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Boleslaw Domanski

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INDUSTRIAL CHANGE AND FOREIGN DIRECT INVESTMENT IN THE POSTSOCIALIST ECONOMY THE CASE OF POLAND



Bolesław Domański

Jagiellonian University, Poland

Abstract

This article examines the immense changes in Polish industry since 1990 and the impact of foreign direct investment. It is shown that, contrary to some general views about Central and East European transition, the postsocialist transformation processes have contributed to the enhanced competitiveness of Polish industry and to narrowing the gap between Poland and the European Union. The analysis includes basic indicators of economic performance, changes in branch structure, international relations (especially exports) and the labour market. Discussion of the role of transnational corporations is based on detailed empirical research which covered 2,020

foreign-owned factories. The regional differentiation of foreign investment is outlined, the disparities between developed and underdeveloped regions as well as metropolitan and non-metropolitan areas in particular. Special emphasis is put on principal factors affecting the location of new foreign factories. This is analysed within the broader context of phenomena underlying economic growth or decline in Polish regions and towns during the postsocialist era.

KEY WORDS ★ foreign direct investment
★ industrial location ★ Poland ★ postsocialist
economy ★ regional development ★ transition

The 1990s were a time of dramatic changes in the former socialist economies of Central and Eastern Europe (CEE), marking the (re)introduction of parliamentary democracy and the transition to a market economy. Despite some broad similarities in this transformation, considerable differences among the countries of this region – in terms of size, economic structure, culture, institutional frameworks, government policies, and last but not least regional patterns – have led to differentiated trajectories of economic development. Most authors emphasize that the complexity of transformation processes can only be captured by taking into consideration this historical and geographical diversity (Grabher and Stark, 1997; Offe, 1997; Smith and Pickles, 1998; Swain and Hardy, 1998; Turnock, 1998). National case-studies provide insight into the relationship between globalization processes, place-specific attributes and current economic policies. This has been demonstrated by research on Romania (Shen, 1997), Slovakia (Smith, 1998), Slovenia (Rojec, 1998) and Russia (Bradshaw

et al., 1998). The focus in this paper is on Poland, which is an interesting case for at least two reasons. First, the transformation began rather early here;¹ and second, a unique role was played by trades unions, which were instrumental in bringing down the communist regime and were part of all government coalitions throughout the 1990s.

General benefits and costs of postsocialist economic change ('transition') in CEE have been widely discussed (e.g. Lazear, 1995; Carter, 1996; Kornai, 1997; Turnock, 1997; Pollert, 1999). They include, on the one hand, greater independence from political control, the enhanced well-being of consumers through better-quality and easier access to goods and services; and, on the other hand, a decline in the sense of economic security, the end of full employment and increased social inequalities. There are still contentious issues concerning postsocialist economies. One of them is the question of whether post-1989 processes in CEE countries contribute to long-term convergence with the living standards of the EU. Other controversies concern

the impact of transnational corporations (TNCs) on the development of economies in transition. The contrasting views on these issues stem from the different theoretical perspectives adopted and empirical research conducted in various areas. There have been great expectations as to the economic progress to be brought about by the reforms implemented in CEE. At the same time, Dunford and Smith (2000: 170) argue that 'the competitive position of ECE [CEE] economies has been further weakened by the pursuance of a neoliberal policy agenda since 1989–91'. Burbach et al. (1997) put forward the notion of a 'Kuwaitization' process through which transnational capital tries, together with local elites, to establish colonial-style 'strong points' separate from other territories. Swain and Hardy (1998: 587) point to 'local and national economic development strategies which are confined to attracting inward investment by positioning territory favourably – through social devaluation – with respect to the internationalization strategies of firms'.

This paper aims to make a modest contribution to our understanding of transition processes: the focus is on industry and foreign direct investment (FDI). Two groups of problems are addressed. First, the extent to which the quantitative and qualitative changes in Polish industry during the 1990s have led to a better performance by the national economy, and therefore to narrowing the gap to West European countries, and how this is influenced by FDI. Second, the regional variation in FDI within the country, and the causes and effects of such variation. The author uses Central Statistical Office (GUS) data for 1990–2000 to capture the basic characteristics of industrial change in Poland.² Salient features of foreign investment and its effects are explored on the basis of the author's research, which covered 2,020 foreign-owned factories in 1999–2000 and about 130 detailed interviews with TNC managers, union leaders and local government representatives (Domański, 2001b). Important though they are, political and social changes are discussed only as long as they are related to the economic phenomena and processes specified above.

Catching up or falling behind? Polish industry and foreign capital in the 1990s

Main trends

One of the fundamental questions concerning postsocialist economies is whether they are falling even further behind developed countries or have begun closing the gap (Rey, 1996; Van Zon, 1996; Smith, 1997; Ekiert, 1998). Any discussion of economic trends for CEE countries must take into consideration the fact that there have been contrasting phases, when different processes and factors were at work.³ In Poland, two basic periods can be distinguished: 1989–91 and 1992–2001. The former, the shock phase, was a time of rapid transition from an economy of shortage to a demand-constrained system, and was marked by a deep production decline (18 percent in GDP and 15 percent in real incomes; see Table 1). Enterprises that had functioned for decades in the socialist sellers' market of soft budget constraints and lack of autonomy for firms had to learn right away how to sell their products, while at the same time facing unprecedented competition from the flood of imported goods at home and losing their traditional (Council for Mutual Economic Aid – CMEA) markets, and the Soviet market in particular (51 percent and 25 percent, respectively, of Polish exports in 1988).⁴ The macroeconomic situation was characterized by hyperinflation (586 percent in 1990) and immense foreign debt (\$48b).⁵ When the new institutional framework had taken root and successful adjustment of firms had gathered momentum, economic growth started. Between 1991 and 2000, Poland's real GDP increased by 54 percent (5.0 percent annually on average) and manufacturing output more than doubled (9.3 percent per annum). This uninterrupted growth was faster than in any CEE country and greater than in the EU (1.6 percent). It was stimulated by rising domestic consumption and growing exports, and underlain by an essential ownership shift. Real incomes and consumption have been on the rise since 1991.⁶ Unemployment kept growing till 1993 (16.4 percent), decreased to 9.6 percent in mid-1998, and then again began to rise rapidly. At the same time, far-reaching qualitative changes have been taking place in the economy.

Table 1 Basic economic indicators for Poland, 1990–2000

Indicator	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Gross domestic product (% real annual growth)	-11.6	-7.0	2.6	3.8	5.2	7.0	6.1	6.9	4.8	4.1	4.0
Value added in manufacturing (% real annual growth)	-22.1 ^a	-17.1 ^a	5.1	11.9	11.2	13.7	8.8	14.4	7.5	4.2	7.1
Employment in manufacturing (thousands)	3620 ^b	3389 ^b	3070	2986	3071	3102	3159	3177	3100	2923	2675
Unemployment rate (%)	6.3	11.8	13.6	16.4	16.0	14.9	13.2	10.3	10.4	13.1	15.1
Annual gross earnings in manufacturing (US\$)	840	1368	1908	2232	2652	3300	3672	3840	4284	4836 ^c	5003 ^c
Exports (US\$ bln)	14.3	14.9	13.2	14.1	17.0	22.9	24.4	25.8	28.2	27.4	31.7
Exports to EU (US\$ bln)	6.8	8.3	7.7	8.9	10.7	16.0	16.2	16.6	19.3	19.3	22.1
Foreign direct investment (US\$ bln)	0.1	0.4	0.9	1.8	2.4	3.0	5.5	6.6	10.1	7.9	10.6

^a manufacturing and mining^b approximate^c including compulsory social security contributions paid by the employee

Source: GUS and PAIZ.

Foreign direct investment in Poland was very low in the early 1990s, but grew steadily, reaching recently about \$10b annually. According to the Polish Agency for Foreign Investment (PAIZ) the total FDI between 1990 and 2000 amounts to \$50b, about half of which has been in manufacturing.⁷ The largest single source of investment in Polish manufacturing is the United States (23 percent). Europe as a whole represents about two-thirds of the capital, with 60 percent coming from the countries of the European Union. The leading role of Germany is hardly surprising here (14 percent), though it does not match the much higher German share of Polish exports (35 percent) and imports (25 percent).

