Policy Research

WORKING PAPERS

International Trade

International Economics Department
The World Bank
June 1993
WPS 1144

The Foreign Trade Dimension of the Market Transition in Poland

The Surprising Export Performance and Its Sustainability

Bartlomiej Kaminski

Contrary to expectations, the driving force behind the export upswing were manufactures — not raw materials, mineral fuels, or agricultural products.

Policy Research

WORKING PAPERS

International Trade

WPS 1144

This paper — a product of the International Trade Division, International Economics Department — is a revised version of a paper presented at the conference "Transition to Democracy in Poland," organized by the Hoover Institution on War, Revolution, and Peace, Stanford University, California, in November 1992. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Pauline Kokila, room S7-040, extension 33716 (June 1993, 27 pages).

To the extent that foreign trade has been discussed in the debate about the transformation of former centrally planned economies, discussion has focused on what should be done to minimize the costs of external adjustment through managed foreign trade and exchange rate policies. Little attention has been paid to the "supply-side" forces behind export expansion.

Kaminski addresses questions that have been ignored: What product categories were the driving force behind the expansion of exports to the OECD? To what extent were exports from the CMEA reoriented to the West? What was the factor content of exports to the OECD? Was export expansion accompanied by a shift in relative comparative advantage? Will the Central European economies preserve their recent gains in OECD markets?

He finds that developments from the beginning of the transformation program represent a dramatic acceleration of the trends in exports observed between 1984 and 1989. Contrary to expectations, the driving force behind the export upswing were manufactures — not raw materials, mineral fuels, or agricultural products. Exports expanded because of the efforts of state-owned enterprises to export more in metallurgy, electro-engineering, and chemical and light industries.

Evidence on the relationship between Poland's export performance in the West (especially trade with the European Community) and the collapse of the CMEA seems to suggest that the fall in Polish exports to the CMEA was smaller than expected. The redirection of Polish exports from the CMEA fueled only limited export expansion to the West.

The developments in Polish trade during the first two years of the transformation program suggest that attempts to recreate the CMEA arrangements in some new guise would have unnecessarily weakened incentives to restructure the economy with its comparative advantage.

"THE FOREIGN TRADE DIMENSION OF THE MARKET TRANSITION IN POLAND: THE SURPRISING EXPORT PERFORMANCE AND ITS SUSTAINABILITY"

by

Bartlomiej Kaminski
International Trade Division, The World Bank, Washington
and the University of Maryland, College Park

*/ The revised version of a paper presented at the conference Transition to Democracy in Poland, organized by The Hoover Institution on War, Revolution and Peace, Stanford University, Stanford, 23-24 November 1992

**/ I wish to acknowledge helpful comments from Ronald Duncan, Andrzej Olechowski, Jacek Tomorowicz and Alexander Yeats.

TABLE OF CONTENTS

LIST OF TABLES

CHARTS

I. INTRODUCTION

The period following the implementation of the transformation-cum-stabilization program in 1990 witnessed a dramatic opening of the Polish economy to market forces accompanied by a rapid growth in exports, especially to the West. The reorientation of Polish trade occurred in the face of changes in external and domestic circumstances which were not particularly favorable to an improvement in export performance. Externally, the CMEA (Council for Mutual Economic Assistance), Poland's major trading focus, was disintegrating. Intra-CMEA trade, accounting for around half of Polish trade, had been falling since 1986, and the survival of the organization was uncertain in 1990. Its demise in 1991 came unexpectedly quickly,[1] leading to a fall in CMEA import demand for Polish products and to a deterioration in the terms-of-trade vis-a-vis the FSU (former Soviet Union). The end of the Cold War changed Poland's political status in the West. However, its access to Western markets did not improve enough in the 1990-91 period to explain the export upswing. Hence, the most significant external developments relevant to Polish foreign trade during the first two years were the demise of the FSU and of the CMEA.

Domestically, the transformation from an administrative economic system involved a simultaneous change in macroeconomic policies and in their microeconomic foundations. The macroeconomic stabilization program was carried out in an institutional environment dominated by SOEs (state-owned enterprises), resembling administrative units rather than full-fledged firms with unambiguously defined property rights. Their organizational structures were designed to facilitate administrative management by the state. In addition to the organizational legacies, there was a legacy of production and investment heavily distorted by the misallocation of resources and the economic stagnation in the 1980s. As a result, the capacity of SOEs to compete internationally was also limited because of outdated technologies. Yet they expanded their exports to highly competitive Western markets.

An intriguing question is whether the export upswing to the West, defying the previous trends, is a short-term phenomenon. The paper addresses this question by comparing the export performance in the 1980s with that in the 1990-91 period,i.e., when some major systemic constraints of central planning were effectively removed and

---

[1] The CMEA was officially dissolved at its 46th General Session held in Moscow on June 28, 1991. Its members included Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic, Hungary, Mongolia, Poland, Romania, the Soviet Union, and Vietnam.

a supply-constrained economy was replaced by a demand-constrained economy. It begins with an attempt to identify the "supply-side" sources accountable for the sudden improvement in export performance. It shows that the increase in penetration of OECD markets was not a reversal but the dramatic acceleration of trends observed in the 1984-89 period; that it was driven by manufactured goods, mainly characterized by a high unskilled labor content; and that it was triggered by domestic developments rather than by external factors such as the collapse of the CMEA or more cooperative economic relations between Poland and OECD countries. In its concluding section, the paper discusses prospects for sustaining the new pattern of exports.

II. THE EXPORT BOOM DURING THE INITIAL STAGE OF THE MARKET TRANSITION

Polish export performance in Western markets following the implementation of the stabilization program was a bright spot in an otherwise bleak picture of growing unemployment, expanding budget deficits, persistent inflation, and falling aggregate output. The expansion defied projections of both Polish and Western experts involved in the preparation of the transformation program.[2] They had good reasons to be wrong. When all policy variables and incentive structures of economic actors are in a state of flux, the chances for immediate improvement in economic performance are rather slim. In addition, nothing in the investment patterns of the 1980s would point to improvement in Poland's competitiveness in Western markets. Symptoms of industrial decline were abundant, as many industrial sectors did not have access to resources to modernize their aging productive capacities.

II.1. Upsetting the Trend: Improved Competitiveness in OECD markets

Polish export performance during the first two years of the transformation program represented a break with some trends dominant in the 1980s and a continuation of others. Extrapolation of 1980s trends would have sketched the following picture: Poland's position in Western markets would be stagnant or improving only at a hesitant pace; its competitiveness in the most rapidly expanding markets for manufactures would continue to slip; and, its export commodity composition would continue to shift towards natural-resource and unskilled labor-intensive

---

[2] The stabilization program, as presented in the Polish government letter of intent submitted to the IMF, assumed a slight increase of exports and a hard currency trade balance deficit of $800 million in 1990. There was actually a surplus of $2.2 billion. (Kolodko, 1991:13).

products. Yet the pace at which exports to the OECD increased and the extent of the shift to manufactures in the export structure was astounding.

To set the developments in exports to the West in the early 1990s in perspective, we briefly examine trends in the 1980s. Polish trade with the West in the 1980s can be divided into two distinct phases. The first phase, covering the 1980-83 period, witnessed its collapse accompanied by an aborted attempt to cut links with the West. While this phase also witnessed a contraction in OECD total import demand, the decline in Polish exports was even sharper and especially deep for exports of manufactures: the average ratio of the fall in Poland's manufactures exports to the fall in OECD imports of manufactures was 13.5 in the 1981-83 period. During the second 1984-89 phase a policy of expanding trade with the West was actively pursued. The results of this effort at the end of the 1980s were mixed, however. On the one hand, among Central and South European CMEA countries, Polish export growth to OECD markets was second to Hungary; but the region as a whole had performed very poorly. (As can be seen in Chart 1, between 1984 and 1990 its share in OECD imports had been falling each year.) On the other hand, taking into account the virtual collapse of exports in 1981 and 1982, the subsequent export growth left much to be desired. Poland's share in total OECD imports did not contract thanks to improved export performance in non-manufactures markets. Despite progressive liberalization of the foreign trade regime and strong political pressures to boost exports to obtain much-needed hard currency revenues to service its international debt and pay for imports, Poland failed to recapture the share of OECD markets that it held in 1980.[3] There were increased exports of farm products, mineral fuels and raw materials, but these were not large enough to compensate for the dismal performance in manufactures. In consequence, Poland's export profile shifted towards low value-added products.

