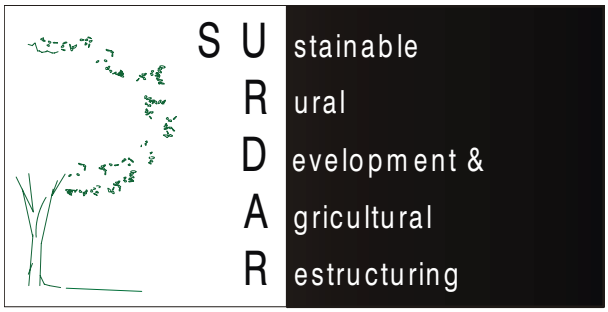

FDI IN POLAND: EVIDENCE AND A SURVEY OF INVESTORS' PERCEPTIONS

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Mike Ingham, Hilary Ingham and Jan Kowlaski

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Address for correspondence:

Department of Economics
Lancaster University
Lancaster LA1 4YX

e-mail: h.ingham@lancaster.ac.uk

I. INTRODUCTION

It is widely held that foreign direct investment (FDI) can help to spur development and convergence, with the link receiving renewed emphasis in the context of the transition economies of Central and Eastern Europe (CEE). The hypothesis receives most attention in comparisons between countries, although there is also an important body of literature that transposes the arguments from the international to the inter-regional context. This work is primarily, but not exclusively, directed at the latter. In particular, it seeks to convey the views of foreign enterprises that already have assets in Poland about the relative merits of five of the country's lagging regions - Lubelskie, Podkarpackie, Podlaskie, Świętokrzyskie and Warmińsko-Mazurskie (the East-5) - as locations for FDI. Given the comparative lack of attention that these areas appear to have received so far from inward investors, the results of the exercise should provide useful guidance to those with ambitions to reverse this neglect.

The early sections of the report provide the necessary background to the research. In the next, there is a brief review of the literature on the benefits that FDI might bring to its host economy, along with the costs that it might impose. As will be seen, attitudes towards the impacts of inward investment in developing countries vary widely, from those who regard it as the essential key to progress to those who see the costs as overwhelming any potential benefits. On balance, however, the mainstream economics literature focuses on the beneficial impacts that it – and globalisation more generally – can bring to its host territories, even if the empirical evidence does not always corroborate the underlying theory. Postures towards FDI in the transition countries in the last decade of the twentieth century mirrored this tension, with individual countries adopting different stances towards external capital and with different sectors being opened to it at different points in time (e.g. Hunya, 2000 and others). Nevertheless, even after eight of them (the CEE-8) have acceded to the European Union (EU), the potential of FDI to assist with their convergence to the core remains a central concern (Geishecker, 2004).

The third section of the paper explores the factors that are held to determine the flow and associated accumulation of stocks of FDI across space. On the whole, Poland adopted a rather liberal and welcoming stance towards external investors from the outset of its transformation and, as reported in Section IV, in absolute terms its accumulated stock of FDI was the highest amongst the 2004 EU entrant states. Relative to the size of the country, on the other hand, amongst the CEE-8 it ranked either last in per capita terms or next to last when the accumulated stock was measured as a proportion of GDP. A similar picture emerges from an examination of its annual FDI inflows. What is more, the external investment that it has attracted has been concentrated in a relatively small number of sectors of the economy and has been derived from a limited number of, mainly EU, countries.

Attention in Section V turns to the Polish regions, with an examination of their levels and trajectories of development. The landscape that emerges provides the justification for the emphasis on the East-5 in the remainder of the paper. Section VI

focuses upon the distribution of foreign investment across the country and highlights how the East-5 have been relatively unattractive to outside capital. Indeed, FDI in Poland, at least in the years up to and including 2002, followed a familiar pattern in being heavily concentrated in the capital region (Hamilton, 2000). Nevertheless, as countries mature as inward investment targets, there is evidence that this concentration tends to dilute and, to the extent that FDI is indeed beneficial, this renders the question of how well the eastern regions can compete in attracting foreign capital one of considerable contemporary relevance.

The survey instrument employed to elicit the views of inward investors to Poland about the attractiveness of the East-5 as locations for their activities is introduced in Section VII, with the questionnaire itself being provided in the Appendix to the paper. This is accompanied by a description of the characteristics of those enterprises that eventually participated in the survey. The findings from the exercise are then presented in the subsequent section. A summary and some indicators for policy design conclude the paper.

II. THE EFFECTS OF FDI ON GROWTH AND DEVELOPMENT

Baldwin *et al*. (1997) argued that increased FDI inflows would be one of the major gains from EU membership for the transition economies and there can be no doubt that the latter have devoted a good deal of attention to attempting to attract foreign capital, albeit to different degrees and with varying levels of intensity though time. It is important, however, to accept neither words nor deeds in this area too uncritically. There is a large literature, theoretical and empirical, devoted to the examination of the impacts of FDI in both developed and developing countries and much of this recognises that inward investment need not necessarily deliver unmitigated benefits to the host. Indeed, governmental interventions designed to increase the attractiveness of one country or region to outside investors can easily become socially unjustified (Hanson, 2001). Given this absence of a consensus, this section briefly reviews the major potential benefits and costs of inward investment for the recipient.

In general terms, the means by which FDI is argued to operate to the potential benefit of the host economy are numerous and varied and, while some are most often raised in the context of developing economies, all have been of some import in the transition states. In the first place, external capital injections can help to overcome a shortage of investment funds; that is, they lift the investment ratio above the savings ratio, while also allowing counties to import more than they export. Inadequate domestic savings and trade deficits have been recurring phenomena, both in the transition economies in general and in Poland itself (Read, 2002; Krkoska, 2001). Moreover, FDI often takes place in the tradeable goods sector, which improves export earnings and brings in valuable foreign exchange (Meyer, 2003). Along the same lines, Bevan and Estrin (2000) see FDI as an important vehicle for increasing the economic integration of the transition economies.

However, it should be recalled that, under the traditional specification of the production function, growth is taken to depend upon factor accumulation and increases in productivity, both of which are assumed to be determined exogenously in neo-classical models. When combined with the standard assumptions of constant returns to scale and diminishing returns to capital accumulation, the necessary conclusion is that FDI can only have level effects and no lasting impact on the rate of growth, with all economies constrained to follow their steady-state path (Solow, 1956, 1957; Sala-i-Martin, 1990). Nevertheless, in the context of the transition economies, with their low incomes and initially backward technology, permanent effects on the level of GDP per head are perhaps as important as longer-term considerations of whether eventual overall convergence with the leaders is achieved.

The situation is somewhat different under new growth theory as pioneered by Romer (1986, 1990), with its emphasis on increasing returns and endogenous technology. Under this scenario, growth can be generated by own R & D or by technology transfer, with FDI being seen as a major source of the latter (Tondl and Vuksic, 2003). Indeed, foreign investment is argued to bring not only technology narrowly defined to its host economy, but also more general knowledge and management expertise (Barrell and Pain, 1997), all of which are normally necessary to ensure the effective restructuring of under-performing enterprises that is so important in transition economies and which can, in addition, be a source of positive externalities (Altomonte and Resmini, 2001). At the same time, it is a source of capital accumulation and therefore productive potential and it can act as a catalyst for domestic investment as local suppliers seek to upgrade their facilities in order to satisfy the demands of foreign affiliates located within their home territory (Blomstrom and Kokko, 1997). The introduction of new technology and working methods usually requires the training of labour, which is another externality (Motta *et al*., 1999). By the same token, multinationals abroad have been found to undertake more research and development than domestic firms, while simultaneously stimulating such activity by local enterprises (Blomstrom and Kokko, *op. cit*.). Also, FDI has been seen as a general spur to the upgrading of product quality in its host environments (Hunya, 2000). However, the magnitude of such benefits is generally argued to depend on the absorptive capacity of the host, which is typically viewed in terms of its educational attainments (Tondl and Vuksic, *op. cit*.).

Much of course depends on the empirical parameters. The impact of FDI depends on the extent to which it is a substitute for the activities of domestic firms, whether there are complementarities that local enterprises can exploit, the strength of the linkages formed within the host economy and the extent to which they contribute taxes. Tondl and Vuksic (2003) found FDI, which they see as a source of technology transfer, to have a strong positive impact on regional growth rates in Eastern Europe. More generally, when there are positive externalities, there is a presumption for subsidies to external investment. However, if FDI damages national welfare, as it might if it lowers the profits of domestic firms, it should actually be taxed.

Nevertheless, Maddison (1970) estimated that the growth of capital in 22 developing countries over the period 1950-1965 was the most important source of their

economic growth. This result was corroborated by the findings of Shaaeldin (1989) and World Bank (1991). Indeed, following a survey of the literature, one authority was led to state that: 'If one overriding conclusion emerges, it is probably that if developing countries are to increase their rate of growth significantly, they will ignore capital accumulation at their peril' (Thirlwall, 1999, p. 115). In the transition economies, FDI has represented a considerable proportion of gross fixed capital formation for several years (UNCTAD, 2004). However, Thirlwall (*op. cit.*) is also aware of the possibility that FDI can introduce inappropriate technology, stifling indigenous capital goods industries and local entrepreneurship, rendering the net addition to capital less than the original investment.

Indeed, FDI activity can have other damaging effects. Thus, multinationals can exploit competition between potential hosts by extracting expensive concessions and perhaps inducing long-lasting market distortions (Sanchez-Anochea, 2009; Uri, 1976). For example, an incomer might obtain protection on the domestic market or extract subsidy and tax concessions. Nevertheless, and notwithstanding Hanson's (2001) argument to the contrary, it seems possible that selective subsidies to FDI might induce demonstration effects and enhance a country's credibility in the eyes of other potential external investors; assuming, of course, that their resources are beneficial. A further danger is that inward investors might challenge national sovereignty and control over economic policy: simply put, they can avoid monetary policy by using external sources of funds and fiscal policy by transferring profits abroad. In the latter case, the transfers may last much longer than the flow of debt-service payments on a loan of similar amount, which can be problematic for the balance of payments and for domestic resource utilisation if foreign exchange is scarce. Also, while FDI companies are usually found to export more than comparable domestic firms (Aitken *et al*., 1997), they are usually found to be heavy importers and this can itself generate current account difficulties.

Many commentators focus on the detrimental social consequences that might follow from the activities of multinational companies and, while these might seem of greatest import for lesser developed countries, it is hard not to detect a certain resonance in the transition economies. Thus, even if FDI does speed up economic growth, multinationals can generate divisive inequalities by benefiting those with whom they have direct dealings the most (Uri, 1976) and such people are usually to be found in urban areas.[1] However, this could be levelled at investment from any source. Perhaps more specific to FDI is the suggestion that it frequently panders to the consumption tastes of the already wealthy, which can induce conflict, or that it can encourage inappropriate consumption among the masses and thereby reduce saving and worsen the balance of payments. In addition, fears are held that inward investors can exploit the population through the abuse of monopoly and monopsony power and are prone to deplete resources more quickly than is desirable.

III. DETERMINANTS OF FDI

Tondl and Vuksic (2003) found FDI, which they see as a source of technology transfer, to have a strong positive impact on regional growth rates in Eastern Europe. However, the impact appears greater, the higher is the level of educational attainment. They also argue that for regions that are neither capitals nor EU border territories, poor transport infrastructure hinders growth.