Technology, exports and industrial structure

This investment contributes to the growth of the economy and its qualitative change. The typical effect of the involvement of a foreign investor in a Polish company is an increase in the volume of production. There is a considerable variation in introduced technologies, but the general impact of foreign investors on the modernization of Polish industry and the narrowing of the technological gap between Poland and developed countries is

unquestionable (Błuszkowski and Garlicki, 2000). In a widely held opinion, this results in a marked improvement among the domestic producers as well (Kulawczuk, 1996). The most radical progress is typically found in export-oriented factories and greenfield investment plants. Foreign companies account for nearly half of Polish exports, though less than one-fifth of manufacturing employment. New foreign plants opened in successive years tend to be increasingly capital-intensive. Transnational corporations bring Poland new organization and management techniques, and this in turn affects domestic firms (Kozminski, 1993). Transnationals boosted the upgrading of productivity in Polish manufacturing throughout the 1990s, the adverse effect of which has been a decreasing demand for workforce. Productivity in foreign-owned companies exceeds that in domestic firms. Better technology and organization have led to the higher quality of products, which makes possible more effective competition with producers from other countries. Quality standards are demonstrated by a multiplying number of firms with certificates for ISO 9000 norms, and even more so by the growth of Polish exports to EU countries. Exports rose fivefold between 1989 and 2000, and the value of exported machines and transport equipment by a factor of 15. The latter constitute 36 percent of Poland's exports to the EU now, in comparison to 12

Table 2 Selected characteristics of Polish manufacturing by NACE industry

Industry	Value added 2000 (%)	Foreign investment 1990–98 (%)	Productivity 2000 (total manufacturing = 100) ^a	Average	Employment change 1992–2000 (1992 = 100)	Value added change 1992–2000 (1992 = 100) ^b
				earnings 2000 (total manufacturing = 100)		
Food products and beverages	17.7	24.9	96	91	100	204
Tobacco products	1.0	4.8	302	194	74	73
Textiles	2.6	1.9	67	78	52	107
Clothing	3.5	0.9	39	59	85	156
Leather and leather products	1.0	0.2	49	66	54	84
Wood products (without furniture)	4.6	1.7	83	75	108	182
Paper and pulp	2.4	5.9	155	116	106	268
Publishing and printing	5.7	3.2	159	135	126	406
Coke and refined petroleum	3.3	0.1	484	197	78	82
Chemicals and chemical products	7.0	8.4	170	146	77	158
Rubber and plastic products	5.2	4.5	114	101	138	406
Non-metallic mineral products	7.3	11.2	116	103	89	259
Basic metals	4.1	1.3	112	125	59	131
Metal products (without machinery)	7.1	1.9	92	97	112	259
Machinery and equipment	7.4	2.8	89	107	67	191
Computers and office equipment	0.4	0.1	205	168	95	1633
Electrical machinery and apparatus	3.6	4.2	101	112	102	271
TV and communication equipment	1.8	3.8	138	138	55	447
Medical and precision instruments	2.4	0.2	138	120	88	327
Motor vehicles	3.8	15.6	105	118	87	280
Other transportation equipment	2.9	0.5	98	124	67	131
Furniture and other manufacturing	4.9	1.7	70	78	112	226
Recycling	0.5	0.2	158	128	129	174
Total manufacturing	100.0	100.0	100	100	87	211

^a value added per employee

^b constant prices

Source: author's calculations based on GUS data, PAIZ data and author's research on FDI.

percent in 1989; in the same period, the share of raw materials, fuels and foodstuffs has fallen from 40 percent to 14 percent.

This brings us to the issue of structural changes in Polish industry in the 1990s. The legacy of socialist economic policy was expanded production of raw materials, simple semi-finished goods (e.g. steel, textiles), armaments and heavy machinery (Paszowski, 1996). The manufacture of more sophisticated products, as well as consumer goods, was by and large underdeveloped. Apart from clothing, the traditional industries have experienced severe difficulties and have lagged behind since 1989. The extraction of coal fell by 40 percent and sulphur by 70 percent, although the production of copper and lignite remains stable. The highest

growth is found in computers, plastic and rubber products, publishing and printing, electronics, electrical machinery, precision instruments, motor vehicles, paper, non-metallic mineral and metal products (Table 2). Most of these industries have attracted substantial foreign investment; motor vehicles, electrical machinery, electronics and furniture generate significant exports. According to Wysokińska (1998) 37 percent of foreign capital has been invested in technologically intensive industries, 16 percent in standard production of basic technology (e.g. paper products, construction materials), and the rest in labour-intensive (38 percent) and resource-related (9 percent) branches. All in all, the structure of Poland's industry is moving towards an increased share of medium-

technology and basic consumer goods at the expense of those that were dominant under socialism. The share of technologically advanced industries is low vis-à-vis Western Europe, but is growing faster than average. Private companies comprise 82 percent of output and 86 percent of employment in manufacturing; they dominate all manufacturing branches except for steel and petroleum, in contrast to state ownership in the extraction of resources. Another new process is the rise of small and medium-sized firms – a missing element in the industrial structure under socialism.

Role within TNCs

The position of Polish factories within foreign corporations varies enormously depending on industry and company strategy. Some plants have become principal producers of certain components or final goods for the European market, e.g. Philips lighting equipment in Piła, ABB distribution transformers in Łódź, Opel and Fiat cars in Gliwice and Tychy, Volvo buses in Wrocław, and Volkswagen diesel engines in Polkowice. Such specialized plants are becoming integrated within the Europe-wide company production network, and direct or indirect relocation of manufacturing activity from Western Europe is taking place here as part of a broader TNC spatial reorganization strategy. Lower labour costs and geographical proximity to the EU markets are vital conditions of this relocation, together with the ability to meet the investor's quality standards and achieve healthy improvement in productivity. There is also a group of export-oriented plants in Poland that are locked into subcontracting relations with TNCs. The clothing industry is a special case here, with numerous indigenous companies engaged in performing low-value-added sewing services for West European producers and retailers, which provide the fabric and design (Graziani, 1998; Smith et al., 2002).⁸

The majority of foreign-owned factories manufacture standard products for the Polish market, similar to those produced in other countries. The size of the Polish market and the faster growth of demand here than in the EU has motivated the bulk of FDI in the production of food products and beverages, chemical, rubber and plastic products,

construction materials, publishing and printing. The domestic market was also an initial target for investment by car and electrical machinery manufacturers, e.g. Fiat and ABB. Widespread increases in social well-being⁹ (Bywalec, 1998; Hanusik and Łangowska, 2001) stimulated overall production growth in the country and attracted TNCs, while at the same time being supported by this growth.¹⁰ Some investors enjoy monopolistic positions, though this is less common than in the smaller Czech or Hungarian economies. The involvement of several foreign firms in the same type of production has brought competition to many industries that were monopolized under state socialism, e.g. TV sets, tyres, industrial gases.

The size of investment, sunk costs, type of production and position of Polish factories within the corporation determine plants' future prospects. The involvement of the majority of TNCs in Poland appears to be part of their long-term strategy; this refers both to domestic market-oriented producers and specialized export manufacturers. A more temporary character may be an attribute of assembly activities (both domestic and export-oriented). The same is probably true of the production of simple, labour-intensive goods for export. Plant closures have been rare to date and have resulted from the concentration or relocation of production to other factories in the country, rather than relocation abroad. On the whole, enterprises with foreign participation show better performance than domestic firms. Poland's integration with the global economy through transnational corporations means access to capital and new markets, technologies and know-how, but also dependence on global trends and decisions taken abroad. Problems faced at home or in distant markets may cause adverse effects in Poland, as illustrated by the exigencies and uncertainties following the collapse of Daewoo in Korea. In several branches, foreign corporations increase competition for local manufacturers and push them out of their traditional markets. Although there are no fiscal incentives available to foreign investors alone, they may take advantage of greenfield locations in special economic zones versus existing producers of similar goods. Large ailing companies are predominantly those which have not been privatized, and are most common in declining sectors.

The perspective of networks of value (Smith et al., 2002) can be useful in exploring the current and

future role of foreign plants in Poland. Changes in production and appropriation of value in particular places depend on relationships between the corporation and local actors, including other companies, the state and labour. While most of these relations are asymmetrical in terms of power, they underlie the redefining of investors' objectives (strategies) and practices as well as build trust in inter- and intrafirm linkages. Contrary to the 'hollowing out' thesis (Ohmae, 1990), the impact of state regulation and bargaining has proved notable in Poland.¹¹

Local suppliers

Another key issue is the propensity towards imports versus local supply for foreign manufacturers in Poland. On the one hand, they generate substantial imports, e.g. in electronics, clothing and chemicals. On the other hand, much foreign investment is of an import substitution nature. The share of domestic supplies and imports depends on the industry, the type of investment, the time of its commencement, and company strategy. Greater imports are typical of export-oriented producers, greenfield factories and the newest plants. Very low imports are found in the manufacture of construction materials, glass, food and beverages, paper and furniture. The networks of suppliers are widest in automotive production. Local content in cars manufactured by foreign companies in Poland exceeded two-thirds in 1998, which is related to vast foreign investment in component production.¹² One should note that the improved technological standards are principally achieved through imported technologies. The role of local R&D activities has decreased, though some TNCs decided to open their technical centres in Poland in recent years, e.g. ABB, Philips, Lucent Technologies, Delphi. All the discussed linkages are important elements of the local embeddedness of foreign investors in Poland.

Labour

Finally, there is the question of the impact of foreign companies on labour. Large foreign

employers represent the superior segment of the labour market, distinguished by higher pay and better working conditions. Broad training programmes, as well as contact with better technology and organization of production, enhance local skills (Gieorgica, 1998; Starzyk, 1998; Olesiński, 1999). The quality of labour is a prerequisite of functional upgrading in terms of the value chain. The positive impact of TNCs on the number of jobs is rather indirect: they bring brighter economic prospects for the workplace, but not individual employment certainty. Greenfield investment created over 100,000 jobs; some others were added in expanded plants. Nonetheless, in the majority of factories taken over by foreign investors, increasing productivity entails the downsizing of employment, despite production growth. Poland, like other socialist countries, had a higher share of economically active population in manufacturing and mining (above 30 percent) than EU countries, except for Germany. This reflected backward industrial technology and low productivity, as well as general underdevelopment of the tertiary sector. The latter provided room for rapid expansion of services in the 1990s and the creation of a great many new jobs. Manufacturing employment in the country declined drastically during the early shock phase of transition, and then increased slightly between 1993 and 1997, before another wave of company restructuring pushed it down again (Table 1). It now represents only three-quarters of the 1990 level and further decrease may be expected since there are still overstaffed producers. This marks a dramatic trade-off between advancing productivity and the size of employment. The total employed in mining sank by more than half (223,000 people in 2000), predominantly in the Upper Silesian coal industry. The contraction of employment as an effect of 'offensive restructuring', including improved skills and productivity, must be distinguished from labour shedding as a result of the collapse of enterprises or plant closure.