To make these observations a little more specific, Table 1 tabulates information on Poland's export performance by major product categories. The table shows the shares in OECD imports of Polish exports in 1980-91. In addition, it includes average shares in three periods: the 1981-83 collapse; the 1983-89 hesitant recovery,

[3] In 1989 the share was still lower than it was in 1984 and 1985.

and the 1990-91 export upswing. The statistics in Table 1, derived from trade data reported by OECD partners,[4] are given for the following broad commodity categories: foods and feeds (SITC Rev.2. 0+1+22+4); raw materials (SITC Rev.2. 2-22-27-28); mineral fuels (SITC Rev.2. 3); ores and metals (SITC Rev.2. 27+28+68); and manufactures (SITC. Rev. 2. 5+6+7+8-68).

Although the collapse of exports in the early 1980s left a lot of room for improvement,[5] only exporters of coal, farm products and manufactures--the latter two sectors being the most affected by the contraction (see Table 1)--succeeded in increasing their shares in OECD markets in the 1984-89 period. In view of the modernization of the Polish industrial base in the 1970s, financed by Western credits, the shift in Poland's comparative advantage (as revealed in exports to Western markets) to natural resource intensive products demonstrated its inability to compete in markets for products whose production called for more sophisticated technologies, marketing skills and organization techniques.

But the important point to note is that the developments following the introduction of the transformation program in 1990 were the reversal of trends observed in the 1984-89 period. While between 1989 and 1981 Poland's share in OECD important had almost not changed at all, it dramatically increased in the 1990-91 period, mainly thanks to increased exports of manufactures (see Chart 1). Export performance improved in all product categories including manufactures in the 1990-91 period. Poland's exports increased three-fold faster than OECD total imports, while the ratio of the increase in Poland's exports of manufactures to OECD imports was 4.1 (see Table 1). The value of manufactures exports rose by 58% in 1990 and 23% in 1991.

---

[4] The analysis does not cover all OECD members. It includes ten members of the European Community (excluding Greece and Portugal), that is, Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Spain and United Kingdom, all members of the European Free Trade Association (Austria, Finland, Iceland, Norway,Sweden, and Switzerland), North America (USA and Canada), and Japan.

[5] The collapse of Poland's exports to the West, triggered by social unrest and magnified by the fall in OECD import demand, was immense. Except for exports of mineral fuels (mainly coal), which fell less than OECD import demand (at around 50% of the OECD rate), all other product categories lost their market shares. The biggest loser were manufactures: their decline was around 14 times larger than the fall in OECD import demand for manufactured goods.

Table 1: Export Performance of Poland in OECD Markets, by product categories, 1980-91

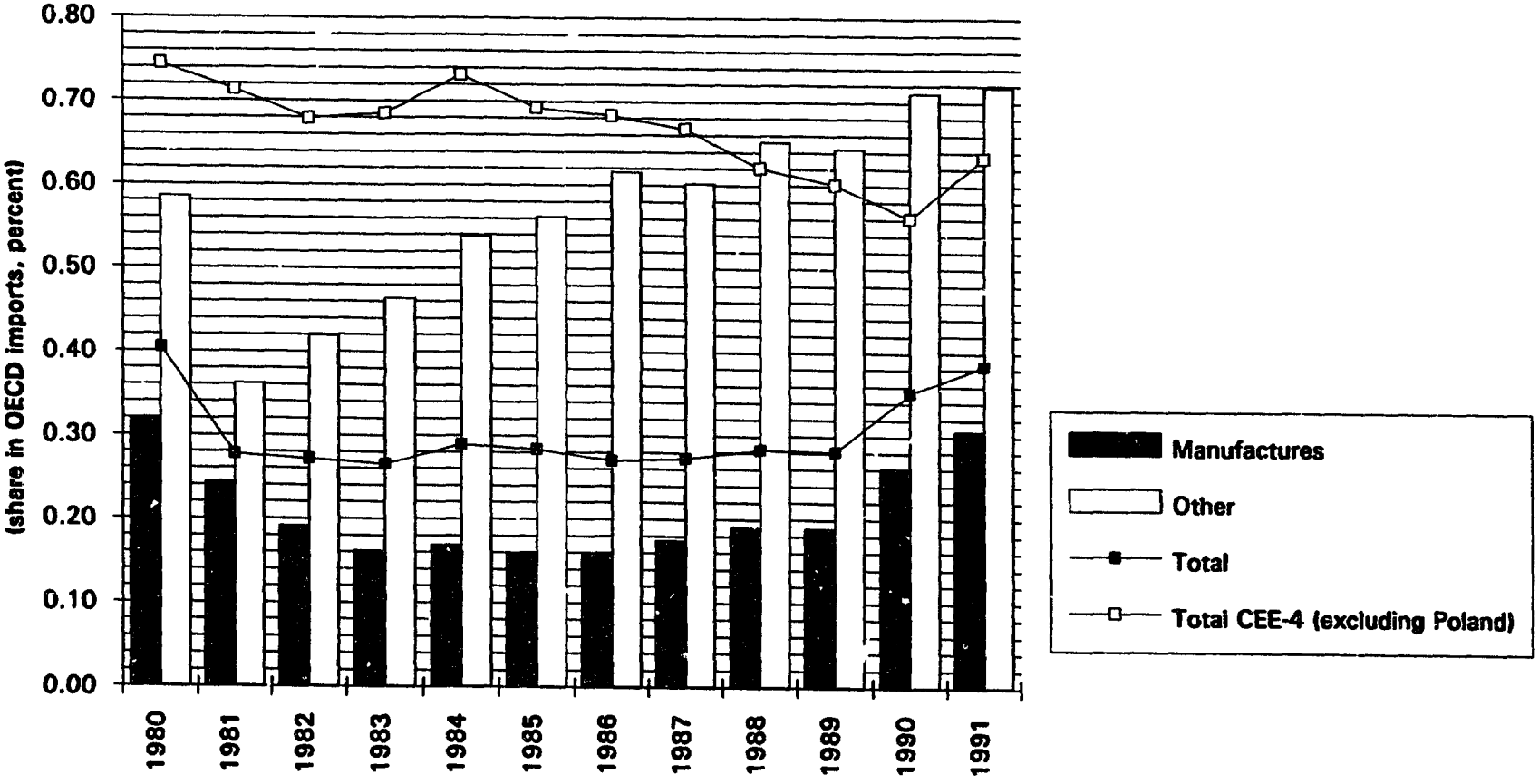
	Total Exports	Foods and Feeds	Raw Materials	Mineral Fuels	Ores and Non-ferrous Metals	Manufactures
1980	0.40	0.58	0.65	0.37	0.88	0.32
1981	0.28	0.39	0.57	0.19	0.75	0.24
1982	0.27	0.37	0.51	0.29	0.79	0.19
1983	0.27	0.44	0.49	0.33	0.65	0.16
1984	0.29	0.46	0.54	0.40	0.77	0.17
1985	0.28	0.55	0.54	0.40	0.78	0.16
1986	0.27	0.54	0.52	0.50	0.63	0.16
1987	0.27	0.58	0.49	0.44	0.61	0.17
1988	0.28	0.57	0.46	0.46	0.68	0.19
1989	0.28	0.65	0.39	0.43	0.60	0.19
1990	0.35	0.77	0.52	0.41	0.75	0.26
1991	0.38	0.65	0.57	0.45	0.98	0.31
Memorandum: average in						
1981-83	0.40	0.58	0.66	0.37	0.88	0.32
1984-89	0.28	0.56	0.49	0.44	0.68	0.17
1990-91	0.37	0.72	0.55	0.43	0.87	0.28

Source: Derived from the United Nations COMTRADE data base.