While somewhat trite, it is nevertheless worth recalling that firms will invest abroad when the expected returns exceed the costs (Caves, 1982), rendering the factors that determine the expected net profitability from investment important concerns. At one level, the enquiry is basically that of what makes FDI more attractive than other forms of global market integration, such as exporting, contracting-out or licensing? According to Dunning (1981), this will be the case when the potential investor has control over a unique mobile asset that it wishes to exploit (the ownership advantage), when it is cost effective to do this in a foreign location (the locational advantage) and when it is profitable to retain the asset within the confines of the enterprise rather than contracting out its use (the internalisational advantage); that is, the OLI paradigm. Suggestive as it might be, without further embellishment, this approach is confronted by measurement difficulties and, while acknowledging the contribution of Dunning's work, much research focuses on more readily quantifiable factors, at least in proxy form, which theory would suggest will be important for the foreign location decision.

In this regard, variables that are immediately relevant include market size and its growth, input costs, tax regimes, the quality of infrastructure and the potential for agglomeration economies. It is worth recalling that while Hanson (*op. cit.*) argues that, in the absence of distortions that are specific to FDI, there are no grounds for subsidising investors from abroad, although multinationals will of course find locations at which they receive favourable tax treatment more attractive. Nevertheless, measurement issues arise in nearly all cases. For example, it is preferable to look at unit labour costs rather than simply wages. Somewhat surprisingly, Wheeler and Mody (1992), amongst others, find that FDI is higher in countries with higher labour costs and higher taxes. However, such findings have been challenged on the grounds of their suspect empirical methodology (Hanson, *op. cit.*). In any event, a fairly standard finding is that FDI is attracted to areas with more educated workforces.

Recognition of the potential importance of the prevailing trade regime on the attractiveness of FDI relative to exporting has a long history (Uri, 1976), with investment abroad being seen as a tactic for jumping tariff barriers. More recent evidence points in the same direction; for example, Brainard (1997) found that FDI was positively correlated with tariff rates. Presumably, however, this argument becomes progressively weaker the more world trade is liberalised. In the same way, Brainard came to the usual conclusion that FDI rather than exporting is more likely the higher are the transport costs associated with sales in the host economy from external locations.

It has been argued that, once inside a tariff wall, the locational decision making of the inward investor will be largely uninhibited by historic factors and it will be able to take advantage of concessions made for particular countries or regions more successfully than domestic firms (Uri, 1976). However, this should not blind one to the empirical regularity that much FDI tends, initially at least, to cluster around capital or to the argument that investing enterprises seek agglomeration economies (Hamilton, 2000). What is more, many foreign investors, particularly smaller ones, have been found to prefer locations closer to their home bases, while psychological ties and cultural affinities between source and host locations and the actors involved can also assume importance (Bevan and Estrin, *op. cit.*).[2]

Finally, foreign investors seek stability and good governance. This encompasses sound macroeconomic performance and policy and a credible commitment that it will be maintained in the future. However, it also includes political stability, the primacy of the rule of law, the presence of sound property rights and the absence of corruption. All of these issues impinge on the risks associated with foreign investment and they have emerged repeatedly in the literature. In particular, they have been at the forefront of discussions regarding FDI in the transition economies, as well as of their economic prospects in general (Brada *et al*, 2003; Bevan and Estrin, 2000). Indeed, EU accession has above all been seen as the anchor that would reduce the risks involved.

IV. FDI IN THE CEE-8: 1989-2003

The analysis begins with an overview of the comparative attractiveness of Poland within the CEE-8 as a location for FDI in the aggregate over time, both in terms of annual flows and accumulated stocks. In this regard, it might be noted that the latter are not simply the sum of the former, as a result of factors such as divestments, changes in prices or interest rates, rescheduling or cancellation of loans, debt forgiveness and debt-equity swaps. The section concludes with a brief overview of the source countries of the FDI that Poland has received and its sectoral composition.

FDI Inflows

Table 1 casts its inflows in the light of those into the other seven CEE countries that also acceded to the EU in 2004. Although the legal framework for FDI existed in many parts of the region prior to 1989, in practice its extent was minimal due, in large part to the excessive that were placed upon it and the restrictions in place on the repatriation of profits. Poland was one minor exception insofar as it allowed the creation of so-called Polonia firms from 1982. These were unincorporated firms operated by non-residents of Polish extraction. The aim behind the initiative was introduce new management methods, a market oriented work ethic and links to western economies. However, they served mainly the domestic market and the early, rapid growth in their number was soon exhausted and they remained insignificant throughout the remainder of the communist era. Furthermore, Hungary was much the most open economy in the communist world to western involvement, even if this normally stopped short of what is recognised as FDI.

Notwithstanding frequently voiced concerns about macroeconomic management, political instability, bureaucratic transparency, property rights and the rule of law, inflows of FDI increased quickly in absolute terms throughout the CEE region. However, while its growth in aggregate is evident, it must also be noted that its behaviour in individual economies has been erratic, as reflected not only in the inflow figures themselves, but also in the proportion of the total accruing to individual countries. Poland fared better than most insofar as it experienced year-on-year growth in its FDI until 2000, although its share fluctuated quite markedly. Nevertheless, along with Hungary and the Czech Republic, it consistently attracted the lion's share of foreign capital injected into the eight economies of the region. In general, most of the activity appears to have been export oriented, although the large domestic market in Poland represents something of an exception.

Beyond 2000, Poland witnessed a sharp and sustained reduction in its injections of foreign capital, while the region as a whole experienced almost a fifty per cent fall in inflows between 2002 and 2003. Such volatility was not simply a feature of the CEE economies, however: the EU-15 experienced a near doubling of FDI between 1997 and 1998, only to see it fall by nearly one-half between 2000 and 2001 and to decrease again sharply at the end of the data period. The primary reason for the overall decline of FDI inflows into Europe suffered in 2003 lies in the contraction of American FDI witnessed in that year (Passerini, 2004).

The ebbs and flows in foreign investment flows evidenced in the transition countries can be attributed, at least in part, to the privatisation waves observed in each of the individual states. Allied to this, different countries opened up to FDI at different rates, with Slovenia being amongst the slowest (Hunya, 2000). In this regard, mass privatisation schemes and insider sales, as heavily used in the Czech Republic, Slovakia and Slovenia, have hindered foreign takeovers, while open market sales have tended to favour them in an environment in which there has typically been a shortage of domestic capital.

Table 1: FDI Inflows (millions of dollars)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R	257	72	523	1003	654	878	2568	1435	1286	3700	6310	4984	5639	8483	2583
% of 8	56.1	12.6	21.6	28.7	12.5	18.5	21.1	13.7	10.7	22.2	34.0	24.5	30.7	37.6	22.5
Estonia	-	-	-	82	162	215	202	150	267	581	305	387	542	284	891
% of 8	0.0	0.0	0.0	2.3	3.1	4.5	1.7	1.4	2.2	3.5	1.6	1.9	2.9	1.3	7.8
Hungary	187	311	1462	1479	2350	1144	5103	3300	4167	3828	3312	2764	3936	2845	2470
% of 8	40.8	54.6	60.4	42.4	44.8	24.1	41.9	31.5	34.5	22.9	17.8	13.6	21.4	12.6	21.6
Latvia	-	-	-	29	45	214	180	382	521	357	347	411	163	384	360
% of 8	0.0	0.0	0.0	0.8	0.9	4.5	1.5	3.6	4.3	2.1	1.9	2.0	0.9	1.7	3.1
Lithuania	-	-	-	10	30	31	73	152	355	926	486	379	446	732	179
% of 8	0.0	0.0	0.0	0.3	0.6	0.6	0.6	1.4	2.9	5.5	2.6	1.9	2.4	3.2	1.6
Poland	11	89	291	678	1715	1875	3659	4498	4908	6365	7270	9341	5713	4131	4225
% of 8	2.4	15.6	12.0	19.4	32.7	39.5	30.0	43.0	40.7	38.2	39.2	46.0	31.1	18.3	36.9
Slovakia	-	93	81	100	179	273	258	370	231	707	428	1925	1584	4123	571
% of 8	0.0	16.3	3.3	2.9	3.4	5.7	2.1	3.5	1.9	4.2	2.3	9.5	8.6	18.3	5.0
Slovenia	3	4	65	111	113	116	152	174	332	218	106	137	369	1606	181
% of 8	0.7	0.8	2.7	3.2	2.1	2.5	1.2	1.7	2.8	1.3	0.6	0.7	2.0	7.1	1.6
EU-15	**76744**	**96774**	**77739**	**72437**	**73275**	**77251**	**114560**	**110975**	**126576**	**249931**	**479372**	**671417**	**357441**	**374000**	**295154**

Source: UNCTAD FDI Database

While the figures in Table 1 provide an introduction to the behaviour of inward investment in the eight transition countries that have now joined the EU, it is evident that they do not provide a wholly adequate picture. In particular, they take no account of either the size of the countries or of their economies. To rectify these shortcomings, Table 2 provides the data on FDI inflows deflated by population size, while Table 3 uses GDP as the denominator. Once these adjustments are made to the data, the large differences and distinct hierarchy observed in the case of the absolute inflows tend to disappear and any suggestion that Poland has attained pre-eminence as an investment location loses much of its force.

On a per capita basis, Lithuania and Slovenia are shown to have been relatively unattractive destinations for foreign capital, with the exception of 2001. Estonia and Slovakia exhibited a significant improvement in their positions over time and, while the Czech Republic was generally favoured throughout the period covered, Poland's performance was little more than average. Indeed, the population of the transition economies consistently received less foreign investment per head than did the previous fifteen member states of the EU.

On the other hand, in relation to the size of their economies, the CEE countries had much more favourable FDI profiles than the old EU members. Lithuania once again stands out as having failed to attract the attention of international investors, while the Czech Republic, Estonia and Hungary generally performed well. In addition, Slovakia exhibited a strong performance in the first three years of the new millennium. The overall implication of the combined findings from Tables 2 and 3 is that per capita FDI in the transition states was higher relative to that of the EU than was their GDP per capita over the period observed. To the extent that foreign investment does contribute to growth, this might be taken as evidence of a force in play that should contribute to convergence.

Table 2 FDI Inflows ($) Per Capita

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R	24.8	6.9	50.7	97.2	63.3	85.0	248.5	139.1	124.8	359.4	613.6	485.2	551.5	831.6	253.1
Estonia	n.a.	n.a.	n.a.	53.0	106.9	143.1	135.8	102.3	183.3	400.4	211.5	282.5	397.7	209.3	655.5
Hungary	18.0	30.0	141.3	143.3	228.3	111.5	498.9	323.7	410.5	378.5	329.0	275.7	386.3	280.0	244.5
Latvia	n.a.	n.a	n.a.	11.2	17.4	84.2	71.4	153.2	210.6	148.0	145.4	173.0	69.3	164.1	154.7
Lithuania	n.a.	n.a.	n.a.	2.7	8.1	8.4	19.5	41.1	95.7	260.8	138.0	108.2	128.1	211.0	51.9
Poland	0.3	2.3	7.6	17.7	44.6	48.6	94.8	116.5	127.0	164.6	188.1	241.7	147.9	107.5	110.6
Slovakia	0..0	17.6	15.3	18.8	33.6	51.0	48.2	68.8	42.8	131.1	79.3	356.6	294.5	766.6	106.2
Slovenia	1.5	2.2	32.4	55.6	56.6	58.6	76.4	87.6	167.1	109.9	53.2	69.0	185.3	804.8	90.7
EU-15	**210.9**	**264.7**	**212.3**	**197.2**	**198.6**	**208.5**	**308.0**	**297.3**	**338.1**	**665.7**	**1273.6**	**1779.4**	**945.1**	**986.7**	**777.1**

Sources: As Table 1 and United Nations *Demographic Yearbooks*.