Many new jobs have been created in some fast-growing industries, such as rubber and plastic, publishing and printing (Table 2). There are also branches where more than a threefold rise in output has been achieved with a reduced workforce, such as the automotive and electronic industries. A major job loss was experienced by non-growth traditional branches, such as textiles, leather, and basic metals.

Real manufacturing pay has been on the rise since 1993 (35 percent), but has not kept pace with explosive productivity growth (142 percent increase in value added per employee). Profound differences among industries exist here. It is worth noting that the continuous rise in earnings makes Poland attractive for domestic-market-oriented foreign investment, while undermining the rationale for producers seeking low labour costs.¹³ Still, wage level is the most common complaint of the employees, who encounter intensified labour process and greater worker responsibility; new working practices are usually accepted, increased outsourcing is more often contested (Domański, 2001a). Trades unions are active in most privatized firms and in some new plants.¹⁴ Foreign corporations have by and large learned how to forge non-conflicting industrial relations on the shop-floor and how to use the political clout of the unions for their own interests at the national level, e.g. bargaining for special economic zones (Domański, forthcoming).

General impact of FDI

All things considered, the inflow of foreign capital into Poland helps to cover the country's current account deficit (making allowances for remitted profits, transfer pricing and fiscal incentives) while fostering investment in new production capacity and modernization. The conclusion of all studies is that it contributes to the enhanced competitiveness of Polish enterprises and the entire economy (Dziworska and Szczęśniak, 1996; Misala, 1996; Chrupek, 1998; Durka, 1999). Rising productivity and quality of products, the growth of exports and positive structural changes indicate the superior position of the Polish industry in the European economy vis-a-vis its situation in the socialist era. The better performance by the national economy and growing involvement by well-known transnationals create a better image for the country in the world. This finds expression in Poland's improving international ratings and encourages further investment. Moreover, TNCs are an active force lobbying for Poland's swift integration within the European Union. However, the negative effects include lower employment, limited use of domestic suppliers by some investors, and occasional transfer

of technological lines dismantled in EU plants. The dominant role of foreign enterprises in some industries poses a danger of dependence on imported technology and the truncation of certain functions (e.g. strategic decision making, high-value-added design and marketing activities).

At the regional and local levels, transnational corporations bear upon the comparative advantage of certain regions and towns through the enhanced competitiveness of local firms and enriched labour skills. The improvement of technology and concern about company image bear upon better environmental standards (Starczewska, 1996), as demonstrated by certificates for ISO 14001 norms. Together with more effective national enforcement of environmental regulations and local government efforts, this has alleviated the ecological disaster inherited in several regions from socialist industry. From the point of view of local businesses, TNCs are a source of organization and management innovations as well as better personnel skills. However, foreign producers push up wages and salaries and capture the best employees due to their dominant position in the local labour market; they may also compete in the same market. In some industries, TNCs rely on local or regional raw materials, but more often suppliers are situated in other regions of the country or abroad. Companies from major cities or Warsaw provide specialist producer services, while basic services are typically purchased locally. All companies generate income multiplier effects in the local economy. Last but not least, foreign investors are also integrated in communities through their social provisions, including support for local events and institutions, such as schools, hospitals, and so on (Olesiński, 1999). The embeddedness of foreign manufacturers in Poland differs markedly, but a general conclusion that they create isolated enclaves in Polish economic space would be unfounded.

Spatial distribution of foreign investment and regional growth

Uneven distribution of FDI

Half of foreign manufacturing capital has been invested in three voivodships: Mazowieckie, Śląskie

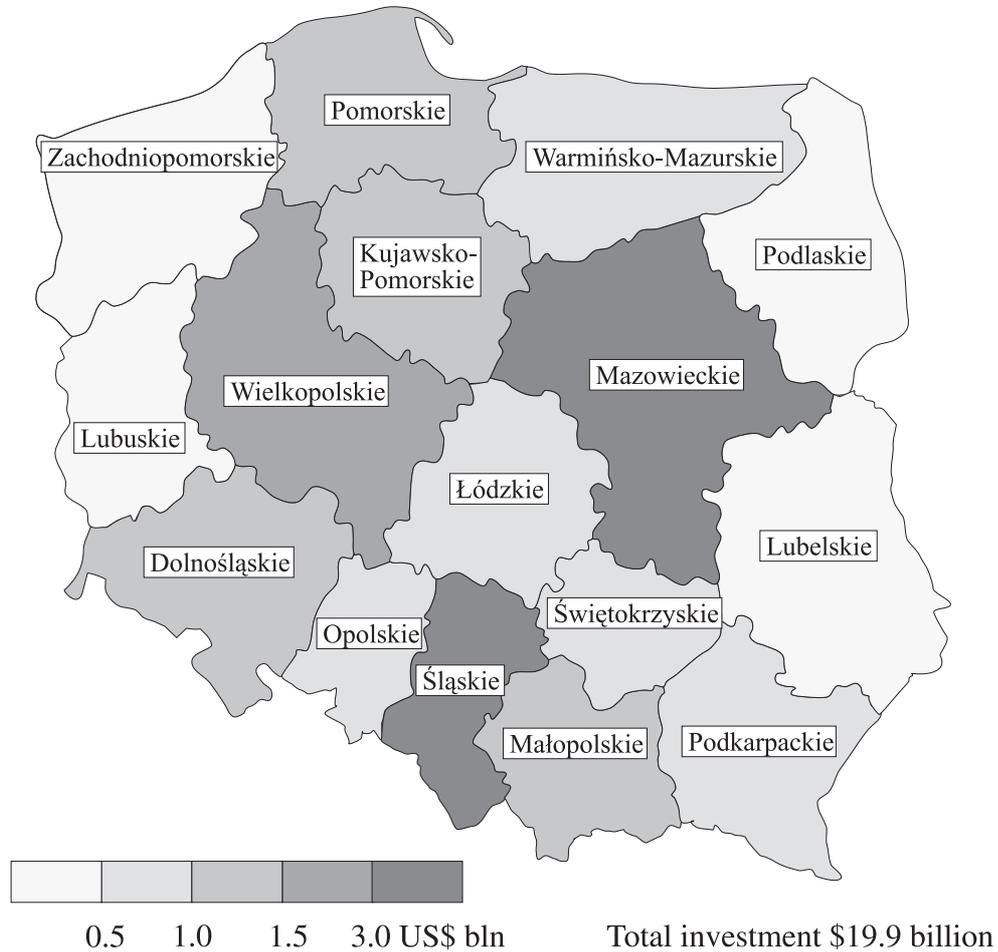


Figure 1 Foreign direct investment in Polish industry by voivodship, 1990–98
 Source: Domański (2001b).

and Wielkopolskie (Figure 1). Industrialized southern Poland (Dolnośląskie, Opolskie, Śląskie and Małopolskie) embraces one-third of the investment, and the central voivodships about 40 percent. Little capital is found in the north, even less in eastern Poland (e.g. Podlaskie and Lubelskie, 3 percent altogether) and in areas adjacent to the Polish–German border (Zachodniopomorskie and Lubuskie, 4 percent).

The comparison of FDI and GDP per capita demonstrates that foreign investors reinforce the strongest, developed regions (Figure 2). This

results, first, from the fact that three-quarters of the capital comes to existing plants, and second, from the spatial concentration of greenfield investment. Among voivodships comprising large cities, relatively low investment has taken place in centrally situated Łódzkie. In the western borderland, the influence of foreign companies is more relevant in Lubuskie and Dolnośląskie than in Zachodniopomorskie. In the east, Warmińsko-Mazurskie, Świętokrzyskie and Podkarpackie stand out from Podlaskie and Lubelskie. The differentiation of FDI by voivodships, and even