II.2. Manufactures: The Driving Force of the Export Upswing

Contrary to expectations, the driving force behind the Polish export boom in the 1990-91 period was manufactures--not farm products, energy, and raw materials, as one might have expected. Poland's share in OECD's total imports rose from 0.28% in the 1984-89 period to 0.37% (a 28% increase) in the 1990-91 period, mainly thanks to the expansion of exports of manufactured goods. Poland's share in OECD imports of manufactures rose from 0.17% to 0.28% (by 63%). To put this development in perspective, in 1985 Poland's exports of manufactures (US$ 1.3 billion) to the OECD were about 17% and 8% of Brazil's (US$ 7.2 billion) and Korea's exports (US$ 17.1 billion), respectively, in 1991 Poland's manufactures exports ($5.5 billion) stood at 57% of

Chart 1: Poland's Competitive Position in OECD Markets, 1980-91



Brazil's exports (US$ 10.4 billion) and 14% of Korea's exports (US$ 40.8 billion). Manufactured goods accounted for 63% of the increase in the value of Poland's exports in 1990 exports, for 90% of the increase in 1991, and for 71% of the increase between 1989 and 1991.

What manufactures were a success story in Western markets? Table 2 gives a list of manufactured goods which contributed most to the export upswing. It contains product categories meeting the following two criteria: first, the value of exports in 1991 was larger than US $10 million; and, second, the average annual rate of growth (in current prices) in the 1990-91 period was equal to or larger than 40% The second criterion is quite restrictive, as it excludes all product categories whose value failed to almost double between 1989 and 1991. The products were selected from the breakdown of exports to the EC at a three digit SITC (Standard International Trade Classification) level.[6]

Although limited to exports to the EC, the analysis of these product groups sheds light on developments in Polish exports of manufactures to the West in general. First, it should be noted that the EC provides an outlet for almost 80% of Polish products sold on OECD markets, and the EC share has been expanding. Second, the value of export items in Table 2 accounted for around 23% of total Polish exports to the EC in 1991 and for 42% of its exports of manufactured goods. Third, between 1989 and 1991 the value of exports of products meeting the above criteria increased by more than US$ 1 billion, and accounted for more than one-third of the increase in manufactures exports to OECD countries. Thus, the exporters meeting the above criteria made a significant contribution to performance in Western markets.

Several observations can be drawn from eyeballing the information in Table 2. Not surprisingly, one cannot find high-technology products: Poland like other communist countries missed the information-computer revolution. Sectors which stand out in their export performance are representative of the second industrial

---

[6] As compiled from the official Polish statistics by Marczewski (1992). The shift from licensed-based centralized registration to customs-based recording of trade flows decreased the reliability of trade statistics. Yet, this has little impact on this analysis for two reasons. First, export data are more reliable than import data; the latter are particularly poor given the exponential increase in private importers and the notorious absence of recording of these imports by customs officials. The bulk of exports originated in SOEs which continued their practice of reporting export transactions to state agencies. Second, firms have an incentive to underreport exports because they are taxed. Since the objective of this analysis is to identify the most successful export performers, neither the first nor the second factor influences the results significantly.

revolution, driven by chemical and steel industries. Excluding textiles and most non-metallic mineral manufactures, they were high on central planners' investment priorities in the 1960s and to a lesser extent in the early 1970s. Capital equipment is not on the list but the transport equipment industry--mainly thanks to shipbuilding--had a significant share. Ironically, the shipbuilding industry, which the communist government wanted to close for allegedly economic reasons, succeeded in increasing its exports by almost 50% in both 1990 and 1991, and accounted for around 10% of foreign currency earnings of the "successful" group.

Table 2: Polish Manufactured Products Exports to the EC in 1990 and 1991 and their Relative Factor Intensities (FI).

FI	SITC Group	Description: Division. (group heading)	Rate of Growth in the 1990-91. (in percent)	Value of Exports (1991) (US $ million)
TI	512	Organic Chemicals (alcohols and phenols)	53.4	72.4
TI	523	Inorganic Chemicals (organic and inorganic compounds of precious metals)	42.8	65.9
TI	562	Fertilizers, manufactures (mineral or chemical)	165.3	125.0
TI	598	Chemical Materials and Products (miscellaneous)	40.3	10.5
HC	641	Paper and Articles of Paper Pulp (paper/paperboard)	40.5	49.6
HC	642	(paper/paper board cut to size or shape)	47.1	10.5
UL	651	Textile Yarn and Fabrics (textile yarn)	46.4	15.3
NR	661	Non-Metallic Mineral Manufactures (lime, cement, etc.)	76.6	55.5
NR	663	(mineral manufactures)	134.0	18.6
UL	664	(glass)	45.8	25.4
UL	665	(glassware)	81.1	55.2
UL	666	(pottery)	67.2	20.4
NR	671	Iron and Steel (pig iron, sponge iron, etc.)	92.5	18.3
HC	672	(ingots and other primary forms)	55.5	152.6
HC	673	(iron and steel bars, rods, etc.)	89.9	264.0
HC	676	(rails and railway truck construction materials)	151.7	17.2
HC	678	(tubes, pipes, and fittings)	81.9	32.8
HC	679	(iron and steel castings)	52.4	23.6
HC	691	Manufactures of Metals (structures)	67.6	83.9
HC	692	(metal containers for storage or transport)	73.0	11.0
HC	697	(household equip. of base metal)	53.8	22.6
TI	728	Machinery and Equipment (machine-tools)	40.0	92.1
TI	741	Industrial Machinery (heating and cooling equip.)	44.9	16.6
TI	743	(pumps and compressors)	75.2	31.6
TI	744	(mechanical handling equip. and parts)	47.1	27.4
HC	775	Household electrical and non-electrical equipment (laundry equip.)	51.9	57.4
HC	791	Transport Equipment (railway vehicles)	70.2	13.8
UL	793	(ships, boats)	48.8	172.3
UL	841	Clothing (outer garments of textile fabrics)	58.0	151.4
		TOTAL EXPORTS (US$ million)		1,729.2

Note: FI-relative factor intensities; TI - technology-intensive products; HC - human capital-intensive products; NR - natural resource-intensive products; and UL - unskilled labor-intensive products.

Source: Derived from data compiled from official Polish sources by Marczewski (1992).

II.3. Changes in Relative Factor Intensities of Exports to the West

Was there a discernible shift in Poland's revealed comparative advantage in the 1990-91 period as compared with the 1980s? According to the Heckscher-Ohlin Theorem, commodity trade patterns reflect differences in comparative advantage as determined by different factor endowments among countries. A country tends to export those goods which use factors in relative abundance--an outcome of a competitive market mechanism efficiently allocating resources. Exploring a full causal chain linking factor endowments, comparative advantage and trade patterns is not relevant for this discussion. The question germane here concerns broad changes in relative factor intensities as revealed in their exports to the West.

To test the Heckscher-Ohlin Theorem, Krause (1988:91-95) breaks commodity groups as classified in the SITC into four groups reflecting their distinct relative factor intensities. These groups are: natural resource-intensive products; unskilled labor-intensive products; technology-intensive products; and, human capital-intensive products.[7] The first two groups represent lines of production characterized by low value added, high natural resource-intensiveness and simple technologies. They account for a dominant share of exports of countries at the lower end of the industrial pecking order.[8] While the line dividing the technology- and capital-intensive groups is fuzzy, they both contain products requiring more sophisticated inputs than found in the first two groups.

The analysis of the weights of these groups in Polish exports proceeds in two steps. First, we shall examine the factor content of "successful" manufactures in EC markets as compiled in Table 2. Second, we survey the changes in relative factor intensities of total exports disaggregated into four groups and assess the trends in Poland's revealed comparative advantage in Western markets (see Table 3).