Table 3 FDI Inflows/GDP (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R	0.6	0.2	1.9	3.1	1.7	2.0	4.6	2.3	2.2	6.0	10.6	9.0	9.2	11.5	2.9
Estonia	n.a.	n.a.	n.a.	7.4	9.8	9.3	5.6	3.5	5.8	11.1	5.9	7.5	9.7	4.4	10.8
Hungary	0.6	0.9	4.3	3.9	6.0	2.7	11.4	7.3	9.1	8.1	6.9	5.9	7.6	4.4	3.0
Latvia	n.a.	n.a.	n.a.	2.2	2.1	5.9	4.1	7.5	9.3	5.9	5.2	5.7	2.1	4.6	3.5
Lithuania	n.a.	n.a.	n.a.	0.5	1.1	0.7	1.2	1.9	3.7	8.5	4.6	3.4	3.8	5.3	1.0
Poland	0.0	0.1	0.4	0.8	1.9	1.8	2.8	3.0	3.3	3.8	4.5	5.7	3.1	2.2	2.0
Slovakia	0.0	0.6	0.7	0.8	1.3	1.8	1.3	1.8	1.1	3.2	2.1	9.5	7.6	17.0	1.8
Slovenia	0.0	0.0	0.5	0.9	0.9	0.8	0.8	0.9	1.7	1.1	0.5	0.7	1.9	7.3	0.7
EU-15	1.4	1.4	1.1	0.9	1.0	1.0	1.3	1.3	1.5	2.9	5.6	8.5	4.5	4.3	2.8

Sources: As Table 1 and United Nations *National Accounts Main Aggregates Database*

FDI Stocks

Table 4 presents UNCTAD data on the accumulated stocks of FDI in the CEE-8 and the EU-15 in the years from 1989 onwards. Given the standard portrayals of the respective states under their communist leaderships, it is perhaps surprising to see that the Czech lands in the former Czechoslovakia actually began the transition with the largest stock of inward investment. Indeed, only it and two other countries – Hungary and Slovenia – emerged from the previous epoch with any perceptible FDI stocks. However, the Czech Republic's share of total inward investment in the eight diminished quickly as stocks in the other seven countries began to accrue.

Poland's stock of FDI grew reasonably quickly from its negligible level at the outset until it accounted for more than one-quarter of the CEE-8 by the mid-1990s. By 1998, it had become the largest seat of foreign capital in the region: a position it retained in all years to 2003. Nevertheless, even though stocks in each country grew year-by-year, with three relatively minor exceptions, there were noticeable swings in the proportion of the region's total for which they accounted, with Poland being no exception. In large part, of course, this volatility is a reflection of the fluctuations observed in inflows above and it was not sufficiently great to prevent the Czech Republic, Hungary and Poland holding more than eighty per cent of the sum in each year from 1992 onwards. However, it is perhaps more informative to once again deflate the raw totals by the size of the host economy.

Table 5 places the accumulated stocks in the context of each country's population and conveys a somewhat different and rather more balanced picture than the raw data. On this per capita basis, Poland no longer appears as a transition tiger. In fact, in 2003, it actually exhibited the weakest performance of all the new EU entrants from CEE. Amongst the other interesting revelations is that Estonia actually appears as the strongest of the eight by 2003 on this method of compiling the data, although the Czech Republic and Hungary still emerge as front-runners. The position of Slovenia, on the other hand, deteriorated somewhat in relation to the three preceding countries, although it still has the fourth largest stock of foreign capital per head. Finally, however, strong the performance of the CEE-8 may have been in recent years, their standardised accumulations of FDI still lag way behind those of the EU-15.

Table 4 FDI Stocks (millions of dollars)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R	1291	1363	1886	2889	3423	4547	7350	8572	9234	14375	17552	21644	27092	38450	41033
% of 8	63.0	50.2	34.1	31.7	25.2	24.5	23.9	21.8	18.8	20.8	22.5	23.4	25.3	26.5	24.8
Estonia	-	-	28	110	272	486	688	838	1148	1822	2467	2645	3160	4226	6511
% of 8	-	-	0.5	1.2	2.0	2.6	2.2	2.1	2.3	2.6	3.2	2.9	2.9	2.9	3.9
Hungary	258	569	2107	3424	5576	7087	11304	13282	17968	22315	23260	22870	23337	35890	42915
% of 8	12.6	20.9	38.1	37.5	41.0	38.1	36.8	33.7	36.6	32.3	29.8	24.7	21.8	24.7	25.9
Latvia	-	-	147	176	221	436	615	936	1272	1558	1795	2084	2332	2751	3320
% of 8	-	-	2.7	1.9	1.6	2.3	2.0	2.4	2.6	2.3	2.3	2.3	2.2	1.9	2.0
Lithuania	-	-	97	107	137	321	352	700	1041	1625	2063	2334	2665	3981	4960
% of 8	-	-	1.8	1.2	1.0	1.7	1.1	1.8	2.1	2.4	2.6	2.5	2.5	2.7	3.0
Poland	-	109	425	1370	2621	3789	7843	11463	14587	22479	26075	34227	41247	47900	52125
% of 8	-	4.0	7.7	15.0	19.3	20.4	25.5	29.1	29.7	32.5	33.4	37.0	38.5	33.0	31.5
Slovakia	-	81	168	268	400	592	810	1604	1671	2129	2272	3738	4836	7800	10248
% of 8	-	3.0	3.0	2.9	2.9	3.2	2.6	4.1	3.4	3.1	2.9	4.0	4.5	5.4	6.2
Slovenia	501	594	675	775	954	1326	1763	1998	2207	2766	2687	2894	2602	4109	4290
% of 8	24.4	21.9	12.2	8.5	7.0	7.1	5.7	5.1	4.5	4.0	3.4	3.1	2.4	2.8	2.6
EU-15	**576332**	**748298**	**822361**	**818478**	**852056**	**994439**	**1136017**	**1217849**	**1241573**	**1618819**	**1806817**	**2257701**	**2441449**	**2899795**	**3335454**

Sources: As Table 1 and United Nations *National Accounts Main Aggregates Database*

Table 5 FDI Stocks ($) Per Capita

	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**
Czech R	125	132	183	280	331	440	711	831	896	1396	1707	2107	2650	3770	4022
Estonia	n.a.	n.a.	18	71	179	324	464	571	789	1256	1711	1930	2317	3110	4792
Hungary	25	55	204	332	542	691	1105	1303	1770	2206	2310	2282	2291	3533	4248
Latvia	n.a	n.a.	55	67	86	171	245	376	514	646	751	878	990	1176	1428
Lithuania	n.a.	n.a.	26	29	37	86	95	189	281	458	585	667	766	1148	1435
Poland	n.a.	3	11	36	68	98	203	297	377	581	675	886	1068	1247	1365
Slovakia	n.a.	15	32	51	75	111	151	298	310	395	421	692	899	1450	1905
Slovenia	251	297	337	388	479	667	887	1003	1111	1395	1353	1454	1306	2059	2148
EU-15	**1584**	**2047**	**2246**	**2228**	**2309**	**2684**	**3054**	**3263**	**3316**	**4312**	**4800**	**5983**	**6455**	**7650**	**8781**

Sources: As Table 1 and United Nations *National Accounts Main Aggregates Database*

Table 6 deflates the amassed capital stocks by the size of the host's economy rather than its population and provides a number of further insights. Once again, however, Estonia appears as the pre-eminent location for FDI, with accumulated stocks amounting to over three-quarters of its GDP in 2003. It is followed by the Czech Republic and Hungary, each of which has gathered foreign capital amounting to roughly half of its annual income. The position of Slovenia in the Table is rather different from that when population is used to deflate the FDI data. In particular, it now appears as the country with the smallest stock, reflecting its situation as a low population, relatively high income state. Poland exhibits the second weakest performance under the current measurement convention. A further very noticeable aspect of the statistics is that the leading countries in CEE very quickly overhauled the EU-15 as stores of foreign capital in relation to the size of their economies.

Table 6 FDI Stocks/GDP (%)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Czech R	3.1	3.6	6.8	9.0	9.0	10.2	13.1	13.7	16.1	23.3	29.5	38.9	44.4	52.3	45.4
Estonia	n.a.	-	0.2	10.0	16.5	21.2	19.3	19.2	24.9	34.9	47.5	51.4	56.4	65.0	79.0
Hungary	0.8	1.6	6.2	9.1	14.3	16.9	25.3	29.4	39.3	47.4	48.4	49.0	45.0	55.3	51.8
Latvia	n.a.	-	0.9	12.9	10.2	11.9	13.9	18.4	22.6	25.6	27.0	29.1	30.4	32.7	32.3
Lithuania	n.a.	-	0.4	5.6	5.1	7.6	5.7	8.9	10.8	14.9	19.4	20.9	22.4	28.8	27.7
Poland	-	0.2	0.5	1.6	2.9	3.7	5.9	7.7	9.7	13.6	16.1	20.9	22.5	25.3	25.2
Slovakia	-	0.5	1.5	2.2	3.0	3.8	4.2	7.7	7.9	9.6	11.1	18.4	23.2	32.2	31.5
Slovenia	n.a.	3.4	5.3	6.2	7.5	9.2	8.9	10.0	11.5	13.4	12.7	15.3	13.3	18.7	15.6
EU-15	**10.4**	**10.9**	**11.5**	**10.5**	**12.0**	**13.2**	**13.2**	**13.8**	**15.0**	**18.9**	**21.1**	**28.6**	**30.8**	**33.6**	**31.7**

Sources: As Table 1 and United Nations *National Accounts Main Aggregates Database*

Inward Investment in Poland: A Summary Overview

According to UNCTAD's latest *Country Profile* for Poland, using data from the country's National Bank (NBP), the largest stock of FDI (60.5% by value) was to be found in the service sector in 2000, which mirrored the situation in CEE overall (UNCTAD, 2004). In terms of specific industries, finance accounted for the largest single contribution, with one-fifth of the overall total, while trade and repairs represented the second largest contributor. Within the manufacturing sector, foreign investors were found to have penetrated motor vehicles and other transport equipment and the food, beverages and tobacco industries most intensely, each with over five per cent of the total stock of FDI.

In value terms, the *Profile*, again using NBP data, shows that the old EU accounted for four-fifths of the total stock of FDI in 2000, of which the Netherlands was responsible for over thirty per cent. In fact, the latter's investment was rather more double the combined total from Canada and the United States. The second and third largest source countries were Germany and France, respectively. Significantly, had the Russian Federation been a member of the EU, it would have represented its fifth largest investor in Poland, although its accrued stock accounted for less than five per cent of the Polish total.