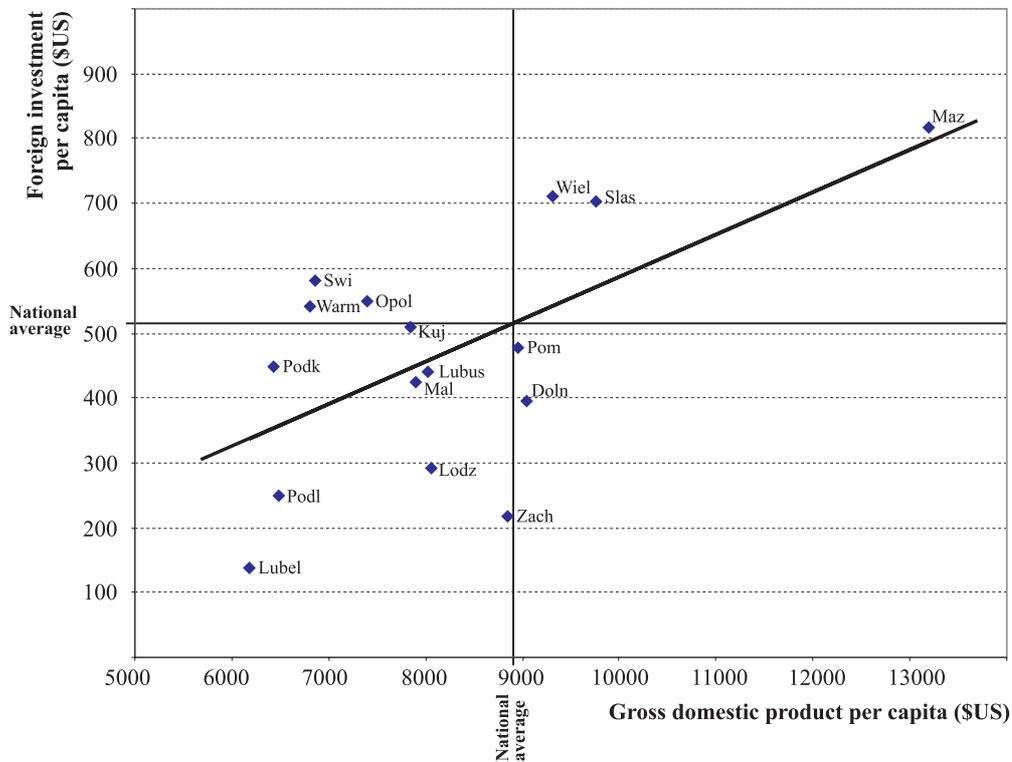


Figure 2 Foreign direct investment in Polish industry (1990–98) and gross domestic product at purchasing power standards (2000) by voivodship

Source: author's calculations based on GUS data and author's research.

more so the differentiation of greenfield investment, is far greater than that of GDP (Gini coefficients 0.163, 0.235 and 0.085, respectively).

The analysis based on voivodships masks the salient fact that foreign capital tends to be heavily concentrated in major metropolitan areas. This reflects substantial investment in both main cities and their surroundings, particularly in the case of new plants. One-third of greenfield investment has been located in the 11 largest cities together with the Katowice and Gdańsk conurbations, and nearly half in small urban and rural places situated up to 60 km from these cities, whereas non-metropolitan areas attracted less than one-fifth of capital. The trend towards the location of new factories within the metropolitan zone is most evident in the vicinity of Warsaw and the western cities of Poznań and Wrocław, and to a lesser extent near Cracow and Gdańsk (Figure 3). Thus, foreign capital is a

constituent element of the process of spatial dispersal of industrial activity at the intra-regional scale. It facilitates the development of new industrial places around the main cities and reinforces the overall importance of metropolitan areas vis-à-vis more peripheral medium-sized industrial centres.

There is a contrast between capital-intensive investment in metropolitan regions and labour-intensive activity in non-metropolitan areas.¹⁵ The former seize a disproportionate portion of the capital of large corporations, and the latter, to a greater degree, depend on small and medium-sized investors, many of which are engaged in labour-intensive production: 35 percent of greenfield investment of smaller companies takes place in non-metropolitan areas in comparison to 14 percent of TNC investment. As a result, metropolitan areas get more technologically advanced production of better long-term prospects, while the non-metropolitan

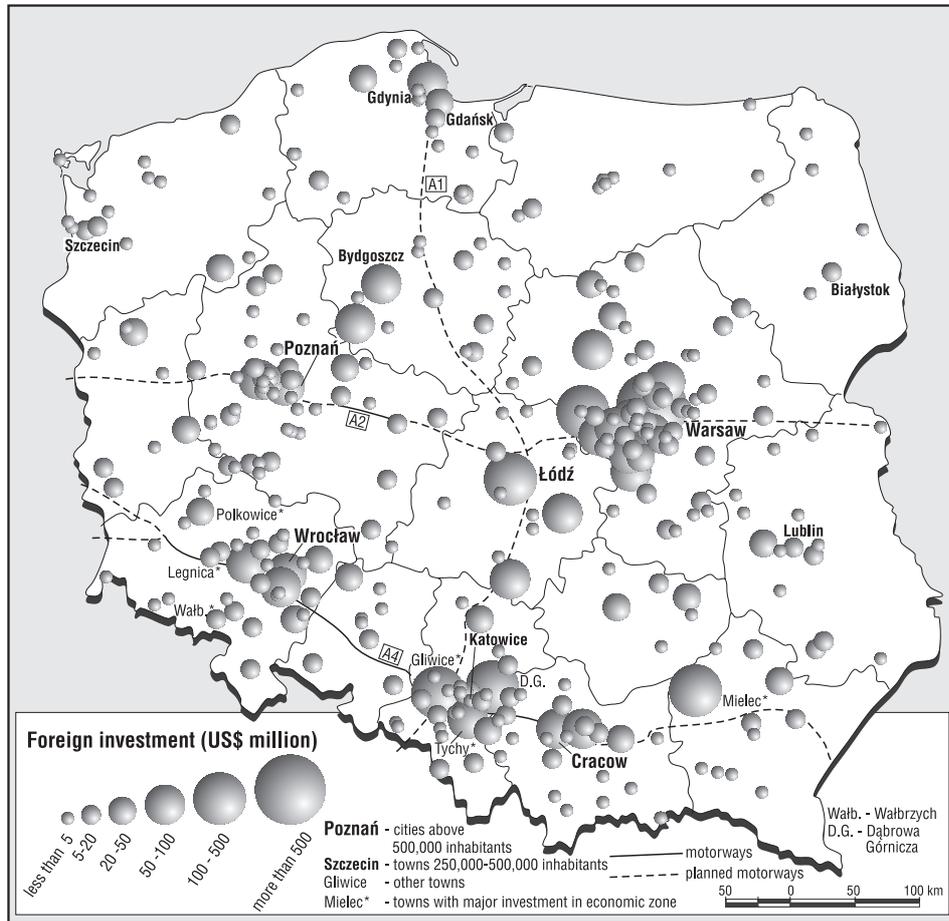


Figure 3 Greenfield foreign direct investment in Polish industry by locality, 1990–98
 Source: Domański (2001b).

ones have relatively more jobs, which may be of low quality. Still, small and medium-sized investor activity is also greatest in developed regions together with western Poland, and is least intense in the eastern peripheries.

Regional economic performance

Mazowieckie and Wielkopolskie are regions that have generally shown the fastest economic growth in Poland in the 1990s. The former has captured 21 percent of the total FDI and 32 percent of the greenfield one. This is more than its historical share

in national manufacturing, but less than a similar concentration in the capital regions of many CEE countries (Buckwalter, 1995; Pavlinek, 1998; Carter, 1999; Gradex, 2001; Turnock 2001). The capital city additionally benefits from the development of producer services for foreign plants located throughout the country. The metropolitan areas not only engross foreign capital, but also show the most intensive development of small and medium-sized indigenous firms and a vast expansion of the tertiary sector. This enables them to overcome effects of the decline of state-owned industrial giants and enjoy the lowest unemployment (Korcelli, 1997; Czyż et al., 2000), in fact lower than indicated by official data due to extensive unrecorded activities. The

highest FDI per capita has taken place in the metropolitan region of Poznań. Considerable foreign capital, half of which is in automotive production, is found in the traditional industrial region of Upper Silesia and its environs (Śląskie, 17 percent), where it contributes to diversification of the economic structure. The jobless rate is below the national average here, even though employment in coal and steel industries has decreased by about 250,000 since 1989. The attractiveness and overall performance of the old textile regions of Łódź and the Sudeten are rather poor; the latter diverges from that of the Wrocław metropolitan area in the same voivodship of Dolnośląskie (Lower Silesia).

There are towns in less developed regions that benefit from FDI too, although this does not foster the growth of such regions as a whole. Moderate foreign manufacturing investment takes place in sparsely populated areas close to the German border, which represent a lower level of development than Wielkopolskie and most of Dolnośląskie.¹⁶ They profit from local transborder trade and service activities (Strykiewicz, 1998), but still suffer from serious unemployment. The smallest amount of capital reaches the peripheral eastern voivodships of Podlaskie and Lubelskie with their high share of fragmented private agriculture and hidden unemployment. The endogenous development of this region is hindered by depopulation experienced since the 1970s and the consequent shortage of young and educated people. Few new factories have been located in northern Poland (outside the Gdańsk metropolitan area), which is plagued by mass unemployment stemming from the collapse of state farming and weak growth of local enterprises due to the 'dependency culture' typical of communities dominated by paternalistic employers. The latter is also true of regions with severe unemployment of industrial origin (e.g. Sudeten) and of troubled towns where the local industrial base has dwindled (e.g. Starachowice). The labour market of many of these places relied on a single industry or, still worse, one factory. Structurally unsustainable dependence upon large plants sometimes had roots in early capitalist industrialization, and more often was established and/or aggravated under state socialism. Many towns dominated by huge military-related

producers, which expanded during the Cold War arms race, are found in Świętokrzyskie and Podkarpackie. The role of economic power relations should not be overlooked here: while most industries have been exposed to market influences with little state intervention, core branches of the socialist industry, especially coal and steel, have been able to win some sort of shelter due to strong managerial and union lobbies. This allowed the deferment of lay-offs and the retention of high wages in half-bankrupt enterprises, in contrast, for example, to the rapidly crumbling textile towns (Domański, 1997). The critical importance of local structures and trajectories of development manifests itself in the fact that prosperous towns and pockets of unemployment or stagnation are often found next to each other in both declining and growing regions.