---

[7] The first group consists of food, beverages, crude materials, mineral fuels, animal and vegetable oils, leather, plywood, mineral manufactures, diamonds and non-ferrous metals. The second group, representing commodities with the lowest value added per worker, includes textiles, garments, furniture, glass, etc. The third group of technology-intensive products are goods with the highest ratios of R&D (Research and Development) expenditures to value added, whereas the human-capital-intensive group contains goods with the lowest ratios of R&D expenditures to value added. The third group includes chemicals (plastics, fertilizers, etc.), some capital equipment, telecommunications equipment, medical, scientific, and measuring equipment, and photographic supplies. The fourth group includes such goods as paints, rubber, paper, TV and radio sets, etc.

[8] For an extensive discussion of links between level of development and factor content of exports, see Balassa (1978) and Yeats (1989).

Contrary to popular perception, the factor content of manufactured products which registered the highest increase in exports to the West was not biased in favor of unskilled labor or natural resource-intensive products and their factor intensity did not change significantly between 1989 and 1991. The first column of Table 2 identifies product groups by relative factor intensities. Products responsible for the largest share of exports listed in Table 2 are human capital-intensive goods (12 product categories). They generated export revenues of $739 million, accounting for 47% of exports of the "successful" group. The second largest contribution came from technology-intensive products (9 product categories)--with $458 million in exports. They accounted for 29% of the total in Table 2. Hence, the two groups at the higher end of the value added spectrum accounted for around 76% of exports with above-average performance. Their share in the increase in total exports of products identified in Table 2 between 1989 and 1991 was roughly the same which suggests that within the "above-average-expansion" group there was no major shift in relative factor intensities.[9]

Products typical of a low level of industrial development accounted for the remaining 24% of exports. The unskilled labor-intensive group (5 product categories) accounted for 18%, and the value of their exports was $289 million. The value of exports of products belonging to the natural resource-intensive group (3 product categories) was $92 million. Thus, among the industrial sectors setting the pace for export expansion in 1990 and 1991, human 1capital- and technology-intensive products played a dominant role, and--as we shall see below--the latter was the component changing more rapidly in the export commodity composition in 1991.

Given Poland's relatively ample endowment in some non-renewable natural resources and its moderate climate favoring agriculture, the share of natural resource-intensive products in total exports--as opposed to a limited sample of manufactures exports--was significantly larger. The Polish export structure became less human capital- and technology-intensive in the 1980s. Although the share of the technology-intensive group in Polish exports increased, its EC-10 (European Community excluding Greece and Portugal) market share remained constant and

---

[9] The total increase of exports between 1989 and 1991 was US$1,020.4 million. The value of exports of human capital-intensive products in 1991 was $477.2 million higher than in 1989, of technology-intensive $287.7 million higher, of unskilled labor-intensive $167.6 million higher, and of natural resource-intensive $87.9 million higher. Their shares were 46.8%, 28.2%, 16.4%, and 8.6% respectively.

the RCI (revealed comparative index[10]) fell slightly (see Table 3). The share of products characterized by high human capital input fell in both Polish exports and EC-10 imports. Polish exporters outperformed other suppliers only in low value added production, demonstrating a significant improvement in "revealed" comparative advantage in natural resource- and unskilled labor-intensive products.

As can be seen from Table 3, neither in the 1980s nor in the 1990-91 period did the factor content of exports move towards products requiring highly skilled labor and technological sophistication. The share of unskilled labor-intensive products in Polish exports significantly increased in both the 1980s and the 1990-91 period: their share rose from an average of 16% in the 1984-89 period to 21% in the 1990-91 period. Part of this increase could be attributed to changes in relative prices in favor of manufactures with the fall in the prices of raw materials and energy din the 1980s. However, a more adequate explanation of the increased weight of unskilled-labor intensive products is that the capital stock was rapidly deteriorating and there was a shift towards natural resource- and unskilled labor-intensive products. At the same time there was a decline in the competitiveness of the Polish economy in products at the higher end of the value-added spectrum. The "high-technology content" of manufactures in the 1980s was lower than in the 1970s (Poznanski, 1988:46-52).[11] Therefore, the export push could only come from traditional sectors characterized by high capital and unskilled labor content. It could not come from sophisticated engineering products, because their production was not well developed.

Viewed through the lenses of relative factor intensity and aggregate comparative advantage indexes of Table 3, some developments in the 1990-91 period were a continuation of trends observed in the 1980s while others marked at least a temporary reversal of trends. On the one hand, the Polish export structure continued to move towards unskilled labor-intensive products: their share and competitive position rose as revealed in the increase of their EC-10 market share and their share in Polish exports. Their share in both Polish exports and EC-10 imports

---

[10] A country's "revealed" comparative advantage in a product "j" is defined as the ratio of the share of "j" in the country's exports to the share of the product "j" in world trade (see Balassa, 1965). A value for this index below unity indicates a comparative disadvantage. If the index takes a value greater than unity, the country is considered to have a "revealed" comparative advantage in the product.

[11] The CMEA exported mainly raw materials and low-processed goods to the non-socialist world. They accounted for about 70 percent of its exports in the 1980s. The share of high technology products in exports to the West, for example, fell from 1.2 percent in 1980 to 0.6 percent in 1986; at the same this share in exports of the Third World increased from 9.8 percent to 13.2 percent (Zycie Gospodarcze, Warsaw, No. 35, 1988)

recorded the largest increase in 1991, rising from 19% in 1990 to 23% in 1991, and the EC-10 market share increased from 0.77% to 1.03%. Similarly, despite the shift in Poland's commodity composition towards human capital-intensive products and the increase in the share of EC-10 markets for this product group, the shift was too small to produce a significant change in Poland's competitive position in these markets. On the other hand, in defiance of the trends in the 1980s, technology-intensive products doubled their share in EC-10 markets from 0.15% in 1989 to 0.27% in 1990, and to 0.29% in 1991.

Table 3: The Composition of Polish Exports to the EC-10 According to Factor Intensities and Revealed Comparative Advantage Indexes, Averages for the 1980-83, 1984-89, and 1990-91 Periods.

	Composition of Polish Exports to the EC-10			Revealed Comparative Advantage Indexes		
Relative Factor-Intensity Groups	1980-83	1984-89	1990-91	1980-83	1984-89	1990-91
	(in percent)					
Natural Resource-Intensive	67.3	62.7	50.8	1.38	1.68	1.65
Unskilled Labor-Intensive	12.7	16.4	20.7	1.28	1.44	1.62
Technology-Intensive	7.7	8.8	15.3	0.35	0.31	0.50
Human Capital-Intensive	12.2	12.0	13.2	0.65	0.53	0.51
Memorandum: Shares of Imports from Poland in Total EC-10 Imports						
	1980-83	1984-89	1990-91			
	(in percent)					
Natural Resource-Intensive	0.6	0.7	0.9			
Unskilled Labor-Intensive	0.5	0.6	0.9			
Technology-Intensive	0.1	0.1	0.3			
Human Capital-Intensive	0.3	0.2	0.3			

Source: As in Table 1.

Too short a period of time has elapsed to make any firm statements as to whether this development presages a movement up the technological ladder in Polish exports to the West. The comparison of 1991 with 1990 points to a fall in the competitiveness of exporters of technology-intensive products. Since the technology-intensive group in Polish exports consisted mainly of traditional labor- and energy-intensive products, it is likely that some of them lost their competitive edge once prices of energy were no longer subsidized in 1991.

Given the relatively high quality and degree of scientific education in Poland, there is an inconsistency between Poland's endowment in human capital and the move toward unsophisticated labor-intensive products in its exports. Hamilton and Winters (1992) show a positive correlation between education in Poland (and in other Central European countries) and comparative advantage in sophisticated engineering goods which, however, is yet to be revealed in its exports to the West. Whether this dissonance is only a transitional phenomenon, the legacy of the

earlier misallocation of resources, will depend on whether private investors are able to exploit this potential comparative advantage and whether government creates a friendly environment for export-oriented activities.

