking advantage of lower environmental standards there any more, if they can clear the “derogation period” problems environmentally friendly, and therefore the future task for CEECs to maintain or to improve international competitiveness will be to take joint actions with the EU in expanding and promoting the environmental standards such as ISO or EMAS in the outside world, especially in Asian NIEs, their formidable rivals, and developing countries all over the world. Because it is mainly Asian NIEs’ products that have been competing rather advantageously with CEECs in the EU markets. In doing so, it will be a powerful tool for EU and CEECs to use their integrated European market as leverage.

## **5. Concluding Remarks**

As far as the CEECs are concerned, the links between FDI, competitiveness and environmentally friendliness have become more or less positive as their negotiations with EU, the forerunner as environmental policy makers, regarding their future accession, proceed, though there exist some exceptions as mentioned in the above, like in Hungary and Romania. As most environmental pollutions are not only borderless but also go beyond time and space, more conscious international efforts must be made so that the more positive links may be established between FDI, competitiveness and environmentally friendliness. The cost of meeting EU environmental standards is generally beyond the budgetary means of CEECs. They will require financial assistance if their new environmental regulations are not



simply to gather dust on the shelves.

**(References)**

- [ 1 ] Business Eastern Europe, No. 47, 1991
- [ 2 ] Cf. World Investment Report 1999, Table X.1
- [ 3 ] Hungarian Central Statistical Office, Foreign Direct Investment in Hungary, 1995–96, Budapest, 1997.
- [ 4 ] World Development Report 1999, Table X.3.
- [ 5 ] World Investment Report 1999, UNCTAD, Geneva, p. 298 (Box X.2).

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