All in all, regional divergence furthered by both endogenous and exogenous factors has been common in CEE countries over the last decade (Gorzelać, 1996; Hamilton, 1999; Smith et al., 2000); and some general sort of west-east disparity is reproduced in some of them (Nemes, 1994; Pavlinek, 1995; Smith, 1996). In Poland, the underdeveloped rural eastern and, in part, central regions (outside metropolitan zones) have experienced sluggish growth or stagnation, and a serious crisis has struck the small urban and rural localities of the north. There are two main industrial problem regions (Łódź, Sudeten), but the most obvious candidate for economic failure (Upper Silesia), has been coping relatively well so far. The most advanced regions, metropolitan areas in particular, have been the chief winners in postsocialist economic growth. Foreign investors contribute to the historical discrepancy between developed and less developed regions and reinforce major agglomerations of economic activity. Some regional patterns of industrial change that are observed in other CEE countries are different from Polish ones, however. Bradshaw et al. (1998) show that growth in Russia is typical of resource-producing regions, where substantial FDI also takes place (Bradshaw, 1997). Begg and Pickles (1998) explain mass unemployment in peripheral regions with ethnic minorities in Bulgaria as a result of branch plant closure by multiplant state-owned enterprises.

Factors behind location of new foreign plants

American and Asian investors show distinctly greater spatial concentration in metropolitan areas, especially in the Warsaw region, than do European ones. This can partly stem from intensive contacts with these areas. The uneven availability of information on various places and imitation of earlier successful firms were put forward to account for the concentration of American investment in capital regions and other developed areas of West European countries in the past (Blackburn, 1974). In the author's research on the location of new factories in Poland, it is American managers who put the strongest emphasis on access to information about a locality and the positive experience of other investors (Domański, 2001b). The importance of available information is confirmed by the fact that location in large cities and metropolitan areas was far more common in the early 1990s than after 1995. For example, the region of Warsaw attracted as much as 40 percent of greenfield investment before 1996 and only 17 percent in the later period. A decline has also occurred in another central voivodship of Łódzkie, and a relative increase in the western and south-western developed regions (Wielkopolskie, Dolnośląskie and Śląskie) and, in part, in the less developed South East.

The study of locational decisions of large investors¹⁷ reveals that they are usually made abroad within 12 months of the time Poland is selected as the country of investment. This means that a wide search and detailed analysis of many locations are difficult; hence the choice of well-known regions and places is more likely. In fact, the geographical scope of locational search is limited: in half the new factories studied, all the locations considered were situated within a single region. The narrowest search is typical of plants built in the Warsaw metropolitan area – only a quarter of these firms took locations in other regions into account.

Access to the market, good road connections, labour-market characteristics and local-government attitude turn out to influence the location most frequently. Since the bulk of capital is invested in manufacturing various goods for the home market, there is a strong preference for location in Warsaw and its vicinity in central Poland, as well as in the western and southern regions, where more people

and a stronger economy are found. Non-metropolitan greenfield investment is also primarily observed in western and south-western Poland. Eastern and northern regions compare unfavourably in terms of access to both domestic and West European markets. A market-oriented location trend is clearly visible in the case of new food and beverage factories, which to a limited degree appear in peripheral agricultural regions. A similar tendency is typical of the manufacture of construction materials, chemical and paper products, publishing and printing, as well as motor vehicles. The development of a regional network of linkages among various foreign and domestic firms is taking place in the car industry in southern, and especially south-western, Poland. Local clusters of component suppliers are found around some large factories, e.g. Fiat in Bielsko-Biała, or Philips in Kwidzyn. A general feature of metropolitan areas is concentration of home-market-oriented production.

The miserable quality of the Polish transport system makes access to main roads very important. As much as three-quarters of greenfield investment is located within the 50-km zone along the two planned west-east motorways, including nearly 50 percent within the 15-km zone. Locations near the A2 Berlin-Poznań-Warsaw road prevailed till 1995, but twice as much capital has been invested along the A4 Berlin/Dresden-Wrocław-Katowice-Cracow motorway as near the A2 since 1996. The construction of the A4 is well advanced (contrary to the slight progress on the A2), and it will become the first road allowing swift transport between Poland and Western Europe.

Heavy investment in Warsaw, Upper Silesia and other industrial areas with high wages and strong unions proves that quality of labour and opportunities to select employees in a large labour market are more important than weak unions and low cost. This is confirmed by the interviews, where ability to recruit skilled workers as well as professional and managerial staff are pointed to as affecting the choice of a locality far more frequently (51–57 percent) than lack of militant unions and a propensity to go on strike (29–37 percent). Positive attitudes to work are regarded as relevant by even more managers (62 percent). The impact of both labour quality and work culture is most widespread in the car industry, which, together with electronics and electrical machinery firms, expresses a

Table 3 Selected economic characteristics and foreign direct investment by voivodship

Voivodship (NTS 2)	Gross domestic product per capita 2000 (Poland = 100)	Manufacturing employment 2000 (%)	Total foreign investment 1990–98 (%)	Greenfield foreign investment 1990–98		Earnings in manufacturing 2000 (Poland = 100)	Unemployment rate 2000 (%)
				US\$ per capita	US\$ th. per employee		
Mazowieckie	149	13.4	20.7	319	70.5	126	10.8
Śląskie	110	13.0	17.3	159	83.1	101	12.9
Wielkopolskie	105	11.3	11.9	141	34.2	96	12.5
Dolnośląskie	102	7.6	5.9	141	59.4	95	18.4
Pomorskie	101	6.0	5.2	91	35.6	104	16.6
Zachodniopomorskie	100	4.0	1.9	51	22.3	98	20.8
Łódzkie	91	8.0	3.9	127	56.9	83	16.3
Lubuskie	91	2.7	2.2	94	21.1	89	21.3
Małopolskie	89	7.6	6.8	90	52.4	100	12.2
Kujawsko-Pomorskie	89	6.2	5.4	95	26.0	94	19.2
Opolskie	84	2.8	3.0	61	41.5	99	15.7
Świętokrzyskie	78	2.8	3.9	64	38.1	99	16.6
Warmińsko-Mazurskie	77	3.2	4.0	23	14.2	94	25.8
Podkarpackie	73	5.3	4.8	102	39.7	94	16.2
Podlaskie	73	2.2	1.5	22	13.5	89	13.8
Lubelskie	70	3.9	1.6	36	29.5	89	14.0
Poland	100	100.0	100.0	129	49.2	100	15.1

Source: author's calculations based on GUS data, PAIZ data and author's research on FDI.

somewhat greater concern about strike activity. The essential contrast perceived in the realm of labour costs exists between the capital city and other parts of the country. The actual level of industrial earnings is remarkably uniform among voivodships, aside from Warsaw and Łódzkie (clothing and textiles); see Table 3. Low labour costs appear to have least influence in the food, chemical and automotive industries (which are concentrated in industrialized areas), and a greater impact in the manufacture of clothing, electronics, electrical machinery and metal products. Positive attitudes to work are attributed to many places; investors in Wielkopolskie and Upper Silesia emphasize this factor more than elsewhere. On the whole, social and environmental conditions in old industrial districts do not necessarily discourage foreign manufacturers in Poland.

All things considered, the size of the market, good accessibility and a large pool of skilled labour can explain the metropolitan investment by foreign companies. The availability of information may also have some impact. It is not clear how far producers who acquire more knowledge about Polish space and become export-oriented will continue this trend.

Access to suppliers, location close to the border, union activity and tax incentives affect the location of some factories. Suppliers are more important for manufacturers of food products, wood and furniture, construction materials and chemicals. Large plants with strong export and/or import relations are often located in Wielkopolskie and Dolnośląskie, while location in the border voivodships of Lubuskie and Zachodniopomorskie is less common.

Special economic zones (SEZs), introduced as a measure of the government's regional policy in 1995, have attracted considerable capital to Śląskie, and partly to Dolnośląskie and Mielec (Podkarpackie). The latter is one of the few medium-sized towns where new foreign investment brought diversity to the local economy and an economic zone helped to alleviate high unemployment (a bankrupt aircraft factory). The influx of \$1b to the Katowice economic zone that comprises subzones in several towns has been significantly influenced by the early location of General Motors. Most of the investment here is car-related and takes place in towns that do not actually need governmental support (Gliwice, Tychy), but

employment effects appear on the labour market of the entire conurbation. All south-western Poland, which has attracted the vast majority of large foreign factories located in SEZs, benefits from the size of the regional market (9m people in three voivodships) and a convenient location, including the new motorway. In fact, the locational tendencies described earlier suggest that the construction of motorways now has a stronger effect on TNC plant location than fiscal incentives. Tax exemptions offered in economic zones (up to 10 years plus another 10 years of 50 percent tax relief) cannot overcome poor accessibility and distance from the market, especially in northern Poland. Foreign capital in all 15 SEZs (two were liquidated) represented less than 4 percent of total industrial FDI in Poland and 15 percent of greenfield investment in 1998.