III. THE COLLAPSE OF EXTERNAL LINKS DISTORTING TRADE PATTERNS: THE FSU AND THE CMEA

The export expansion to the West coincided with the demise of the Soviet-dominated CMEA and the emergence of Poland's new international political status as an ally of the West. While the latter improved Poland's access to Western markets, though only to a small degree during the period under discussion, the former had an immediate impact on Polish commercial relations in 1990 and 1991. The Soviet market which provided an easy outlet for sectors developed specifically to meet its requirements--as a rule much less exacting than elsewhere--has almost disappeared.[12] Because of the contraction in Soviet import demand and the gradual shift to convertible currencies in their trade transactions in the late 1980s and in the 1990-91 period, Polish exporters had already been losing preferential access to Soviet markets. By 1991, when the full switch to hard currency occurred, they had to compete in former CMEA markets on the same footing as other suppliers. This put an end to the dual external environment for Polish trade activity; one subject to market forces and another nurtured by preferential intra-CMEA arrangements. The former comprised the so-called "hard goods," while as to the latter it was suspected that most manufactured goods were "soft" products unmarketable in the West because of high costs and low quality. This section addresses two questions: what was the extent of reorientation of Polish exports from the CMEA to the West?; and, what was the extent of export diversion away from the CMEA?

Although the demise of the CMEA has inflicted a heavy cost on the Polish economy,[13] its impact was less damaging than for other CMEA countries because of a lower dependence on the CMEA. Poland's dependence on Soviet and other CMEA markets had decreased well before the demise of the FSU. A reorientation of Poland's

---

[12] The Soviet Union accounted for around 60% of Polish trade with the CMEA in 1989 (Schrenk, 1992:221).

[13] The shrinking supply and demand of the FSU and the shift to world prices resulted in a dramatic worsening of the terms-of-trade, estimated at between 20% and 40% (Oblath and Tarr, 1992), and in undercutting economic viability of sectors nurtured by CMEA preferential agreements. According to an estimate quoted by Blejer and Gelb (1992:3), the terms-of-trade loss reduced the GDP of Poland by 4%.

trade was already underway in the 1980s. Between 1970 and 1990, the CMEA share fell from 60% to 39%.[14]

Yet the reorientation of Polish trade away from the CMEA during the first two years of the transformation program was formidable; however, it was mainly due to the expansion of trade with the OECD rather than to the collapse of import demand in the CMEA. The share of the former CMEA in Poland's exports (in current prices) fell from 49% in 1985 to 16.9% in 1991, with the FSU accounting for 11% of Polish exports, and Czecho-Slovakia--the second largest trading partner in the CMEA--for 4.7%. The share of the EC rose from 23% of the total in 1985 to 47.2% in 1990 and to 55.6% in 1991. However, the fall in exports to the CMEA in 1991 was much smaller than the increase in the value of exports to the West.[15] Table 4 presents annual incremental changes in the value of Poland's exports in 1990 and 1991 as well as during the period from 1988 to 1991 (the period during which the value of intra-CMEA exports was falling) to the FSU, other European CMEA members, and OECD countries (EC, EFTA, North America and Japan). Three points are worth noting. First, the pattern of change in trade with "small" CMEA members was different than with the Soviet Union, especially in 1991.[16] Following the dissolution of the TR payments mechanism in January 1991, exports to the Soviet Union increased and to the CMEA-4 (Bulgaria, Czecho-Slovakia, Hungary, and Romania) collapsed. Second, the increase in exports to OECD markets more than offset the fall in exports to the CMEA-4 markets. Third, the increase in Polish exports to the FSU in both 1990 and 1991 followed the earlier expansion in 1988 and 1989. The increase between 1987 and 1991 was slightly above US $1 billion. Since Soviet exports had been falling since 1988, Poland ran significant trade surpluses, apparently needed to pay off its debt to the Soviet Union.

It is tempting to draw the conclusion that thanks to Western trade, Polish enterprises, mainly state-owned,

---

[14] The declining international competitiveness forced Poland to offer industrial products at more heavily discounted prices, which in turn implied a substantial devaluation of the transferable ruble (TR) relative to the US dollar. The revalued trade figures suggest a long-term trend of declining shares of the CMEA in Polish total exports. For revalued estimates of trade of the CMEA and the FSU, see Table 4.3 in Pohl and Sorsa (1992).

[15] Having recalculated CMEA trade data using the uniform (Hungarian) ruble/US$ exchange rate, Neal (1992) concludes that not only Poland but also Czechoslovakia and Hungary "..fully offset lost CMEA trade through expanded exports to western industrial countries."

[16] Polish exports to the CMEA-4 did not fall in 1990, the last year of the existence of soft payments arrangements.

could more than compensate for losses in CMEA-4 markets in 1990 and 1991. This conclusion is not necessarily correct, since not all of the exports to the CMEA-4 could have been redirected to the West and the import demand of the FSU shifted to "harder" goods. While more research is needed at the firm level, some preliminary observations can be derived from comparing changes in Poland's exports before and after an almost complete switch to hard currency settlements in intra-CMEA trade occurred in 1991.

Table 4: Changing Polish Export Orientation from the CMEA to the OECD, 1988 to 1991.

	1990	1991	Total
	(US $million)		1988-91
(Former) Soviet Union	78	335	1081
Other European members of the CMEA-4	498	-834	-67
OECD countries	2557	1110	4845
TOTAL	3133	611	5859
Memorandum: FSU: Balance of Trade	-1282	-1410	

Source: IMF, Direction of Trade Statistics Yearbook, 1992

The change in the composition of exports by area can be used as a proxy measure depicting the extent of the switch in Poland following the dramatic opening of the economy in January 1990. The composition of Polish exports to the CMEA and to the EC was traditionally strongly dissimilar: the former having a large component of capital equipment and electro-engineering, whereas in the latter food, raw materials and energy dominated. The former were regarded as soft goods which because of low quality could not be sold in markets other than the CMEA, the latter were hard goods, imposing hard currency opportunity costs for the CMEA exporters. Table 5 contrasts the composition of Polish exports to the CMEA and the EC broken down to farm products, energy, primary and intermediate manufactured products, and capital equipment. It gives indexes of similarity between the two structures in 1985, 1989, 1990 and 1991.[17] The index assumes the value of zero if the two structures are entirely different, and the value of one when they are the same. There has been a convergence in the composition

[17] The index of similarity equals $1-\sum_{i=1}^{n}(e_i^c-e_i^o)^2$, where: e^c denotes the share of a product category "i" in exports to the CMEA; e^o – the share of a product category "i" in exports to the OECD.

of export baskets, as measured by this index; similarity increased steadily between 1985 and 1990, and then jumped highly in 1991. The general conclusion which can be drawn from examining the data in Table 6 is that the product structure of industrial exports to the former CMEA countries has moved rather dramatically toward the EC structure.

Table 5: Composition of Polish Exports to the CMEA and the EC in 1985, 1989, 1990 and 1991

	1985		1989		1990		1991	
Industries	EC	CMEA	EC	CMEA	EC	CMEA	EC	CMEA
				(in percent)				
Electro-engineering	11.3	63.8	20.7	71.0	21.6	67.7	22.0	45.3
Metallurgy	15.1	7.3	21.0	4.0	23.1	6.1	24.3	6.5
Chemical	11.8	9.5	11.2	11.6	13.3	11.1	10.2	21.6
Wood and Paper	4.2	0.7	6.5	0.7	6.3	0.5	11.1	0.7
Light	7.1	5.5	8.0	3.3	8.0	6.1	8.7	5.0
Processed food	11.8	2.0	19.9	1.7	15.1	2.5	14.3	7.2
Fuels and Energy	38.7	11.3	12.7	7.9	12.6	6.1	9.4	13.7
Memo: Index of Similarity		0.6321		0.6766		0.7345		[illegible]

Source: Calculated from data in The State of the Economy: Including Forecasts for the Future: First Half of 1992: A Brief Summary, Central Planning Office, Warsaw 1992, Table 20.