Relying on Polish Central Statistical Office data, which covers only enterprises in which there is foreign ownership of more than half of the issued equity capital, the *Profile* reports that FDI was responsible for almost 650,000 jobs in the year 2000. Once again, the EU accounted for eighty per cent of the total, although, in this case, Germany was found to be a little more than the Netherlands. Rather tellingly, however, companies with foreign participation were shown to import almost twice as much as they exported and EU based enterprises represented no exception to the overall picture.

V. DEVELOPMENT AND FDI POTENTIALS IN THE POLISH REGIONS

Certainly in the case of the transition economies, the vast bulk of the literature has focused on the distribution of FDI across countries rather than within them. The primary spotlight in this paper, however, is on its location within an individual country and it is appropriate as a backcloth to the discussion that follows to provide an overview of the pattern of development across the regions of Poland and to integrate that with a consideration of the implications that theory might suggest this has for the distribution of inward investment.

While no attempt at formal modelling is made in this paper, the preceding review of the literature does lead to some presumption that the prospects of territories might be expected to be intertwined with their ability to amass foreign investment. Attention will be focused on the sixteen NUTS 2 level regions (voivodships) into which Poland was divided under the administrative reforms of 1999 and it is for this reason that only a short time-series of data is available with which to inform the discussion. Nevertheless and as

will become evident in the next section, those areas with the weakest economies have also been the least successful at attracting FDI.

GDP per Head

In common with all of the transition economies, Poland endured a pronounced recession in the early years of the transformation, although it was the quickest to recover, with its real GDP first exceeding its 1990 level in 1994 (GUS, 1998). Since that time, the country has experienced healthy growth, with a real GDP in 2003 exceeding its 1995 level by more than one-third (GUS, 2004) and, given that the population has remained roughly constant over this time, the increase can be taken to represent a real welfare gain. However, as the data in Table 7 make plain, there are large differences in per capita GDP across the regions, with the poorest in 2002 reaching only seventy per cent of the national figure and less than half of that in the capital voivodship of Mazowieckie. What is more, the hierarchical ranking of Polish territories was stable in all relevant respects between 1998 and 2002 while the relative difference between regions increased slightly. The East-5 were consistently the poorest performers and each had a per capita income that was less than four-fifths of the national figure.

A reasonably natural argument is that FDI flows might be expected to be positively associated with per capita GDP insofar as the latter represents a measure of market size. However, this argument loses some of its cogency in a regional context within a single country when firms might be looking to serve the whole market. Also, the East-5 either abut or are proximate to the rapidly emerging economies of Belarus and Ukraine, which have a combined population of almost sixty million.

Table 7
GDP per Head (złoty)

	1998	1999	2000	2001	2002
Dolnośląskie	14290	16273	18324	19758	21193
Kujawsko-Pomorskie	13193	14121	15893	17563	18635
Lubelskie	10383	11112	12146	13614	14300
Lubuskie	13062	14444	15900	17254	17850
Łódzkie	12682	14497	15723	17535	18492
Małopolskie	13029	14231	15826	16788	17659
Mazowieckie	20920	23760	26871	30283	31115
Opolskie	12635	13320	15146	15780	16738
Podkarpackie	10866	11685	12608	13870	14569
Podlaskie	10926	11580	13174	14727	15719
Pomorskie	14129	16120	17824	19301	20346
Śląskie	16014	17565	19509	21206	22627
Świętokrzyskie	11056	12435	13868	14843	15977
Warmińsko-Mazurskie	10986	12341	13210	14065	15258
Wielkopolskie	15141	16747	18900	20634	21072
Zachodniopomorskie	13980	15924	17489	19269	20196
Poland	**14316**	**15914**	**17725**	**19430**	**20431**

Source: *Statistical Yearbook of the Regions*, GUS, various years.

Wages

Table 8 highlights the spatial distribution of gross monthly wages in Poland. The differentials in this case are not as marked as with per capita GDP, with only two regions having workforces whose wages exceeded the national average in any of the years covered by the data. It is noted, however, that the five eastern regions identified above were consistently to be found towards the bottom of the hierarchy and in only one of them (Warmińsko-Mazurskie) was the rate of increase between 1998 and 2002 above that recorded nationally. The simplest expectation is that capital will be attracted to those areas with the lowest wages. However, standard wage variables frequently do not operate in the predicted way in many investment studies (Hatzius, 2000), a finding that is normally ascribed to a failure of the simple assumption that factor quality and productivity is the same across regions that is embedded in the basic hypothesis. The next sub-section therefore explores this issue in a little more depth.

Table 8
Average Gross Monthly Wage (złoty)

	1998	1999	2000	2001	2002
Dolnośląskie	1194.95	1625.97	1811.21	1973.44	2024.25
Kujawsko-Pomorskie	1093.78	1512.90	1668.92	1794.92	1844.35
Lubelskie	1099.72	1494.66	1678.50	1797.02	1836.32
Lubuskie	1095.53	1490.22	1670.36	1789.27	1825.20
Łódzkie	1096.85	1498.41	1668.76	1782.98	1839.55
Małopolskie	1152.83	1561.29	1744.42	1867.35	1932.26
Mazowieckie	1524.11	2201.77	2469.59	2681.85	2701.94
Opolskie	1142.71	1550.40	1731.65	1865.48	1910.22
Podkarpackie	1069.27	1456.62	1639.28	1755.11	1788.08
Podlaskie	1109.04	1494.13	1675.71	1787.42	1840.21
Pomorskie	1180.06	1604.38	1826.36	1990.66	2033.37
Śląskie	1365.28	1799.53	1954.41	2094.39	2156.19
Świętokrzyskie	1096.42	1514.11	1717.85	1815.12	1852.35
Warmińsko-Mazurskie	1048.17	1474.66	1671.17	1797.27	1851.02
Wielkopolskie	1164.56	1581.24	1771.86	1898.35	1929.60
Zachodniopomorskie	1145.76	1582.59	1741.06	1896.67	1911.13
Poland	**1232.69**	**1697.12**	**1893.74**	**2045.11**	**2097.83**

Source: *Statistical Yearbook of the Regions*, GUS, various years.

Unit Labour Cost

The attempt to incorporate productivity considerations into relative wage considerations leads to comparisons of unit labour cost (ULC). Conceptually, this is defined as total labour cost per unit of output. However, only an approximation to this ideal is available in the current instance and the proxy for ULC is given by the average gross wage in a voivodship deflated by its GDP per worker, measured in thousand złoty, which thereby ignores labour costs levied directly on the employer. The results of these calculations are presented in Table 9 and they paint a starkly different picture to those obtained from the wage data alone. In particular, it might be noted that notwithstanding its high nominal wages, Mazowieckie does not have particularly high productivity adjusted wages. On the other hand, four of the five eastern voivodships highlighted here have the highest ULCs, with Warmińsko-Mazurskie being the partial exception. Standard theory would point to the attractiveness of low unit cost regions.

Table 9
Unit Labour Cost

	1998	1999	2000	2001	2002
Dolnośląskie	29.7	36.0	34.1	32.8	31.8
Kujawsko-Pomorskie	31.9	39.6	38.1	35.7	34.8
Lubelskie	48.2	60.2	60.6	56.8	55.9
Lubuskie	29.5	36.0	33.9	32.1	31.5
Łódzkie	36.8	43.0	42.7	40.3	39.6
Małopolskie	36.6	47.8	45.6	44.6	43.9
Mazowieckie	34.7	43.3	43.3	40.3	39.2
Opolskie	32.5	42.0	39.1	38.5	37.2
Podkarpackie	45.7	24.5	57.8	55.0	53.9
Podlaskie	42.6	53.7	51.6	48.2	46.8
Pomorskie	29.7	35.6	34.6	33.7	32.5
Śląskie	33.4	38.6	36.1	34.4	33.7
Świętokrzyskie	46.5	56.0	55.6	53.7	51.7
Warmińsko-Mazurskie	33.7	40.4	39.2	38.3	37.0
Wielkopolskie	31.8	39.6	37.7	35.8	36.0
Zachodniopomorskie	29.5	34.4	32.8	30.4	29.2
Poland	**35.5**	**43.3**	**41.9**	**40.0**	**40.3**

Source: *Statistical Yearbook of the Regions*, GUS, various years.

Privatisation

Although not regarded as a short-term priority in the radical Balcerowicz Plan that set Poland on its reform and restructuring path in late 1989, the country's progress in transferring assets out of the public sector into private hands has frequently been regarded as a barometer of its progress to a fully fledged market economy (CEC, 1998; World Bank, 1997). From the perspective of multinational investors, it is also a signal of the commitment of a transforming country to enterprise (Bevan and Estrin, 2000; Lankes and Venables, 1996). It is somewhat ironic therefore that the report that effectively concluded the country's pre-accession preparations was to say that "the pace of privatisation in the first months of this year has been disappointing" and that "the Polish authorities need to take decisive action to accelerate privatisation" (CEC, 2003: 6 & 8, respectively).

Whatever the reservations, three-quarters of Polish employment was in the private sector by the end of 2002, as shown in Table 10. However, care should be taken not to over-emphasise the magnitude of the underlying achievement: the country's authorities did not in fact succeed in taking a large section of the economy into the socialised sector, as discussed more fully below. Nevertheless, Table 10 indicates that there exist regional variations in the dominance of the private sector. Thus, in Śląskie, only two-thirds of employment was in the non-state sector, while the figure was approximately eighty per cent in four of the East-5. Warmińsko-Mazurskie was the exceptional case amongst the

eastern voivodships, insofar as the private sector was responsible for only seventy-three per cent of those in work in 2002.

Table 10
Employment in Private Sector (% of total)

	1998	1999	2000	2001	2002
Dolnośląskie	64.1	67.3	70.8	71.7	72.5
Kujawsko-Pomorskie	71.6	72.5	74.1	74.9	75.7
Lubelskie	75.7	76.7	77.6	78.9	79.4
Lubuskie	67.2	70.3	70.5	71.0	71.7
Łódzkie	73.4	74.5	75.5	76.8	77.4
Małopolskie	73.2	74.9	75.7	76.9	77.5
Mazowieckie	72.7	73.6	75.2	76.1	76.7
Opolskie	68.0	70.4	71.8	73.2	74.1
Podkarpackie	74.8	75.9	77.3	78.6	79.4
Podlaskie	75.4	76.1	77.5	78.4	79.3
Pomorskie	67.3	69.5	70.1	73.2	73.4
Śląskie	61.0	63.3	64.9	65.3	66.4
Świętokrzyskie	77.2	78.6	79.5	80.6	81.2
Warmińsko-Mazurskie	70.1	71.3	71.3	72.7	73.2
Wielkopolskie	74.3	76.6	77.4	77.9	78.7
Zachodniopomorskie	66.7	68.3	69.5	70.6	70.4
Poland	**70.7**	**72.3**	**73.7**	**74.8**	**75.4**

Sources: *Yearbook of Labour Statistics 2001, 2003*; *Employment in National Economy 1999, 2001*

Agricultural Employment

One of the major paradoxes of the Polish communist era was the existence of a large, privately owned agricultural sector composed of millions of small farms. Its persistence intact to the present day renders it, rather than any large scale privatisation project, perhaps the major restructuring project still to be achieved (Ingham and Ingham, 2002). Indeed, while the large state farms withered at early stage in the transition, employment in private agriculture has, if anything, increased (Ingham and Ingham, 2005), fuelled in part by its role as a buffer zone for those laid off from other branches of economic activity. Thus, on the broad count utilised by the statistical authorities, there were more than 4.25 million employed in the sector in 2003, accounting for twenty-nine per cent of those in work (GUS, 2004).[3] The farms involved exhibit extremely low productivity, producing only 2.6 per cent of GDP in 2003 (*ibid*.). What is more, more than half of all those aged sixty and more in work were engaged in the sector (GUS, 2004a).