A basic question concerning the zones is where they draw investors from: from abroad, from other regions of Poland, or from other localities within the same region? It is difficult to arrive at definite conclusions as to whether incentives have succeeded in attracting investment that would otherwise have been made outside Poland. Arguments of this sort have been used in lobbying for the incorporation of Gliwice (General Motors) and Bielsko-Biała (Fiat in 2000) into the zones. The Japanese plants of Isuzu (engines in Tychy) and Toyota (gearboxes in Wałbrzych) are probably examples of those drawn from abroad. Nevertheless, it seems that the majority of factories in economic zones would have been located in Poland anyway. This can be illustrated by the behaviour of Merloni, which built its cooker factory in Łódź, despite being refused permission to locate it in the local SEZ under the pressure of domestic competitors. There are a few cases of production being relocated from existing plants to SEZs, such as UT from Płońsk to Mielec (electric harnessing), or Lear from Mysłowice to Tychy (car seats).

What deserves special attention is the impact of local governments. About two-thirds of firms assert that activity by the commune authorities (*gmina*) was significant in their final choice of a locality. Two types of conditions are put forward as most important here: the general attitude towards the investor and the quality of service by the local administration. Broadly defined openness and readiness for cooperation are fundamental to

convincing the investor that the commune is a reliable partner, willing and capable of solving problems associated with a new plant. Moreover, companies expect prompt decision making and a lack of bureaucratic delays in such areas as issuing building permits, and occasionally support in dealing with utility companies and other institutions. Local participation in the development of infrastructure is declared as relevant by about 30 percent of firms. All in all, conditions allowing for a quick start to the investment, and to some extent reduction of its cost, turn out to be vital in attracting large investors.

It is interesting to note the greater impact on location choice by small communes's authorities. Their ability to provide more effective service is one of the reasons behind investor preference for small towns and villages over large cities; other reasons are availability of land and access to main roads. The role of local leaders and a general 'atmosphere of success' cannot be neglected here, as for example in Tarnowo Podgórne near Poznań, Kobierzyce near Wrocław, and several communes near Warsaw. *Gmina* authorities almost universally perceive the activities of foreign manufacturers as beneficial to local communities (Błuszkowski and Garlicki, 1996; Domański, 2001b).

Conclusion

In 1990, Poland's GDP per capita represented about 22 percent of the equivalent for the EU (at purchasing-power standards). The figure was 40 percent 10 years later. This shows that, after a period of falling behind Western Europe under communist rule, the Polish economy has bridged part of the gap.¹⁸ The fact is that quantitative and qualitative changes that have already taken place are pushing Polish industry somewhat closer to the standards and structures of the EU countries. Greater competitiveness manifests itself in higher productivity, better quality of products and increased export capability. This is related to progress in organization and management, as well as improved technology and environmental standards, and is accompanied by upgraded labour skills and wages, the spread of compensation based on performance, multiplied university enrolments, and

growing educational aspirations. Thus, there is little ground for the contention that the transition to a market economy caused Poland's deindustrialization and economic collapse. Nor does the experience of Poland support general negative opinions about the impact of FDI on regional economic performance in CEE (Smith et al., 2000).

Foreign investment has not been the major factor behind Poland's recent economic development, although it has been a relevant one. The expansion of TNC activity in Poland contributes to the growth and reorganization of manufacturing production, which raises the competitiveness of Polish industry and enhances its position in the European economy. The advantages brought to the host economy by the TNCs' pursuit of their interests in Poland have, on the whole, prevailed in the period under discussion. The impact obviously varies among individual investments and depends on both firm- and place-specific characteristics (see Dicken, 1998; Ettlinger, 1999). The important point is that FDI stimulates progressive changes in domestic firms and includes the manufacturing of products competing on the basis of price as well as quality and reliability (in contrast with ones primarily oriented towards cost-efficiency) and the establishment of non-routinized, skill-based operations. The long-term positive effects of TNCs will be determined by an increase in the share of this sort of activity and the wider development of what Hamill (1993) calls a 'product specialist' role by the Polish subsidiaries, as opposed to 'miniature replicas' serving the domestic market and low-labour-cost-oriented 'rationalized manufacturers'. Another crucial element is the degree of 'embeddedness' of foreign companies through investors' supplier networks, training and technical support for local companies (Dicken et al., 1994; Hardy, 1998).

The positive trends and qualitative transformation of the Polish economy neither mean that the transition has been unproblematic and brought positive effects alone, nor guarantee success in the years to come. Numerous enterprises have proved unable to adjust to new conditions. The future of many others is uncertain, as in the case of steelmakers desperately seeking capital for technological modernization, or armaments and coal producers striving for stability in an environment of dwindling demand. TNC activity fosters the break-up of production and distribution monopolies, but

entails more intense competition as well. The positive impact of foreign investors on the labour market is more of a qualitative than a quantitative nature. Persistent unemployment has appeared, social inequalities have grown,¹⁹ and housing problems inherited from the previous era have hardly been overcome. Many of these ills are well-known to capitalist economies of Western Europe (e.g. a trade-off between productivity and employment), while many have specific features in the Polish context.

As Hudson (1998: 169) writes, the opening of CEE 'has created new opportunities for some companies and places; conversely, it has generated a serious threat to others'. While many regions and places in Poland have experienced 'offensive restructuring' (see Lipietz, 1992; Amin and Thrift, 1994; Pavlinek and Smith, 1998) and had their competitiveness enhanced, among other things, through an engagement with global capital, others have lagged behind and been bypassed by quality foreign investment. The developed regions (metropolitan areas in the main) benefit from their growing, diversified economic base, international contacts and the increasing social well-being. There are no indications of success resting on 'social devaluation'. TNCs reinforce rather than undermine regional strengths and potentials for development. Partners for cooperation can be found more easily here, and so investments are more likely to become regionally embedded. At the same time, some areas face crises for their dominant activities, and eastern peripheries are undergoing relative stagnation and remain isolated from closer integration within the European economy. Low-cost, low-skill foreign investment is more common here. All in all, regional differentiation has deepened: opportunities are not equal for everyone and do not emerge everywhere. There is a variety of historically rooted regional and local trajectories within the country, which as a whole has taken a step forward towards closing the gap with the EU. This is in congruence with the wider argument of Dunford and Smith (2000) that convergence and divergence may appear in parallel at different spatial scales. The disparities in FDI are partly underlain by the same factors as the uneven growth of indigenous firms and by the general economic performance of regions and places; vast FDI in the advanced regions in turn has some effect on the

latter. Faster growth or recovery by the 'losers' will be determined most of all by their capacity to mobilize local and regional resources for endogenous development, and the impact of foreign capital may be of secondary or local importance here.²⁰

The experience of Poland confirms the special role of core regions in the development of CEE economies. The fundamental question is whether, in the long run, their growth generates strong trickle-down development rather than backwash effects. The experience of the 1990s indicates the extensive spread of growth within broad metropolitan areas. The impact on peripheral regions appears to be weak, although more studies and a longer period of observation are necessary. A carefully designed regional policy is badly needed, targeting specific social, cultural, institutional and infrastructural barriers in various peripheral regions and declining industrial places.

One must bear in mind that the 1990s constituted an early, special stage of Poland's quest for a better economic position in Europe. Some factors that fuelled Polish economic growth in this period are losing significance, such as room for the expansion of services and production of consumer goods as a result of former underdevelopment. Manufacturing growth in Poland in the 1990s rested on three basic sources: the rising standard of living (consumption), import substitution, and exports to the EU. The early and thorough installation of new mechanisms led enterprises to learn rapidly about market behaviour. The advance of private producers was vital as they actively sought new markets and achieved a higher productivity that their socialist predecessors were unable to provide. The role of culturally embedded entrepreneurship cannot be overlooked here; its roots were visible in informal social and economic activity in the 1980s. The size of the home market and earlier international personal contacts (including those related to the sizeable Polish émigré population and the widespread temporary work abroad) were also significant. A specific element in the Polish trajectory of economic development was the strong political position of trades unions, which pushed wages above Czech and Hungarian levels and curbed deregulation and greater flexibility in labour relations; this has not, however, deterred the TNCs.

Despite significant growth, the overall gulf to be bridged is still substantial. Poland's share in world

exports remains low and the trade balance negative. External political control has been replaced by greater economic dependence on global markets and foreign companies, and the likelihood of profit transfers is increasing with the completion of the first stage of domestic-market-oriented investments. The integration of Poland within the EU brings new opportunities as well as new threats. The endpoint is still uncertain and many questions remain open. What sort of capitalism can Poland expect? What role are Poland and its regions going to play in the European economy? Polish manufacturing enterprises and the entire economy have to pass tests of viability in the next 'post-transition' decade. The behaviour of TNCs during the economic slow-down that marks the start of the new millennium deserves special scrutiny.

Notes

- 1 The semi-free election took place in June 1989, a non-communist prime minister took the office two months later, the fundamental legal framework of market relations was introduced in January 1990, and Lech Wałęsa, the leader of the Solidarity trade union, became president in December 1990.
- 2 Changes in methodology of statistical data collection make some data not entirely comparable, e.g. due to implementation of NACE classification of economic activities as late as in 1993, the exclusion of small enterprises from some data, and a new territorial division of the country since January 1999, make dynamic regional comparisons difficult (see also discussion of measurement problems in Berg, 1993).
- 3 Extrapolations that ignore the fundamentally different character of these changes and use aggregate data for the entire transition period, or still worse for its early phase, can hardly provide a basis for discussion of future trends (see Dunford and Smith, 2000).
- 4 The peculiarities of this 'transitional recession' have been discussed by many authors; e.g. Earle et al. (1993), Rosati (1993), Żukowski (1993), Kornai (1995).
- 5 The writing-off of part of this debt removed one of the stumbling blocks to economic development.
- 6 Consumption reached the 1989 level in 1994, i.e. earlier than in other CEE countries (Bywalec, 1998).
- 7 Mining represents 0.2% of FDI, energy supply 3%.
- 8 Although this remains the lowest paying industry, general wage increases, the appreciation of the Polish zloty, and competition from South East Europe are making this activity ever less profitable (Domański, 2001a).