Taking into account that the transferrable ruble almost totally disappeared from commercial transactions in 1991 and that the former-CMEA exporters lost preferential access to each other's markets, the increased similarity of the two export structures can be explained as follows. Faced with market constraints, importers in the former CMEA countries slashed soft goods in favor of hard goods, independently of their origin. They were not willing to spend scarce foreign exchange on goods produced by their former trading partners from the Soviet bloc, unless they were competitive with products offered on international markets. In 1991 the change in the structure of import demand was exacerbated by a steep decline in aggregate output and investment activity in all post-communist countries. Therefore, some portion of the decline cannot be attributable to the lower quality of products from the CMEA, but to the fall in import demand for capital goods and other intermediate products. Given the increase in the share of the electro-engineering sector in exports to the EC in the 1985-91 period, some portion of the decline of this sector in exports to the CMEA can be attributed to the reorientation away from the CMEA.

Rodrick (1992:18), having analyzed the changes in shares for both Hungarian and Polish exports between

1985 and 1990, draws a conclusion that "... there is no evidence that the overall increase in trade with the West was fueled by redirecting Eastern sales to the West, or indeed that the latter played any role at all in the former." However, the available evidence for 1991 suggests that some portion of the export increase to the West was the result of diverting products no longer demanded by former CMEA trading partners. Indicative of the diversion is that the industrial product structure of Polish exports to the EC shifted more toward that of the CMEA, rather than the other way around. As was pointed out earlier, among manufactures which contributed most to the export push were products of the electro-engineering sector.

Between 1985 and 1990 the combined value of exports of power generating equipment (the main product of the electro-engineering sector representative of the soft goods) to the FSU and the EC slightly increased from $864 million to $884 million, with the EC accounting for a growing share of these exports. The increase of EC imports of power generating equipment (SITC. 71) from Poland was very substantial. They rose at an average rate of around 20% in the 1986-89 period, and increased by 60% in 1990 alone.[18] Exports to the FSU stagnated during this period. The average value of exports to the FSU in the 1985-89 period was $662 million, while that to the EC was $157 million. The difference between the value of exports in 1990 and the average for the 1985-89 period offers some insights as the extent of the diversion: in 1990 the value of exports to the FSU fell short by $139 million, while that to the EC was $207 million higher than the average in the 1985-89 period. Hence, the loss of the Soviet market for power generating equipment was more than offset by increased exports to the EC.[19]

This observation is confirmed by the following: combination of expanding exports and falling domestic demand resulted in a significant increase in the share of exports in total output of industrial sectors with the exception of electro-engineering, a traditional supplier to the FSU. Its export share fell from 29% in 1989 to 26% in 1991. Moreover, during this time the share of this sector in total industrial exports declined from 38% to 22% because of falling exports to the CMEA: its share in exports to this region fell precipitously from 62% in 1989 to

---

[18] All data taken from the United Nations COMTRADE data base, as reported by Poland. As of November 1992, Poland had not supplied data on its foreign trade in 1991.

[19] One important caveat should be made: given the high level of aggregation, this analysis cannot suggest that the same products were simply shifted from the CMEA to the West or that they were manufactured by the same producers.

38% in 1991. At the same time, however, its contribution to exports to the EC remained at around 18% in 1989 and 1991, thus keeping the same rate of growth in value terms as total industrial exports to the EC. This expansion would not have been possible without some diversion of sales from the CMEA to the EC.

A striking foreign trade-related feature of the transformation program was the increase in openness of sectors previously oriented toward domestic markets. The export orientation of sectors which had neither been nurtured by intra-CMEA specialization schemes nor exposed to Western markets increased significantly between 1989 and 1991. For instance, the export share of total sales of such sectors as wood-paper rose from 11% in 1989 to 32% in 1991, and of light industry from 9% to 22% (CPO, 1992:46).[20] The shares of these industries in exports to the EC increased significantly during this period (see Table 5).

An interesting point coming out of this analysis is that the Polish authorities were correct to ignore the advice of Western experts to establish the East European Payment Union to promote trade among the CMEA.[21] The advice failed to take into account salient characteristics of intra-CMEA trade and the impact of the shift from a demand-constrained to a supply-constrained economy. First, the proponents of this scheme acted on the premise that the CMEA had been successful in integrating its member-countries' economies. The much lower than anticipated impact that the dissolution of the CMEA had on the Polish economy in 1991 supports the idea that the economic dependence level was not as considerable as some earlier analyses had suggested. The FSU's various attempts to impose supra-national planning and to increase intra-industry integration within the CMEA failed.

Second, the dramatic change in the commodity composition of Polish exports to the CMEA in 1991 was mainly the result of the collapse of exports of soft goods. Extending the CMEA arrangements under the guise of an East European Payments Union would have negatively affected welfare of all its participants. This trade would have had to be subsidized simply because domestic production costs exceeded world prices. Thus, the introduction

---

[20] Between 1989 and 1991 the volume of total sales of the wood-paper and light industries declined by around 30% and 40% respectively. Had their export shares remained at 1988 levels, sales of the wood-paper sector would have fallen by an additional 14.3 percentage points and light industry sales by 15.0 percentage points. Thus, it appears the fall in domestic demand accounted for 51 percent of the increased export orientation of the wood-paper sector and 32 percent of light industry's reorientation.

[21] The most vocal were analysts from the United Nations Economic Commission for Europe (ECE-1990), Brabant (1991), and Havrylyshyn and Williamson (1990).

of an East European Payments Union would have unnecessarily weakened incentives to restructure trade in line with actual comparative advantage.

IV. IS THE EXPORT EXPANSION TO THE WEST SUSTAINABLE?

There are still too many blank spots to be able give an unequivocal assessment as to whether the improvement in export performance characteristic of the first two years of the transformation program in Poland is a short-term phenomenon. Externally, its sustainability hinges upon the reduction of trade barriers in the West as well as growth of Western import demand. Domestically, sustainability will be affected by the pace at which an environment enhancing growth, macroeconomic stability and microeconomic efficiency is reached.

Barring unexpected domestic and external shocks, access to Western markets in the immediate future will considerably improve in comparison to the 1990-91 period. The change in the international political status of Poland as a result of the ending of communism did not have a significant impact on its export performance in 1990 and 1991. Poland had GSP status in the EC since 1989. Moreover, most EC import quotas were not binding. Implementation of some measures helped, however, including the extension of GSP (Generalized System of Preferences) treatment by Western governments, the restoration of MFN (Most Favored Nation) status in the United States, the increase of textile and clothing quotas by the EC, and the elimination and suspension of some quantitative restrictions by the EC to reward the Polish government for the introduction of the Economic Transformation Program on January 1, 1990.[22] These measures did not include agriculture and steel--products in which Poland had comparative advantage.

Yet all these measures fade into insignificance when seen against the future improvement in access to West European markets thanks to the European Association Agreement signed between Poland and the EC in December 1991 and to the Gothenburg Declarations promising the establishment of a free trade area between Poland and the EFTA, signed in June 1990. The free trade agreement with the EFTA was signed in November 1992. It is broadly similar to the trade section of the "Europe Agreement."

---

[22] On 1 January 1990, the EC eliminated all quantitative restrictions that were not in conformity with Article XII of the GATT, as applied to a Trading State (i.e., a centrally planned economy). Around 12% of Polish exports in 1989 were affected by these restrictions (Moebius and Schumacher, 1990, quoted in OECD 1992).

Full membership in the EC, as envisaged in the "Europe Agreement," should be on the top of the agenda of the Polish government. Integration with the EC will provide guidance to institutional transformation and shield Poland to some extent from adverse developments in its other international trade. While borrowing institutions from a different environment is not always productive, the necessity of matching solutions concerning the organization of the banking sector, development of fiscal policy instruments, setting of industrial standards, etc. sets a clear path to be followed.

The provisions of the European Association Agreement are to be phased in over the next 10 years. As the free trade provisions of the "Europe Agreement" became effective on March 1, 1992, Poland has obtained duty-free access to EC markets for a wide range of manufactures. Thanks to the Agreement, exports of more than 50% of Polish manufactured goods to the EC are no longer subject to trade barriers (Marczewski 1992:8). The provisions of the European Agreement directly relevant to trade include also the removal of all trade barriers by 2002, and the lifting of customs barriers within two to five years.