As shown in Table 11, the spatial distribution of agricultural employment is highly skewed, with four voivodships having approximately half of their employed

populations absorbed in such activity. Given the low productivity of the sector, it is unsurprising that that these four – Lubelskie, Podkarpackie, Podlaskie and Świętokrzyskie – belong to the East-5. The remaining member of the latter group - Warmińsko-Mazurskie – was a major location for the state farms that were liquidated in the early 1990s and, more than a decade later, it has yet to recover from the shock this imposed on the local economy, as indicated by some of the earlier development indicators.

Table 11
Employment in Agriculture, Hunting, Forestry & Fishing (% of Total)

	1998	**1999**	**2000**	**2001**	**2002**
Dolnośląskie	15.8	15.5	16.1	16.7	16.8
Kujawsko-Pomorskie	25.4	26.1	26.3	27.2	27.3
Lubelskie	50.1	50.9	52.0	53.0	53.0
Lubuskie	17.0	17.0	17.9	18.3	18.6
Łódzkie	30.6	31.3	32.5	33.0	33.2
Małopolskie	34.2	34.2	35.9	36.8	36.8
Mazowieckie	24.7	25.1	24.9	25.7	25.7
Opolskie	28.0	27.4	28.5	29.8	29.8
Podkarpackie	45.6	45.8	47.3	48.2	48.3
Podlaskie	44.8	45.2	46.4	47.3	47.5
Pomorskie	15.3	15.0	15.5	15.7	15.8
Śląskie	11.1	11.6	12.2	12.6	12.7
Świętokrzyskie	46.7	47.7	49.0	50.1	50.2
Warmińsko-Mazurskie	24.2	24.9	26.6	27.3	27.5
Wielkopolskie	25.9	25.2	25.9	26.5	26.2
Zachodniopomorskie	15.2	15.4	15.5	16.0	16.1
Poland	**27.4**	**27.6**	**28.5**	**29.3**	**29.4**

Source: *Employment in National Economy*, GUS, various years.

Unemployment

Areas of high unemployment are, on the one hand, disadvantaged but, at the same time, pools of surplus labour, which may, under certain circumstances and in particular activities, be of some attraction to inward investors. From the outset of the transition, Poland has experienced relatively high jobless rates in comparison with other similar economies. Nevertheless, the aggregate figures have masked persistent and wide regional differentials, as shown for earlier years in Ingham *et al*. (1998) and as highlighted for the recent past in Table 12. More than anything else, of course, the latter underscores the massive increase in the number of people registered with the authorities as being without work in recent years, with the number exceeding 3.2 million in 2002 and being only slightly lower in subsequent years (GUS, 2004b). The worsened situation on the labour market was evident in all areas of the country, with the situation in Warmińsko-

Mazurskie being consistently the weakest of all. Nevertheless, it is noticeable that the relative deterioration over time was least in the East-5, although the underlying reason has more to do with disguised unemployment in private sector farming in four of them than with any new found dynamic.

Table 12
Unemployment Rate (%)

	1998	**1999**	**2000**	**2001**	**2002**
Dolnośląskie	12.8	16.0	18.4	21.5	22.4
Kujawsko-Pomorskie	13.9	16.9	19.2	21.9	22.5
Lubelskie	10.3	12.9	14.0	15.7	15.7
Lubuskie	13.2	17.5	21.3	24.4	26.0
Łódzkie	11.4	14.3	16.3	18.1	18.4
Małopolskie	7.6	10.2	12.2	14.1	13.8
Mazowieckie	7.6	9.5	10.8	13.0	13.8
Opolskie	10.5	13.2	15.7	18.2	19.4
Podkarpackie	12.3	14.5	16.2	17.4	16.9
Podlaskie	10.8	12.5	13.8	15.1	15.1
Pomorskie	11.0	13.8	16.6	19.6	21.3
Śląskie	7.3	10.4	12.9	15.7	16.5
Świętokrzyskie	12.1	15.1	16.6	18.4	18.5
Warmińsko-Mazurskie	19.7	22.4	25.8	28.9	28.9
Wielkopolskie	8.0	10.5	12.5	15.4	15.9
Zachodniopomorskie	13.9	18.1	20.8	24.7	26.6
Poland	**10.4**	**13.1**	**15.1**	**17.5**	**18.0**

Source: *Statistical Yearbook of the Regions*, GUS, various years.

Having examined briefly the development differentials that exist within Poland, with the capital region standing out as a leader and with the East-5 lagging on most counts, the next section goes on to explore location of the FDI flows that have been attracted into the country.

The East-5: A Summary

The five voivodships that have been highlighted for attention in this paper have the lowest levels of per capita GDP in Poland, with the best figure amongst them for 2002, recorded in Świętokrzyskie, being less than eighty per cent of the national average and the worst, in Lubelskie, being less than seventy per cent. Gauged simply in terms of the size of their internal markets therefore, these regions would not appear attractive.

Podkarpackie had the lowest nominal wages in the country in 2002, which were some fifteen per cent below the national average. The highest wages in the five in 2002

were recorded in Świętokrzyskie and it ranked ninth in the national hierarchy of regions on this count, although its figure was still less than ninety per cent of that recorded nationally. Taken at face value, this might be taken to suggest that the East-5 might appeal to cost minimising foreign investors. However, Lubelskie, Podkarpackie, Podlaskie and Świętokrzyskie had the four highest unit labour costs in Poland in 2002, although the major reason for this was the heavy concentration of low value added private farming within their borders. Only Warmińsko-Mazurskie had productivity adjusted wages that fell slightly below the national average.

On the other hand, Warmińsko-Mazurskie was the only one of the five that did not rank amongst the regions with the largest private sectors in the country. While the relatively heavy presence of state enterprises in the area could be seen as a deterrent to inward inwards, it might actually be the precursor of future privatisations, which might attract the attention of foreign capital, although this paper focuses only on events to date. However, the nature of the private sector in Lubelskie, Podkarpackie, Podlaskie and Świętokrzyskie, where approximately half of all employment is to be found in agriculture, would not necessarily appeal to investors seeking workforces with contemporary disciplines. Warmińsko-Mazurskie stands out as a region with a farming labour force that was slightly below the national average in 2002, although this is a reflection of the fact that it is an area that was a centre of the state farms that collapsed early in the transition. Indeed, the region had the highest unemployment rate in Poland in 2002, some sixty per cent above the figure prevailing nationally. On the other hand, Lubelskie, Podkarpackie and Podlaskie had jobless rates below the national average, although this doubtless conceals a good deal of hidden unemployment in farming.

VI. FDI IN THE REGIONS OF POLAND

The purpose of this section is to investigate how the foreign investment that has entered Poland, which is significant in absolute terms even if somewhat less impressive relative to the size of either the country's population or its economy, has been distributed throughout space. In this regard, attention must turn from the statistics prepared by international agencies such as UNCTAD, which are only national in scope, to data prepared internally within Poland. While at least some of those who perform the latter exercises are responsible for responding to the standardised questionnaire instrument issued by UNCTAD to all co-operating countries, the resulting data sets differ as they are not constructed under the same conventions. However, this problem is not unique to Poland or indeed to the transition countries. Nevertheless, one needs to be aware that there are at least four sources of data within Poland – those produced by the old Polish Foreign Investment Agency (PAIZ), the Central Statistical Office (GUS), the Polish National Bank (NBP) and specialised institutes – and each of these generally differ in the principles of measurement adopted. Attention in this section will be focused on the data made available by GUS at the regional level.

The GUS statistics are derived from information contained in the financial results of enterprises, including whether they have foreign capital participation and is made

available at all levels of administrative disaggregation. While attention is at all times restricted to commercial law companies, these are not necessarily large and the reported figures may not, in addition, be a good guide to the significance of the foreign presence in any area. Nevertheless, it is the most comprehensive indicator of the spatial distribution of such capital available. However, in order to address at least some of the concerns that may be levied at its use, information on the subset of joint stock companies contained within the larger aggregate will also be provided.

While it is on occasion suggested that companies select the target country for their investment first and are less concerned with precise location (Hamilton, 2000), this is quite difficult to reconcile with the same author's observation that it is common in most countries for FDI to locate initially in and around capital cities and only later spreads to other regions. In fact, location is to some extent predetermined with brownfield privatisation exercises, although it is possible to over-emphasise this as a constraint, given that the purchaser will generally intend to rationalise the operations of the undertaking. Also, it does not apply at all in the case of greenfield undertakings. On the other hand, some large investments may require economic access to a sizeable labour force, which may demand centrality.

Table 13 presents the spatial distribution of commercial companies with foreign capital participation across the voivodships of Poland, as derived from the GUS statistics. Without exception, the number of companies with foreign capital participation increased year on year between 1998 and 2003, both in aggregate and in each voivodship taken separately. It is very evident, however, that the distribution of this involvement is distributed very unevenly across the country: one-third is to be found in the capital region of Mazowieckie, while seven territories together accounted for no more than eleven per cent of the total. Furthermore, the East-5 occupied the lowliest positions in the hierarchy and the rank ordering of voivodships was stable over time, with little evidence that the initial laggards were converging on the leaders.[4]

While there is more evidence of shuffling in the rank ordering of the regions over time, a broadly similar picture emerges when the density of foreign investment presence, measured as the percentage of all commercial companies registered in a voivodship with foreign capital presence, is considered. In this case, however, Mazowieckie no longer had the greatest foreign penetration, a place occupied by the western border region of Lubuskie. This is perhaps to be expected insofar as capital cities and their hinterlands are the seedbeds of both domestic and foreign enterprise. Nonetheless, it is notable that the density figure declined in all areas and most noticeably so in Warmińsko-Mazurskie. Furthermore, the remaining four members of the East-5 again recorded the lowest foreign capital presence. This may seem surprising when it is noted that own account agricultural enterprises are excluded from the data, but it could conceivably reflect a positive relation between actual or disguised unemployment and self-employment, a hypothesis for which some empirical support has been found in CEE (Ingham and Ingham, 2002a).