- ⁹ This finds expression in rising consumption indicators and longer life expectancy, which decreased till the early 1990s.
- ¹⁰ Poland confirms the key role of the growth of the home market for attracting foreign capital into CEE countries (Dunning, 1993; Sharp and Barz, 1997).
- ¹¹ See broader discussion of institutional relations and bargaining of TNCs, the state and other agents in Domański (forthcoming).
- ¹² See the discussion of internationalization of component manufacturers in Sadler (1998; 1999).
- ¹³ Poland already has higher labour costs than the Czech Republic and Hungary, despite having a lower GDP per capita.
- ¹⁴ The ETUC study shows that the industrial relations record of foreign companies in CEE countries is mixed (Gradev, 2001).
- ¹⁵ The average investment per employee of new plants is \$70,000 in metropolitan areas and \$23,000 in non-metropolitan ones.
- ¹⁶ Limited FDI is also found in the agricultural borderland with Austria in Hungary and in western parts of the Czech Republic (Pavlinek, 1998; Carter, 1999).
- ¹⁷ Interviews concerning 55 large greenfield plants were carried out in 1999.
- ¹⁸ The relative progress of the more developed Hungarian and Czech economies has been less impressive: they moved from 45% to 51% and from 58% to 59% of the EU average respectively.
- ¹⁹ They are still far smaller than in the UK, Germany and the CEE countries that have delayed major reforms and experienced economic decline. The mechanisms of social inequalities are different to those before 1989, which affects their popular perception (Słomczyński et al., 1999).
- ²⁰ The prospects for the development of peripheral areas in CEE, including eastern Poland, are broadly discussed by Turnock (2001).

References

- Amin, A. and Thrift, N. (1994) 'Living in the Global', in A. Amin and N. Thrift (eds) *Globalization, Institutions and Regional Development in Europe*, pp. 1–22. Oxford: Oxford University Press.
- Begg, R. and Pickles, J. (1998) 'Institutions, Social Networks and Ethnicity in the Cultures of Transition: Industrial Change, Mass Unemployment and Regional Transformation in Bulgaria', in J. Pickles and A. Smith (eds) *Theorising Transition: the Political Economy of Post-Communist Transformations*, pp. 115–46. London: Routledge.
- Berg, A. (1993) 'Measurement and Mismeasurement of Economic Activity During Transition to the Market', in M.I. Blejer, G.A. Calvo, F. Coricelli and A.H. Gelb (eds) *Eastern Europe in Transition: From Recession to Growth?* World Bank Discussion Paper 196. Washington, DC: World Bank.
- Blackburn, A. (1974) 'The Spatial Behaviour of American Firms in Western Europe', in F.E.I. Hamilton (ed.) *Spatial Perspectives on Industrial Organization and Decision Making*, pp. 245–64. London: Wiley.
- Bluszkowski, J. and Garlicki, J. (1996) *Companies with Foreign Participation in their Local Environment*. Warsaw: PAIZ/Friedrich Ebert Foundation.
- Bluszkowski, J. and Garlicki, J. (2000) *Opinia inwestorów zagranicznych o społecznych i ekonomicznych warunkach działalności w Polsce*. Warsaw: PAIZ/Indicator.
- Bradshaw, M. (1997) 'The Geography of Foreign Investment in Russia, 1993–1995', *Tijdschrift voor Economische en Sociale Geografie* 88 (1): 77–84.
- Bradshaw, M., Stenning, A. and Sutherland, D. (1998) 'Economic Restructuring and Regional Change in Russia', in J. Pickles and A. Smith (eds) *Theorising Transition: the Political Economy of Post-Communist Transformations*, pp. 147–71. London: Routledge.
- Buckwalter, D.W. (1995) 'Spatial Inequality, Foreign Investment, and Economic Transition in Bulgaria', *Professional Geographer* 47 (3): 288–98.
- Burbach, R., Nunez, O. and Kagarlitsky, B. (1997) *Globalization and its Discontents: the Rise of Postmodern Socialism*. London: Pluto.
- Bywalec, C. (1998) *Spoleczne aspekty transformacji gospodarczej w Europie Środkowo-Wschodniej*. Cracow: University of Economics.
- Carter, F. (ed.) (1996) *Central Europe After the Fall of the Iron Curtain: Geopolitical Perspectives, Spatial Patterns and Trends*. Frankfurt am Main: Peter Lang.
- Europäischer Verlag der Wissenschaften.
- Carter, F. (1999) 'The Geography of Foreign Direct Investment in Central-East Europe During the 1990s', *Wirtschaftsgeographische Studien (Wien)* 24/25: 40–70.
- Chrupek, Z. (1998) 'Bezpośrednie inwestycje zagraniczne w procesie transformacji i rozwoju gospodarczego Polski', in Z. Olesiński (ed.) *Bezpośrednie inwestycje zagraniczne w Polsce*, pp. 168–87. Warsaw: PWE.
- Czyż, T., Churski, P. and Hauke, J. (2000) 'Unemployment Dynamics in the Process of System Transformation in Poland', *Geographia Polonica* 73 (1): 25–46.
- Dicken, P. (1998) *Global Shift: Transforming the World Economy*. London: Paul Chapman Publishing.
- Dicken, P., Forsgren, M. and Malmberg, A. (1994) 'The Local Embeddedness of Transnational Corporations', in A. Amin and N. Thrift (eds) *Globalization, Institutions and Regional Development in Europe*, pp. 23–45. Oxford: Oxford University Press.
- Domański, B. (1997) *Industrial Control over the Socialist*

- Town: Benevolence or Exploitation?* Westport, CT: Praeger.
- Domański, B. (2001a) 'Poland: Labour and the Relocation of Manufacturing from the EU', in G. Gradev (ed.) *CEE Countries in the EU Companies' Strategies of Industrial Restructuring and Relocation*, pp. 21–49. Brussels: European Trade Union Institute.
- Domański, B. (2001b) *Kapitał zagraniczny w przemyśle Polski*. Cracow: Institute of Geography and Spatial Management, Jagiellonian University.
- Domański, B. (forthcoming) 'Transnational Corporations and the Postsocialist Economy: Learning the Ropes and Forging New Relations in Contemporary Poland', in C. Alvstam and E. Schamp (eds) *The 'Networked' World – Making Sense of Globalization*.
- Dunford, M. and Smith, A. (2000) 'Catching Up or Falling Behind? Economic Performance and Regional Trajectories in the "New Europe"', *Economic Geography* 76 (2): 169–95.
- Dunning, M. (1993) 'The Prospects for Foreign Direct Investment in Eastern Europe', in P. Artisen, M. Rojec and M. Svetlicic (eds) *Foreign Investment in Central and Eastern Europe*, pp. 16–33. London: Macmillan.
- Durka, B. (ed.) (1999) *Foreign Investments in Poland*. Warsaw: Foreign Trade Research Institute.
- Dziworska, K. and Szcześniak, A. (1996) 'Bezpośrednie inwestycje zagraniczne w Polsce', in M. Bąk and P. Kulawczuk (eds) *Analiza wpływu inwestycji zagranicznych na polską gospodarkę*, pp. 6–34. Warsaw: PAIZ.
- Earle, J., Frydman, R. and Rapaczynski, A. (eds) (1993) *Privatization in the Transition to a Market Economy*. London: Pinter Publishers.
- Ekiert, G. (1998) *Why Some Succeed and Others Fail? Eight Years of Transition in Eastern Europe*. Washington, DC: Woodrow Wilson International Center for Scholars, East European Studies.
- Ettlinger, N. (1999) 'Local Trajectories in the Global Economy', *Progress in Human Geography* 23 (3): 335–57.
- Georgica, J.P. (1998) 'Wpływ inwestycji zagranicznych na wprowadzanie nowych technologii społecznych', in Z. Olesiński (ed.) *Bezpośrednie inwestycje zagraniczne w Polsce*, pp. 87–110. Warsaw: PWE.
- Gorzelać, G. (1996) *The Regional Dimension of Transformation in Central Europe*. London: Jessica Kingsley Publishers.
- Grabher, G. and Stark, D. (1997) 'Organizing Diversity: Evolutionary Theory, Network Analysis and Post-Socialism', in G. Grabher and D. Stark (eds) *Restructuring Networks in Post-Socialism: Legacies, Linkages and Localities*, pp. 1–32. Oxford: Oxford University Press.
- Gradev, G. (2001) 'EU Companies in Eastern Europe: Strategic Choices and Labour Effects', in G. Gradev (ed.) *CEE Countries in the EU Companies' Strategies of Industrial Restructuring and Relocation*, pp. 1–19. Brussels: European Trade Union Institute.
- Graziani, G. (1998) 'Globalization of Production in the Textile and Clothing Industries: the Case of Italian Foreign Direct Investment and Outward Processing in Eastern Europe', Berkeley Roundtable on the International Economy Working Paper 128 (available at <http://brie/berkeley.edu/~briewww/pubs/wp/wp128.htm>).
- Hamill, J. (1993) 'Employment Effects of the Changing Strategies of Multinational Enterprises', in P. Bailey, A. Parisotto and G. Renshaw (eds) *Multinationals and Employment: the Global Economy of the 1990s*. Geneva: ILO.
- Hamilton, F.E.I. (1999) 'Transformation and Space in Central and Eastern Europe', *Geographical Journal* 165 (2): 135–44.
- Hanusik, K. and Łangowska, U. (2001) 'An Econometric Analysis of the Spatial Variation in Consumption in Poland in the Years 1990–1998', *Opole University, Economic and Environmental Studies* 1: 51–91.
- Hardy, J. (1998) 'Cathedrals in the Desert? Transnationals, Corporate Strategy and Locality in Wrocław', *Regional Studies* 32 (7): 639–52.
- Hudson, R. (1998) 'Industrial Restructuring in Europe: Recent Tendencies in the Organization and Geography of Production', in T. Unwin (ed.) *A European Geography*, pp. 169–85. Harlow: Addison Wesley Longman.
- Korcelli, P. (1997) 'The Urban System of Poland in an Era of Increasing Inter Urban Competition', *Geographia Polonica* 69: 45–54.
- Kornai, J. (1995) 'Eliminating the Shortage Economy. A General Analysis and Examination of the Developments in Hungary', *Economics in Transition* 3 (1): 13–37; 3 (2): 149–68.
- Kornai, J. (1997) *Struggle and Hope. Essays on Stabilization and Reform in a Post-Socialist Economy*. Cheltenham: Edward Elgar.
- Kozminski, A.K. (1993) *Catching Up? Organizational and Management Change in the Ex-Socialist Bloc*. Albany: State University of New York Press.
- Kulawczuk, P. (1996) 'Wpływ inwestycji zagranicznych na jakość zarządzania przedsiębiorstwami', in M. Bąk and P. Kulawczuk (eds) *Analiza wpływu inwestycji zagranicznych na polską gospodarkę*, pp. 54–68. Warsaw: PAIZ.
- Lazear, E.P. (ed.) (1995) *Economic Transition in Eastern Europe and Russia: Realities of Reform*. Stanford, CA: Hoover Institution Press.
- Lipietz, A. (1992) 'The Regulation Approach and Capitalist Crisis: an Alternative Compromise for the 1990s', in M. Dunford and G. Kafkalas (eds) *Cities and Regions in the New Europe*, pp. 309–34. London: Belhaven.