Hence, in the long term, the "Europe Agreement" will significantly expand the access of Polish exporters to the EC, its largest trading partner. Another potential benefit of the Agreement with foreign trade impact is that the attractiveness of Poland to foreign investors is likely to increase. Thus, Polish industries should also profit from the financial resources and know-how of Western firms. As a result, the export basket is likely to expand and become more diversified.

In the short term, the expansion of Polish exports critically depends on the growth of import demand in the EC-10, especially in Germany, which replaced the FSU as Poland's largest trading partner in 1990. In 1991 the main engine of Polish export growth was Germany.[23] Had it not been for expanding German markets for Polish products, it is rather unlikely that the 1990 export upswing would have extended into 1991. Its exports in current prices to the EFTA, North America and Japan slightly contracted, to other EC-9 countries stagnated (increased by a mere $7 million in current prices), but they grew by more than US $1 billion to Germany. Therefore, a slow down in economic growth in Germany is likely to have serious consequences for Polish exports.

---

[23] Germany's share in Polish total exports increased from 14% in 1989 to 25% in 1990 and to 29% in 1991 (MWGZ-1992:8). Excluding Germany, EC demand for Polish products stagnated in 1991; thus, Germany's share in Polish exports to the EC-10 increased from around 50% in 1990 to 58% in 1991.

From the view-point of domestic developments, the export expansion was initially propelled by the swift movement to a new set of institutional arrangements, revamping the existing incentives structures. The virtual termination of the supply-constrained economy in 1991, the result of decontrolling prices and restoring macroeconomic fiscal and monetary controls, combined with the introduction of current account convertibility of the Polish *zloty*, produced a strong export stimulus not only to the West but also to the CMEA just before its collapse.[24] Faced with the collapse of domestic consumer demand, devaluation, and the elimination of government subsidies, export expansion became one of the few survival options available to SOEs. During the first year of the transformation program, the rapid appreciation of the *zloty* (which followed the devaluation regarded by many analysts as excessive[25]) had little impact on the propensity of Polish SOEs to export. Despite the appreciation, exports continued to increase through 1990, suggesting that exporters were relatively immune to the changes in exchange rate policy. With the hardening of the budget constraint and the depletion of reserves accumulated under the administrative economic system,[26] their capacity to compete successfully in international markets may be jeopardized.

Although the increase in exports to OECD markets was quite dramatic, this does not necessarily imply a dramatic change in competitiveness and export potential of the Polish economy. Fornasari and Grilli (1992:12) rightly warn that "... the positive results achieved in restoring external balance [..] should not be interpreted as successful instances of production and trade reorientation following the external shocks of 1990-91..." Poland's industrial base, inherited from central planning, has remained unchanged and will not be transformed unless a strong upward trend in output and capital formation takes place. One may also suspect that in many instances export proceeds do not cover full production costs, representing "distress sales." In addition, they may be *de facto* subsidized by intra-enterprise credits and "bad" loans from the state-owned banks. Thus, their competitive edge

---

[24] In contrast to otherwise stagnating intra-CMEA trade, Poland ran trade surpluses with most of its CMEA-trading partners in 1991 (See Kaminski, 1991).

[25] The new rate, introduced on January 1, 1990, represented an almost 50% devaluation of the Polish currency vis-a-vis the US dollar. It was criticized as excessive (see, for instance, Olechowski, 1991; Polanski, 1992)

[26] For their discussion, see Winiecki, 1990.

may be short-lived.

Although the Polish economy continued its export-orientation in early 1992,[27] powerful supply barriers reducing competitiveness of exporters of manufactures may soon surface for at least two interrelated reasons. First, the impressive export expansion of technology/capital-intensive goods, a significant portion of them diverted from the FSU and other CMEA markets, is likely to be constrained by the existing production capacity of plants which cannot be increased quickly. Second, taking into account that the increase in domestic costs more rapid than the increase in export earnings because of the *zloty* appreciation in 1990 and 1991, exporters lack resources to modernize their production equipment. This probably was also the case in 1991, when investment fell while consumption rose despite falling output.

This pessimistic outcome is not inevitable and may be controlled to some extent by appropriate government policies. The export upswing took place in an institutional environment whose full pro-export potential is yet to be tapped. There are at least two institutional constraints which may be overcome. The first relates to the dominance of the state-owned sector and its transformation. The second is the absence of organizations providing information and credits for export-oriented activities.

During the initial stage of the transformation, the export push came from SOEs with organizational structures inherited from central planning. When faced with the domestic demand constraint, the SOEs displayed an unexpected capacity to compete in international markets. However, without a clear delineation of their property rights their competitiveness may quickly evaporate. The ambiguities in the status of many SOEs do not provide appropriate incentive for the shift of resources to the export sector. And without investment there can be no modernization of goods for export markets. In addition, the SOEs' organizational structures were ill-adapted to market conditions. Privatization of the SOEs, usually preceded by organizational restructuring to make state-owned assets more attractive to potential investors, is likely to increase their international competitiveness. Moreover, the move from labor-managed SOEs to privately-owned firms would assure that export proceeds would be invested and not consumed by wage increases.

---

[27] During the first six months of 1992, the third year of the transformation program, Polish exports in current prices increased by 12.5% (CPO 1992:1).

While the absence of an export-promoting infrastructure was not particularly relevant for the large SOEs with an earlier presence in Western markets, its lack may hamper exports of newly-established private firms. The problem is that they are usually small and seldom have information capabilities for identifying export opportunities. In addition, since they lack capital, they tend to trade with geographically close countries, as the recent experience of small Polish firms illustrate. Private small and medium-sized firms engaged in exports mainly to geographically adjacent markets--to Germany and other EC countries. (see CPO-1992 and MWGZ-1992) Their share in exports, though increasing, remains lower that their share in aggregate output. In brief, therefore, privatization and organizational restructuring of SOEs combined with the development of infrastructure facilitating access to foreign markets may provide a strong stimulus to exports.

V. CONCLUSION

Poland has made significant strides in integrating into the world economy. A strategic decision of the first non-communist government to move quickly to an open, market economy had a dramatic impact on Poland's external economic links. There was a sharp upswing in exports to the West, in particular to the EC (and specifically to Germany), which was triggered by the domestic economic transformation and the collapse of the CMEA. The role of the former appears to have been of greater significance. The compression of domestic demand, resulting from the liberalization of domestic prices and the restrictive fiscal and monetary policies adopted, provided a strong export stimulus. The liberalization of the foreign trade regime and the introduction of convertibility in domestic currency for current account transactions enabled private and state-owned firms to become actively involved in foreign trade. The introduction of currency convertibility for current account transactions, combined with a very deep devaluation of the *zloty*, significantly increased the profitability of exports, especially in 1990. Hence, the measures introduced as a part of the stabilization-cum-transformation program created a strong pro-export environment.

That the economy, dominated by SOEs, was able to respond to the new incentives was the result of changes in the economic system implemented in the 1980s. In retrospect, the ability of the SOEs to respond to the new incentives was clearly underrated. The various reform measures introduced in the 1980s turned out to provide

fertile ground for a quick move from a supply- to a demand-constrained economy, whereas they had a rather limited impact in improving micro-economic efficiency under the earlier administrative economic system. The changes significantly increased the autonomy of SOEs in conducting their domestic and foreign transactions. The extension of licenses to other than centralized foreign trade organizations--the traditional guardians of the state monopoly over foreign trade--led to an increase in the number of SOEs directly responsible for their exports.[28] The foreign currency retention schemes, allowing exporters to retain a portion of their hard currency earnings, contributed to the proliferation of marketing skills, as they could use foreign exchange receipts to purchase imports. For instance, around 50% of all imports were financed from this source in 1989 (Olechowski and Oles, 1991:157). The gradual dismantling of the state monopoly over foreign trade in the 1980s forced SOEs to develop contacts with Western customers and gain some expertise in marketing their products. As a recent World Bank study shows (Mueller, 1991), the driving force behind Poland's export expansion in the West were the SOEs with earlier exposure to Western clients. In the administrative institutional environment of the 1980s, however, these measures only exacerbated disequilibria and had a limited impact on export performance.