Table 13
Commercial Companies with Foreign Participation
(% of voivodship total)

	1998	**1999**	**2000**	**2001**	**2002**	**2003**
Dolnośląskie	3648 (33.1)	4066 (33.7)	4379 (33.1)	4571 (31.2)	4689 (29.0)	4834 (28.3)
Kujawsko-Pomorskie	988 (17.3)	1062 (17.5)	1163 (17.8)	1202 (16.5)	1246 (15.2)	1281 (14.9)
Lubelskie	538 (13.3)	622 (13.8)	682 (14.0)	711 (12.8)	746 (12.1)	759 (11.7)
Lubuskie	1586 (41.4)	1770 (42.7)	1904 (42.6)	1980 (40.5)	2045 (38.3)	2092 (37.5)
Łódzkie	1551 (23.8)	1701 (24.3)	1820 (24.2)	1907 (22.5)	1985 (20.5)	2071 (20.1)
Małopolskie	1750 (22.0)	2002 (21.5)	2196 (21.3)	2249 (19.3)	2300 (17.3)	2375 (16.6)
Mazowieckie	12564 (33.2)	13744 (33.7)	15014 (33.8)	15801 (32.5)	16474 (31.0)	17090 (30.2)
Opolskie	815 (31.5)	933 (32.8)	1014 (32.6)	1057 (30.2)	1066 (27.4)	1106 (26.8)
Podkarpackie	445 (15.2)	501 (15.8)	560 (15.7)	584 (13.8)	605 (12.3)	632 (11.9)
Podlaskie	283 (13.6)	313 (14.1)	345 (14.5)	355 (12.8)	364 (11.5)	382 (11.3)
Pomorskie	2568 (21.7)	2759 (22.0)	2897 (21.5)	3059 (20.9)	3132 (19.9)	3221 (19.6)
Śląskie	3143 (20.6)	3452 (21.2)	3712 (21.0)	3880 (20.0)	4009 (18.2)	4105 (17.5)
Świętokrzyskie	354 (15.3)	388 (15.8)	428 (16.2)	452 (14.8)	460 (13.4)	478 (13.0)
Warmińsko-Mazurskie	599 (29.3)	656 (20.0)	733 (20.4)	764 (19.0)	779 (17.2)	801 (16.8)
Wielkopolskie	3346 (28.4)	3675 (28.8)	3919 (28.2)	4107 (26.6)	4278 (24.6)	4409 (23.8)
Zachodniopomorskie	2566 (37.3)	2768 (37.4)	2971 (37.3)	3086 (35.3)	3174 (33.1)	3337 (33.1)
Poland	**36850 (27.0)**	**40412 (27.5)**	**43737 (27.4)**	**45765 (25.8)**	**47352 (24.1)**	**48973 (23.5)**

Source: *Statistical Yearbook of the Regions*, GUS, various editions.

Given the uncertainty regarding the interpretation of the density figures, Table 14 presents the raw figures on the number of firms with foreign participation calculated per 1000 head of voivodship population. This exercise serves merely to confirm the picture portrayed by the original figures. Mazowieckie has by far the highest concentration of foreign capital, with the three provinces of Zachodnio-Pomorskie, Lubuskie and Dolnośląskie exhibiting clear evidence of the significance of their location on the eastern border of Germany and therefore of the pre-2004 EU. There is also evident confirmation that the East-5 voivodships are the least attractive locations for investors from other countries. However, it is instructive to compare this evidence for all commercial companies with that for those with issued share capital.

Table 14
Commercial Law Companies with Foreign Participation per 1000 population

	1998	1999	2000	2001	2002	2003
Dolnośląskie	1.2 (4)	1.4 (4)	1.5 (4)	1.5 (4)	1.6 (4)	1.7 (4)
Kujawsko-Pomorskie	0.5 (11)	0.5 (11)	0.6 (11)	0.6 (11)	0.6 (11)	0.6 (11)
Lubelskie	0.2 (14)	0.3 (14)	0.3 (14)	0.3 (14)	0.3 (14)	0.3 (14)
Lubuskie	1.6 (2)	1.7 (2)	1.9 (2)	1.9 (2)	2.0 (2)	2.1 (2)
Łódzkie	0.6 (9)	0.6 (9)	0.7 (8)	0.7 (9)	0.8 (9)	0.8 (9)
Małopolskie	0.5 (10)	0.6 (10)	0.7 (9)	0.7 (10)	0.7 (10)	0.7 (10)
Mazowieckie	2.5 (1)	2.7 (1)	3.0 (1)	3.1 (1)	3.2 (1)	3.3 (1)
Opolskie	0.7 (7)	0.9 (7)	0.9 (7)	1.0 (7)	1.0 (7)	1.0 (7)
Podkarpackie	0.2 (16)	0.2 (16)	0.3 (15)	0.3 (16)	0.3 (16)	0.3 (16)
Podlaskie	0.2(15)	0.3 (15)	0.3 (16)	0.3 (15)	0.3 (15)	0.3 (15)
Pomorskie	1.2 (5)	1.3 (5)	1.3 (5)	1.4 (5)	1.4 (5)	1.5 (5)
Śląskie	0.6 (8)	0.7 (8)	0.8 (10)	0.8 (8)	0.9 (8)	0.9 (8)
Świętokrzyskie	0.3 (13)	0.3 (13)	0.3 (13)	0.3(13)	0.4 (13)	0.4 (13)
Warmińsko-Mazurskie	0.4 (12)	0.5 (12)	0.5 (12)	0.5 (12)	0.6 (12)	0.6 (12)
Wielkopolskie	1.0 (6)	1.1 (6)	1.2 (6)	1.2 (6)	1.3 (6)	1.3 (6)
Zachodniopomorskie	1.5 (3)	1.6 (3)	1.7 (3)	1.8 (3)	1.9 (3)	2.0 (3)
Poland	**1.0**	**1.1**	**1.1**	**1.2**	**1.2**	**1.3**

Source: *Statistical Yearbook of the Regions*, GUS, various editions.

In Table 15, attention is confined solely to joint-stock companies, with the predictable large reduction in the number of enterprises covered, although the fall in those operating with foreign participation is somewhat larger than in the number overall. On the face of it, the data might appear to cast the East-5 in a slightly more favoured position than that for all commercial companies insofar as both Lubelskie and Świętokrzyskie fell outside the five voivodships with the smallest numbers of enterprises with foreign participation in 1998. By 2003, however, four of the highlighted eastern territories fell within this latter group: only Podkarpackie showed any signs of dynamism over the quinquennium. Indeed, the central message conveyed by the data is that Mazowieckie accounted for forty-five per cent of Polish companies benefiting from foreign capital and six other provinces were responsible for a further thirty-nine per cent. Also, Lubelskie, Świętokrzyskie and Warmińsko-Mazurskie experienced little or no growth in their levels of foreign presence between 1998 and 2003.

Measuring the number of joint-stock enterprises with foreign participation as a proportion of the total number of such firms registered in each region presents an apparently different picture, insofar as Podkarpackie and Podlaskie exhibited relatively high external involvement on this measure in 2003. However, the latter of these voivodships had the second lowest total of companies with foreign involvement in absolute terms throughout the period covered and the result must therefore be seen as a reflection of a general dearth of corporate activity in the area. In the case of the former region, on the other hand, the basic evidence does suggest some growth of interest from foreign capital in the large companies within the area, albeit from a low base. Nevertheless, it must be emphasised that the three voivodships with the lowest proportions of companies with non-Polish stakeholders belong to the East-5. The next section of the paper therefore turns to survey evidence in order to attempt to identify reasons for the evident lack of appeal of these localities to foreign investors.

Table 15
Joint Stock Companies with Foreign Participation (% of voivodship total)[1]

	1998	1999	2000	2001	2002	2003
Dolnośląskie	61 (11.6)	66 (11.6)	70 (11.7)	77 (11.9)	76 (11.7)	79 (12.3)
Kujawsko-Pomorskie	27 (9.2)	28 (8.9)	29 (8.8)	30 (8.8)	32 (9.1)	37 (10.7)
Lubelskie	24 (9.8)	24 (9.2)	26 (9.6)	23 (8.3)	22 (8.3)	24 (9.2)
Lubuskie	20 (12.8)	23 (13.7)	21 (11.9)	23 (12.6)	27 (14.6)	29 (15.7)
Łódzkie	38 (9.9)	37 (9.1)	39 (9.3)	48 (10.8)	53 (11.8)	58 (12.9)
Małopolskie	62 (12.4)	69 (12.5)	69 (11.9)	77 (12.6)	81 (13.2)	76 (12.2)
Mazowieckie	457 (24.0)	500 (24.2)	547 (24.7)	587 (24.5)	602 (24.4)	605 (24.2)
Opolskie	17 (16.5)	18 (16.5)	18 (15.9)	17 (14.2)	19 (15.0)	23 (18.1)
Podkarpackie	17 (9.7)	20 (10.3)	21 (10.0)	23 (9.9)	24 (10.3)	30 (12.5)
Podlaskie	16 (15.5)	16 (14.3)	19 (16.7)	22 (19.3)	23 (19.3)	20 (17.2)
Pomorskie	61 (10.2)	67 (10.6)	70 (10.5)	89 (12.3)	94 (13.1)	95 (13.2)
Śląskie	74 (8.6)	79 (8.6)	87 (9.0)	100 (10.1)	100 (9.9)	105 (10.4)
Świętokrzyskie	19 (9.9)	21 (10.2)	23 (10.6)	21 (8.9)	20 (8.5)	23 (9.8)
Warmińsko-Mazurskie	9 (6.3)	10 (6.8)	12 (7.8)	12 (7.2)	9 (5.4)	10 (6.1)
Wielkopolskie	89 (13.7)	90 (13.3)	94 (13.2)	99 (13.5)	106 (14.2)	113 (15.2)
Zachodniopomorskie	19 (9.1)	24 (10.0)	24 (9.6)	25 (9.4)	27 (10.0)	29 (10.7)
Poland	1010 (14.3)	1092 (14.4)	1169 (14.6)	1273 (15.0)	1315 (15.3)	1356 (15.7)

Source: *Biuletyn Statystyczny*, GUS, various issues.
Note: 1. All data refer to 31 December, except for 2000, which is for 30 September.

VIII. THE FDI SURVEY

In view of both the low levels of development evident in the East-5 and their relative neglect by foreign capital, the major purpose of the work underlying this paper was to ascertain the perceptions of senior executives within foreign companies that had already invested in Poland regarding the attractiveness of the East-5 as FDI locations. This was found to be an important issue in the case of inward investors in Australia (BIE, 1996), particularly as many of them had incorrect beliefs about the characteristics of Australia in relation to those of other rival locations. Given the recently recent opening of Poland to outside capital, it could also be an important factor contributing to the failure of the East-5 to attract FDI. Of course, it might have been preferable to have obtained information from all enterprises that had considered investing in Poland, including those that subsequently declined to do so. However, there is no known database containing information on this set of companies.

In order to obtain information on the identity of inward investors to Poland, it was necessary to switch attention from the information supplied by GUS to that available from the National Investment Agency (formerly PAIZ, now PAIiIZ, the Polish Information and Foreign Investment Agency). The database that it maintains is restricted to investments of more than one million US dollars, but its attraction is that it identifies the company involved in each case. While the lower limit imposed by PAIZ might seem restrictive, this is to some extent overridden by the fact that the initial investment and any future committed investments are aggregated together in the data collection exercise. This characteristic ensures, however, that the information does not necessarily give a very useful indication of the timing of the underlying flows. Nevertheless, the information has been used as the basis for the questionnaire exercise described in the following section.

Postal questionnaires were distributed to all of the 1220 companies listed on the PAIZ record of inward investors in 2001. Of these, a total of 84 were found to be incorrectly identified on the database, but were subsequently traced and the questionnaire re-sent. Another 33 were returned by the postal service as not known at the address given and further research failed to locate them. The final sample targeted therefore amounted to 1187 companies. A total of 6 companies responded by noting that the questionnaire was not relevant to them as their operations were location specific, as in the case of resource extraction activities. Such returns were of necessity treated as non-responses, as were 3 returns where the respondent had clearly misunderstood the questionnaire or had failed to provide essential information. In addition, background research revealed that several of the companies on the PAIZ database were no longer trading in any identifiable guise. In the final analysis, 74 usable responses were received, which represents a low percentage return, but not one that is out of line with other similar exercises conducted in the region.