- Misala, J. (1996) 'Efekty makroekonomiczne zaangażowania kapitału zagranicznego w procesie transformacji gospodarki polskiej', in M. Jarosz (ed.) *Kapitał zagraniczny w prywatyzacji*. Warsaw: Institute for Political Studies PAN.
- Nemes, N. (1994) 'Regional Disparities in Hungary During the Period of Transition to a Market Economy', *GeoJournal* 32: 363–8.
- Ohmae, K. (1990) *The Borderless World*. London: Collins.
- Offe, C. (1997) *Varieties of Transition: the East European and East German Experience*. Cambridge: MIT Press.
- Olesiński, Z. (1999) 'Foreign Investors in the Local Environment', in B. Durka (ed.) *Foreign Investments in Poland*, pp. 102–18. Warsaw: Foreign Trade Research Institute.
- Paszowski, M. (1996) *Zmiany strukturalne przemysłu. Metody badania i tendencje światowe a transformacje w krajach Europy Środkowo-Wschodniej*. Cracow: Jagiellonian University.
- Pavlinek, P. (1995) 'Regional Development and the Disintegration of Czechoslovakia', *Geoforum* 26: 351–72.
- Pavlinek, P. (1998) 'Foreign Investment in the Czech Republic', *Professional Geographer* 50 (1): 71–85.
- Pavlinek, P. and Smith, A. (1998) 'Internationalization and Embeddedness in East-Central European Transition: the Contrasting Geographies of Inward Investment in the Czech and Slovak Republics', *Regional Studies* 32 (7): 619–38.
- Pollert, A. (1999) *The New Market Economies of Eastern Central Europe*. London: Sage Publications.
- Rey, V. (1996) 'The New Central Europe: Waiting for Convergence?', in F.W. Carter (ed.) *Central Europe After the Fall of the Iron Curtain: Geopolitical Perspectives, Spatial Patterns and Trends*, pp. 45–62. Frankfurt am Main: Peter Lang Europaischer Verlag der Wissenschaften.
- Rojec, M. (1998) *Restructuring with Foreign Direct Investment: the Case of Slovenia*. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Rosati, D. (1993) 'Poland: Glass Half Empty', in R. Portes (ed.) *Economic Transformation in Central Europe. A Progress Report*. London: Centre for Economic Policy Research.
- Sadler, D. (1998) 'Changing Inter-firm Relations in the European Automotive Industry: Increased Dependence or Enhanced Autonomy for Component Producers?', *European Urban and Regional Studies* 5 (4): 317–28.
- Sadler, D. (1999) 'Internationalization and specialization in the European automotive components sector: implications for the hollowing-out thesis', *Regional Studies* 33 (2): 109–19.
- Sharp, M. and Barz, M. (1997) 'Multinational Companies and the Transfer and Diffusion of New Technological Capabilities in Central and Eastern Europe and the Former Soviet Union', in D.A. Dyker (ed.) *The Technology of Transition: Science and Technology Policies for Transition Countries*, pp. 95–125. Budapest: Central European University Press.
- Shen, R. (1997) *The Restructuring of Romania's Economy: a Paradigm of Flexibility and Adaptability*. Westport, CT: Praeger.
- Słomczyński, K.M., Janicka, K., Mach, B.W. and Zaborowski, W. (1999) *Mental Adjustment to the Post-Communist System in Poland*. Warsaw: Institute of Philosophy and Sociology Publishers.
- Smith, A. (1996) 'From Convergence to Fragmentation: Uneven Regional Development, Industrial Restructuring, and the Transition to Capitalism in Slovakia', *Environment and Planning A* 28: 135–56.
- Smith, A. (1997) 'Breaking the Old and Constructing the New? Geographies of Uneven Development in Central and Eastern Europe', in R. Lee and J. Wills (eds) *Geographies of Economies*, pp. 331–44. London: Edward Arnold.
- Smith, A. (1998) *Restructuring the Regional Economy: Industrial Transformation and Regional Development in Slovakia*. Cheltenham: Edward Elgar.
- Smith, A. and Pickles, J. (1998) 'Introduction: Theorising Transition and the Political Economy of Transformation', in J. Pickles and A. Smith (eds) *Theorising Transition: The Political Economy of Post-Communist Transformations*, pp. 1–24. London: Routledge.
- Smith, A., Rainnie, A. and Dunford, M. (2000) 'Regional Trajectories and Uneven Development in "the New" Europe: Rethinking Territorial Success and Inequality', in H. Wallace (ed.) *Whose Europe?* London: Macmillan.
- Smith, A., Rainnie, A., Dunford, M., Hardy, J., Hudson, R. and Sadler, D. (2002) 'Networks of Value, Commodities and Regions: Reworking Divisions of Labour in Macro-regional Economies', *Progress in Human Geography* 26 (1): 41–63.
- Starczewska, G. (1996) 'Ochrona środowiska w przedsiębiorstwach prywatyzowanych z udziałem kapitału zagranicznego', in M. Jarosz (ed.) *Kapitał zagraniczny w prywatyzacji*. Warsaw: Institute for Political Studies.
- Starzyk, K. (1998) 'Bezpośrednie inwestycje zagraniczne a transfer technologii w procesie transformacji gospodarczej', in Z. Olesiński (ed.) *Bezpośrednie inwestycje zagraniczne w Polsce*, pp. 263–82. Warsaw: PWE.
- Strykiewicz, T. (1998) 'The Changing Role of Border Zones in the Transforming Economies of East-Central Europe: the Case of Poland', *GeoJournal* 44: 203–13.
- Swain, A. and Hardy, J. (1998) 'Globalization, Institutions, Foreign Investment and the Reintegration of East and Central Europe and the Former Soviet Union with the World Economy', *Regional Studies* 32 (7): 587–90.

- Turnock, D. (ed.) (1997) *Frameworks for Understanding Post-Socialist Processes*, Leicester University, Geography Department, Occasional Paper.
- Turnock, D. (1998) 'Globalization and the East European Transition', *GeoJournal* 45: 129–40.
- Turnock, D. (2001) 'Location Trends for Foreign Direct Investment in East Central Europe', *Environment and Planning C* 19: 849–80.
- Van Zon, H. (1996) *The Future of Industry in Central and Eastern Europe*. Aldershot: Avebury.
- Wysokińska, Z. (1998) 'Wpływ bezpośrednich inwestycji zagranicznych na dostosowania strukturalne w gospodarce', in Z. Olesiński (ed.) *Bezpośrednie inwestycje zagraniczne w Polsce*, pp. 113–35. Warsaw: PWE.
- Żukowski, R. (1993) 'Stabilization and Recession in a Transitional Economy: the Case of Poland', *World Development* 21 (7): 1163–78.

Correspondence to:

Bolesław Domański, Institute of Geography and Spatial Management, Jagiellonian University, Grodzka 64, 31–044 Krakow, Poland.
[email: bdoman@arsenal.geo.uj.edu.pl]