Source Countries

The 74 usable questionnaire returns came from enterprises that had parent companies in a total of twenty-two different countries or country combinations. Table 16 identifies the particular sources of the investments. Inspection of the Table reveals that eight companies in the sample were Polish. This should not be regarded as anomalous; eligible FDI under any of the standard conventions does not require complete ownership. In the

current instance, the qualifying criterion is a financial threshold, while in the case of the UNCTAD data, for example, it is a ten per cent share in the company concerned.

Table 16
Source of Inward Investment

Parent Company Location	No of Returns	% of Returns
Germany	13	17.3
USA	10	13.3
France	8	10.7
Poland	8	10.7
Sweden	7	9.3
UK	5	6.7
Austria	4	5.3
Belgium	2	2.7
Canada	2	2.7
Denmark	2	2.7
Finland	2	2.7
Norway	2	2.7
Netherlands	1	1.3
Spain	1	1.3
Switzerland	1	1.3
Austria/Czech Rep.	1	1.3
France/Germany	1	1.3
France/Sweden	1	1.3
Germany/S. Africa	1	1.3
Japan/UK	1	1.3
Netherlands/UK	1	1.3
UK/Austria	1	1.3

Size of Polish Operation

Respondents were asked to provide the turnover of the company's Polish operations in 2002. Given that they were free to report this figure in the currency of their choice, this resulted in answers that were enumerated in Euro, US dollars, UK sterling and złoty. In the first two instances, the information was converted into złoty using either the National Bank of Poland's annual 2002 average exchange rate of 4.0795 USD to zloty or 3.8557 euro to zloty, as appropriate. Sterling turnovers were converted first into euro using the Bank of England's 2002 annual average exchange rate of 1.5909 and then into zlotys using the previous NBP figure. This yielded a zloty:sterling exchange rate of 6.1340.

Table 17 provides summary information on the distribution of firm sizes in the sample, measured both in terms of turnover (in zloty) and employment of the Polish operations in 2002. These vary quite considerably, with the smallest having a turnover of just under £300,000 from three employees and the largest quoting sales in excess of £700 million, although this is not the largest employer. The latter has a slightly lower turnover and more than 18,000 workers. It might be noted that, in the full sample, there is no correlation between the value of sales and the productivity of labour, defined as turnover per head.

Table 17
Summary Measures of Size of Polish Operations

	Turnover (PLN)	Employment
Minimum	1,800,000	3
Maximum	4,500,000,000	18280
Average	387,000,000	1073.7
Coefficient of Variation	2.18	2.51
N	72	73

The number of sites on which the Polish arm of each company operates represents another dimension of size and, the sixty-nine valid returns to this question unveiled twenty nine firms, mainly in heavy industry, with a single base through to one bank with 238 branches. A total of forty-six of the respondents operated on three sites or fewer. However, 43 per cent of the sample was considering opening new branches in Poland. This latter finding is not altogether surprising insofar as 85 per cent of the returned questionnaires were from firms that had operations in countries other than that of the parent company and Poland.

Location in Poland

The primary aim of the study was to gain further insights into the reasons underlying the spatial concentration of FDI and, in particular, the possible reasons why investors, on the evidence examined so far, appear to eschew the East-5. Table 18 enumerates the companies having operations in each of these five regions. In the event, the findings were perhaps somewhat surprising, with seventeen per cent of investors having operations in Podlaskie, the least popular of the eastern territories; a figure that climbs to almost one-in-four in the case of Swietokrzyskie. However, it might be recalled that the apparent bias against these areas was somewhat smaller in the case of joint-stock companies than it was for all commercial companies. The survey seems likely to be tracking this effect. The figures further reveal that a number of the firms surveyed have multiple eastern operations, with the third column indicating that, in proportionate terms, the number involved is very high. Put slightly differently, once a firm invests in the east it is more likely than not to operate a base in more than one of the five highlighted voivodships. This issue will be returned to below.

Table 18
Investment Locations

	With operations in (%)	Of which, with multiple eastern operations (%)
Lubelskie	21.1	81.3
Podkarpackie	22.4	70.6
Podlaskie	17.1	100.0
Swietokrzyskie	23.7	77.8
Warminsko-Mazurskie	18.4	92.9
N	74	74

IX. PERCEPTIONS OF EASTERN POLAND

In seeking views of the Polish eastern territories as inward investment sites, respondents were asked a series of questions, falling into seven general indicator families, requiring them to compare the attractiveness of the East-5, taken as a whole, with the rest of the country. With one exception, categorical answers in the form of 'much better', 'better', 'same', 'worse', 'much worse' and 'don't know' were requested. The first five of these were scored on a descending scale from 5 to 1. The indicator family representing input costs and turnover provides the exception, when answers in the form 'much higher', 'higher', 'same', 'lower', 'much lower' and 'don't know' were solicited. In this case, the coding scheme was in ascending order from 1-5 for the first five responses. This section of the paper provides a summary of the responses received. In each case, higher scores are associated with favourable impressions of the East-5 and, for many purposes, the comparison of most interest is that with the score of three that would result if the eastern voivodships were viewed as the same as elsewhere by all respondents. For the purpose of constructing the summary indices of attitudes, any responses of 'don't know' have been treated as missing data.

The Business Environment in East-5 Relative to the Rest of Poland

A total of eight indicators were included to capture the relative appeal of the business environment in the east, as detailed in Box 1.

Box 1
Indicators of the Business Environment in East-5

1. Supplier linkages
2. Sales linkages
3. Own company linkages
4. Proximity to market
5. The chance to open up a new market
6. University and research centre linkages
7. Networks of relevant businesses
8. Supporting services/R&D facilities
9. Overall Score

Table 19 reports that the mean scores were less than three in all cases and numerous evaluations that the East-5 are much worse than elsewhere were recorded. Only in terms of the chance to open up a new market, which was viewed most favourably overall, did the highlighted regions receive two assessments grading them as much better than other areas of the country: on all other indicators, the best they achieved was simply that of 'better'. The eastern voivodships received their worst evaluations for their university and research centre linkages and for the network opportunities they offer.

Table 19
The Business Environment in East-5 Relative to the Rest of Poland

	Mean	**N**
Supplier linkages	2.48	62
Sales linkages	2.43	61
Own company linkages	2.61	57
Proximity to market	2.36	59
The chance to open up a new market	2.74	61
University and research centre linkages	2.29	59
Networks of relevant businesses	2.10	60
Supporting services/R&D facilities	2.02	57
Overall	**2.38**	**476**

It is not particularly easy to find good indicators that would assist in assessing the extent to which these are correct. Nevertheless, it is useful to highlight certain proxy

measures that provide pointers in this direction. In terms of proximity to market, the East-5 regions themselves represent low income markets, as shown above, with a combined population of just over eight million people or just over twenty per cent of the national total. However, their proximity to the Ukraine and Belarus might be seen as representing a good opportunity to open up a new market. While clearly not a particularly good measure of actual linkages, it might be noted that, of the 367 higher education institutions in Poland, only eighteen per cent are located in the five highlighted voivodships Furthermore, they accounted for an even smaller proportion of the academics (17%) and 18.6 per cent of registered students in the 2002/2003 academic year. Finally, research and development expenditures in the East-5 are below the national average whether measured in per capita terms or as a proportion of regional product. However, the average in both cases is distorted by the outturn for Mazowieckie and only Świętokrzyskie appears at the very bottom of the hierarchy in both cases. Overall, therefore, it might hesitatingly be concluded that the perceptions of respondents regarding the business environment in the East-5 are not unreasonable.[5]

Inducements and Finance in East-5 Relative to the Rest of Poland

A total of six indicators were included to capture the relative appeal of the inducements and finance available in the east, as detailed in Box 2.

Box 2
Indicators of Inducements and Finance in East-5

1. Availability of capital
2. Financial support from national development agencies
3. Non-financial support from national development agencies
4. Financial support from local government/local development agencies
5. Non-financial support from local government/local development agencies
6. Subsidies/tax breaks
7. Overall Score

The East-5 attract more support as investment locations in terms of the inducements and finance available to incomers than in the case of their business environment, with the overall score of 2.89 reported in Table 20 indicating a rough equality with other regions of Poland. Indeed, this average is lower than it otherwise might be principally because of relatively poor perceptions of the availability of capital. The eastern regions are actually seen as being slightly better than the rest of the country in terms of the non-financial support available from local sources and the subsidies/tax breaks on offer. In all cases, however, the modal sentiment was that the East-5 cannot be differentiated from the rest of the country.

Table 20

Inducements and Finance in East-5 Relative to the Rest of Poland

	Mean	N
Availability of capital	2.55	56
Financial support from national development agencies	3.00	48
Non-financial support from national development agencies	2.77	48
Financial support from local government/local development agencies	2.85	47
Non-financial support from local government/local development agencies	3.13	48
Subsidies/tax breaks	3.08	48
Overall	**2.89**	**295**

Unfortunately, no contemporary evidence on the inter-regional distribution of the forms of support encompassed under the rubric of inducements and finance could be found and the assessments of respondents must therefore be accepted without comment.

Availability and Quality of Factor Inputs in East-5 Relative to Rest of Poland

A total of six indicators were included to capture the relative availability and quality of factor inputs in the east, as detailed in Box 3.

Box 3
Indicators of Availability and Quality of Factor Inputs in East-5

1. Availability of land
2. Availability of premises
3. Availability of managerial/professional labour
4. Availability of skilled labour
5. Availability of unskilled labour
6. Adaptability of labour
7. Overall Score

On average, the East-5 were seen as slightly more attractive investment locations than elsewhere in terms of the availability and quality of factor inputs, as shown in Table 21. However, this overall mean masked contrasting views on the availability of managerial and skilled labour on the one hand, which were perceived to be in relatively short supply, and the availability of land and unskilled labour, which were viewed as plentiful. This distinction is mirrored in the fact that the modal scores for the availability of managerial and skilled labour were two, as opposed to four for all of the other indicators. Likewise, the two former questions were the only ones to which no respondent replied that the east was much better than elsewhere.

Table 21
Availability and Quality of Factor Inputs in East-5 Relative to the Rest of Poland

	Mean	**N**
Availability of land	3.94	64
Availability of premises	3.20	60
Availability of managerial/professional labour	2.31	65
Availability of skilled labour	2.50	64
Availability of unskilled labour	3.81	63
Adaptability of labour	3.05	61
Overall	**3.13**	**377**

Two proxy indicators of the availability of land are invoked here. The first is the density of population across voivodships, on which score all of the East-5 lie below the national average. However, while Podlaskie and Warmińsko-Mazurskie have the lowest densities in the country, Podkarpackie is only slightly below the national figure and ranks as the seventh most densely populated region (GUS, 2004c). The second indicator introduced is amount of agricultural land designated for industrial use and, although open

to a number of interpretations, the figures are strikingly low in the highlighted regions. In particular, they jointly had only thirty-nine hectares in this category in 2002, or less than ten per cent of the national total, and Podlaskie had none at all (*ibid*.). No information could be found to provide a quantitative indication of the relative availability of premises across regions.

Statistically reliable, comprehensive information on the distribution of the labour force by skill across voivodships is not readily available. Nonetheless, certain suggestive pointers can be adduced in this regard. The first, as shown above, is the relatively low level of wages in the East-5. The second, again revealed earlier, is the heavy concentration of low productivity farming within their borders and, conversely, the low levels of employment in more advanced sectors of activity. Subject to the caveat that further research on the availability of land across regions would appear necessary, respondents impressions regarding factor supplies in the East-5 do not appear to be too distorted.

Input Costs and Turnover in East-5 Relative to the Rest of Poland

A total of five indicators were included to capture the relative availability and quality of factor inputs in the east, as detailed in Box 4.

Box 4
Indicators of Input Costs and Turnover in East-5

1. Cost of land
2. Cost of premises
3. Wage costs
4. Labour unrest
5. Labour turnover

7. Overall Score

The most favourable impressions of the East-5 as an investment location under any indicator group were recorded for input costs and turnover, as shown in Table 22. These voivodships were rated more favourably than other areas of Poland on each of the five indicators contained within the family. Opinions were most positive of all in the case of the cost of land, which was viewed overall as lower, although this was closely followed by the cost of premises and wage costs. Views were somewhat less supportive in the cases of labour turnover and unrest. This finding is mirrored in the fact that the modal response in the case of the first three indicators was ‘lower’, while in the latter cases it was ‘same’. All of the questions, however, elicited eight or more views that the relevant factor was much lower in the east than in the rest of Poland.

Table 22
Input Costs and Turnover in East-5 Relative to the Rest of Poland

	Mean	N
Cost of land	4.08	63
Cost of premises	3.93	60
Wage costs	3.97	65
Labour unrest	3.45	58
Labour turnover	3.45	58
Overall	**3.79**	**304**

Reliable inter-regional land and premise cost data are not readily available, although less rigorous sources point to lower prices in the east of Poland than in much of the rest of the country. As has been shown above, wages are certainly low in the East-5, although note must also be made of the high unit labour costs prevailing there. The standard measure of labour unrest, which is by no means perfect, is the level of strike activity. However, only eleven strikes were officially recorded for the whole of Poland in 2002 and, of these, only one took place in the East-5 (GUS, 2003). It is therefore difficult to pass further comment on this issue, except to note that over ninety per cent of all working days lost as a result of such activity were in the western border region of Dolnośląskie (*ibid*.). Finally, while the data only refers to full-time employees in firms with more than nine employees and therefore ignores most farming, Lubelskie and Podkarpackie had low hiring and termination rates in 2002, although they were in general higher in other members of the East-5. Indeed, Świętokrzyskie had the highest termination rate of all voivodships in that year (*ibid*.).

Quality of Communications Networks in East-5 Relative to Rest of Poland

A total of six indicators were included to capture the relative quality of communications networks in the east, as detailed in Box 5.

Box 5
Indicators of Input Costs and Turnover in East-5

1. Rail links

2. Road links

3. Airport access

4. Seaport access

5. Fixed line telecommunication networks

6. Wireless telecommunication networks

7. Overall Score

The disadvantages confronting the under-developed eastern territories find expression in the views of respondents regarding the quality of their communications networks, although particularly so in the case of their transport linkages, which are reported in Table 23. Thus the rail and road links in the east are viewed overall as only slightly better than 'worse' than those of the rest of the country, while the air and sea links are rated between worse and much worse than elsewhere. Opinions are slightly more favourable in the case of telecommunication networks, although even these fail, on average, to achieve parity with the rest of the country. These findings are reflected in other aspects of the distributions of responses: for example, the modal scores for air and sea links are both one, those for rail and road links are two and the telecommunication networks are both three. No respondent rated the East-5 as much better than the rest of the country on any of the six counts.

Table 23
Quality of Communications Networks in East-5 Relative to the Rest of Poland

	Mean	**N**
Rail links	2.23	65
Road links	2.11	66
Airport access	1.80	65
Seaport access	1.66	61
Fixed line telecommunication networks	2.48	58
Wireless telecommunication networks	2.67	57
Overall	**2.15**	**798**

Only Warmińsko-Mazurskie was in the top half of the voivodship ranking for length of standard gauge railway line in 2002, while Podlaskie and Świętokrzyskie were to be found at the bottom of the hierarchy (GUS, 2003c). Furthermore, Lubelskie and Podlaskie had the shortest lengths of electrified track (*ibid.*). None of the East-5 ranked higher than tenth in the ranking of voivodships by length of national roads within their borders in 2002 and Świętokrzyskie was the least favoured of all on this count. With the exception of Warmińsko-Mazurskie, the five are landlocked, although the former is relatively close to the seaports of Gdańsk and Gdynia. Finally, only Podlaskie had more than the national average of main telephone lines per head of population (*ibid.*). The respondents therefore possessed reasonable perceptions of the relatively poor communications infrastructure in the East-5.

Quality of Governance in East-5 Relative to the Rest of Poland

Four indicators were included to capture the relative quality of governance in the east, as detailed in Box 6.

Box 6
Indicators of the Quality of Governance in East-5

1. Overall quality and efficiency of services provided by local government

2. Helpfulness of local government

3. Bureaucratic transparency in local government

4. Honesty/absence of corruption in local government

7. Overall Score

There would appear to be little to differentiate the quality of governance in the East-5 from that which obtains in the rest of Poland, at least in the eyes of the senior executives who responded to the FDI questionnaire. Thus, as shown in Table 24, while the overall quality and efficiency of local government services, the bureaucratic transparency and the prevalence of corruption were viewed as slightly below the prevailing norm, local governments were felt to be marginally more helpful in the east. This conclusion is confirmed by the modal response for the first three characteristics being three, while that for the fourth was four. However, on no count did any respondent judge the eastern territories to be much better than in other areas.

Table 24
Quality of Governance in East-5 Relative to the Rest of Poland

	Mean	**N**
Overall quality and efficiency of services provided by local government	2.85	47
Helpfulness of local government	3.22	51
Bureaucratic transparency in local government	2.78	51
Honesty/absence of corruption in local government	2.77	48
Overall	**2.91**	**573**

As far as can be ascertained, no usable, comprehensive evidence is available on quality of governance at sub-national level within Poland. Indeed, this may be an explanatory factor behind the relatively low response rate to this particular question set and the reasonably neutral position of the answers actually received.

Quality of Local Community Environment in East-5 Relative to the Rest of Poland

A total of eight indicators, listed in Box 7, were selected to attempt to capture salient aspects of the local community environment.

Box 7
Indicators of the Quality of Local Community Environment in East-5

1. Absence of crime

2. Policing

3. Civic mindedness

4. Attractiveness to workers and their families who have to relocate

5. Local initiative and entrepreneurship

6. Linguistic competencies

7. Educational provision

8. Cultural amenities

7. Overall Score

On only two counts – the absence of crime and policing – do the East-5 achieve parity with the rest of Poland, as indicated in Table 25. With the possible exception of the degree of civic mindedness, the east is perceived to be inferior to the rest of the country, although this is particularly true in the case of the prevailing linguistic competencies and the attractiveness of the area to re-locating workers and their families. On these two counts, plus that of the level of local initiative, the modal belief was that the east is worse than elsewhere. On all counts, the modal response was that there is nothing to differentiate between the east and the rest of the country.

Table 25
Quality of Local Community Environment in East-5 Relative to the Rest of Poland

	Mean	**N**
Absence of crime	3.26	53
Policing	3.00	54
Civic mindedness	2.84	51
Attractiveness to workers and their families who have to relocate	2.10	63
Local initiative and entrepreneurship	2.65	54
Linguistic competencies	2.12	60
Educational provision	2.55	60
Cultural amenities	2.41	61
Overall	**2.59**	**456**

Podkarpackie, Podlaskie and Świętokrzyskie have the three lowest per capita crime rates in Poland and only Warmińsko-Mazurskie has a relatively high incidence of felony (GUS, 2004c). As such, respondents might be understating this feature of life in the East-5 regions. Furthermore, all of the five have above average rates of crime detection, with Podkarpackie having the best record of all in 2002 (*ibid*.). It has already been seen that the highlighted voivodships have relatively poor higher educational provision. At the other end of the spectrum, Podlaskie and Świętokrzyskie have the smallest number of nursery school places in the country (*ibid*.). Notions of what represents a cultural are varied and wide-ranging and, while data on numerous issues that may be of relevance in this case do exist, the issue is not pursued further in this report. Similarly, there is no general agreement on what represents an attractive location to which to move, although it might be noted that the East-5 have very low pollutant emissions per square kilometre, at least in relation to the national average (*ibid*.).

X. CONCLUSION

In the eyes of many, progress in the transition will be driven in large part by their success in attracting foreign direct investment. Measured in absolute terms, Poland has fared extremely well in relation to its fellow EU entrants from CEE on this score. However, whether measured per head of population or relation to the size of its economy, its achievements have been much less impressive, with the country being amongst the poorest performers in terms of both flows and stocks. This suggests the need for continued emphasis on attracting external capital if ay reasonable measure of convergence to the European core is to be attained. At the same time, attention might also be paid to the relatively concentrated nature of the foreign investment received to date, both by industry and country of origin.

In the context of a world in which globalisation continues apace, the foregoing tasks are daunting in their own right. Nevertheless, it must simultaneously not be forgotten that FDI can be a source of not only national prosperity, but also a means by which to combat regional disparities of fortune. In the case of Poland, its eastern territories exhibit worrying signs of being left behind in both social and economic terms.

What is more, they have so far failed to attract even a proportionate share of the capital that has entered the country.

This paper presented the results of a survey of the perceptions of existing foreign investors in Poland regarding the five most depressed eastern regions of Poland. In the event, these were not radically out of line with the salient facts. Unfortunately, therefore, this points to a situation that will not simply be overcome by better marketing and promotion. Indeed, it leads straight to the heart of the question about the direction of causality between levels of development and FDI. In reality there is doubtless some degree of mutual causation at work and this points to the need for further attention to be paid to the development deficits that exist in the east of the country. These deficits are not small and they range from the concentration of economic activity in low value agriculture through to the prevailing inadequate level of infrastructure provision. These are not, of course, novel observations, but it would seem unwise to assume that EU funding will afford the panacea. After all, Poland had access to pre-accession finance for many years and the east-west divide has shown little sign of eroding. At the same time, reliance cannot be placed on the development of Ukraine and Belarus to stimulate the east of the country. This, after all, is an exogenous phenomenon.

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[1] Fazekas (2000) is among the numerous authors who have found strong evidence that foreign firms hire more skilled workers and pay higher wages than do domestic enterprises.
[2] Japan and the US are, of course, notable counter-examples to these latter arguments, with firms in these countries presumably benefiting from past experience of FDI.
[3] The authorities now also have a narrower definition of farming, which excludes those holdings that are deemed to be non-economic. However, this practice raises more questions than it answers (Ingham and Ingham, 2005).
[4] There is a good deal of early evidence pointing to the regional concentration of FDI throughout CEE; see, for example, Pavlinek and Smith (1998) and Hunya (1997). However, dispersal in some countries now seems to be occurring (Hunya, 2004).
[5] All information in this paragraph is taken from GUS (2004c).