Another factor which clearly facilitated integration into the world economy in the 1990-91 period was the earlier progress made in the development of trade relations with the West. Despite membership in the CMEA, Poland has been a member of the GATT since 1967, and the foreign trade component of the stabilization-cum transformation program has proceeded within the GATT framework. Although Poland had been treated differently than market economies because its foreign trade activities were conducted through the plan, once foreign trade was liberalized, tariffs (which had already been in place) became the effective tool of commercial policy, like in other market economies. In the second half of the 1980s, the Polish communist government actively sought to establish closer relations with the EC. Following a series of negotiations accelerated by Solidarity's victory in the limitedly-free elections in June 1989, a co-operation agreement on commercial relations was signed. Finally, Poland's membership in the International Monetary Fund and in the World Bank since 1986 turned out to be of significant importance in the quick development of the stabilization program and obtaining external technical and financial

---

[28] Between 1982 and 1985, the number of SOEs empowered to conduct their foreign trade operations increased from 109 to 361. By the end of the 1980s, the state monopoly was terminated (Olechowski and Oles, 1991:156 and 158).

support for its implementation.

Contrary to expectations, the severance of links that used to bind the Polish economy with the CMEA and the FSU did not produce a catastrophic contraction in economic activity. Although the shift to world prices inflicted large terms-of-trade losses on the Polish economy, the contraction and change in the composition of CMEA import demand contributed in some degree to the export expansion in the West.

The existing dissonance between the factor content of Polish exports, increasingly skewed towards unskilled labor-intensive products, and the general level of skills and education should be a temporary phenomenon. Poland seems to have a potential comparative advantage in products requiring inputs of skilled labor. However, any temptation to provide direct incentives through tax concessions or other instruments distorting competitive markets should be disregarded at least for now, as scarce resources should be used to develop a financial sector supportive of markets and export-oriented activities as well as to remove ambiguities in the property rights status of SOEs.

REFERENCES

Balassa, B. (1978), "A Stages Approach to Comparative Advantage," in Economic Growth and Resources, I. Adelman, ed., vol. 4, MacMillan Press, London.

Balassa, B. (1965), "Trade Liberalization and 'Revealed' Comparative Advantage," The Manchester School of Economic and Social Studies, vol. 33, no. 2, May

Blejer, M. and A. Gelb (1992), "Persistent Economic Decline in Central and Eastern Europe. What are the Lessons?" Transition: The Newsletter about Reforming Economies, Vol. 3, No. 7, July-August, The World Bank, Washington D.C.

Brabant, J. (1991), A Central European Payments Union, Institute for East-West Security Studies, New York.

CPO 1992: The State of the Economy: Including Forecasts for the Future: First Half of 1992: A Brief Summary, Central Planning Office, Warsaw, July 1992

ECE-1990: Economic Survey of Europe in 1989-1990, New York: United Nations

Fornasari, F. and E.Grilli (1992), "The Integration of the Central and Eastern European Countries into the World Economy," paper presented at the IV Conference of the International Vienna Council, October

Hamilton, C.B. and L.A. Winters (1992), "Trade with Eastern Europe," Economic Policy, April

Havrylyshyn, O. and J. Williamson (1991), From Soviet disUnion to Eastern Economic Community, Institute for International Economics, Washington D.C.

Kaminski, B. (1991), "The Framework of Soviet-East Central European Economic Relations in the 1990s," in R.F. Staar, ed., The USSR and East Central Europe, St. Martin's Press, New York.

Kolodko, G. (1991), "Stabilizacja inflacji i rynkowa transformacja. Doswiadczenia Polski," (Stabilization of inflation and the market transformation. The Experience of Poland) in G. Kolodko, ed., Polityka finansowa, stabilizacja, transformacja (Fiscal and monetary policies, stabilization, transformation), Institute of Finance, Warsaw.

Krause, L.B. (1988), U.S. Economic Policy toward the Association of Southeast Nations. Meeting the Japanese Challenge, The Brookings Institution, Washington D.C.

Marczewski, K. (1992), "Poland's Export Performance in 1985-1991," July, The World Bank, Washington D.C., mimeo.

Moebius, U. and D. Schumacher (1990), DIW Wochen Bericht, 35/90, DIW, Berlin

Mueller, H. (1991), "Export Performance of Polish Enterprises during the Transition Process," December, The World Bank, Washington D.C. mimeo.

[MWGZ-1992] Handel zagraniczny w 1991 (Foreign trade in 1991), Ministry for Foreign Economic Cooperation, Warsaw.

[OECD, 1992] OECD Economic Surveys: Poland, OECD, Paris

Olechowski, A.(1991), "Discussion," in J.Williamson, ed., Currency Convertibility in Eastern Europe, The Institute for International Economics, Washington D.C.

Olechowski, A. and M. Oles (1991), "Poland," in J.Williamson, ed., Currency Convertibility in Eastern Europe, The Institute for International Economics, Washington D.C.

Pohl, G. and P. Sorsa (1992), European Integration and the Developing World, Geneva Office, The World Bank, mimeo,

Polanski, Z. (1992), "Exchange Rate Policies and Balance of Payments Strategies During The Transition from Communism: The Case of Poland," paper presented at the conference organized by Forshungsprojekt Transformation von Planwirtschaften in Geldwirtschaften, Berlin, 1-2 June

Poznanski, K. (1988), "The Competitiveness of Polish Industry and Indebtedness," P. Marer and W. Siwinski, eds., Creditworthiness and Reform in Poland, Bloomington, Indiana

Rodrick, D. (1992), "Foreign Trade in Eastern Europe's Transition: Early Results," NBER, mimeo.

Schrenk, M. (1992), "CMEA Trade and Payments: Conditions for Institutional Change," in B. Milanovic and A. Hillman, eds., The Transition from Socialism in Eastern Europe: Domestic Restructuring and Foreign Trade, The World Bank, Washington D.C.

Winiecki, J. (1990), "Post Soviet-Type Economies in Transition: What Have We Learned from the Polish Transition Programme in Its First Year?" Weltwirtschaftliches Archiv, Vol. 126.

Yeats, A.J. (1989), "Shifting Patterns of Comparative Advantage: Manufactured Exports of Developing Countries" Policy, Planning, and Research Working Papers, WPS 1989, March, Washington D.C.: The World Bank

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1123	Social Development is Economic Development	Nancy Birdsall	April 1993	S. Rothschild 37460
WPS1124	A New Database on Human Capital Stock: Sources, Methodology, and Results	Vikram Nehru Eric Swanson Ashutosh Dubey	April 1993	M. Coleridge-Taylor 33704
WPS1125	Industrial Development and the Environment in Mexico	Adriaan Ten Kate	April 1993	C. Jones 37699
WPS1126	The Costs and Benefits of Slovenian Independence	Milan Cvikl Evan Kraft Milan Vodopivec	April 1993	S. Moussa 39019
WPS1127	How International Economic Links Affect East Asia	Vikram Nehru	April 1993	M. Coleridge-Taylor 33704
WPS1128	The International Ocean Transport Industry in Crisis: Assessing the Reasons and Outlook	Hans Jürgen Peters	April 1993	J. Lucas-Walker 31078
WPS1129	How Policy Changes Affected Cocoa Sectors in Sub-Saharan African Countries	Jonathan R. Coleman Takamasa Akiyama Panos N. Varangis	April 1993	G. Ilogon 33732
WPS1130	Poverty and Policy	Michael Lipton Martin Ravallion	April 1993	P. Cook 33902
WPS1131	Prices and Protocols in Public Health Care	Jeffrey S. Hammer	April 1993	J. S. Yang 81418
WPS1132	An Analysis of Repressed Inflation in Three Transitional Economies	Andrew Feltenstein Jiming Ha	April 1993	E. Zamora 33706
WPS1133	Macroeconomic Framework for an Oil-Based Economy: The Case of Bahrain	Ibrahim Elbadawi Nader Majd	April 1993	A. Maranon 31450
WPS1134	Managing a Nonrenewable Resource: Savings and Exchange-Rate Policies in Bahrain	Ibrahim A. Elbadawi Nader Majd	April 1993	A. Maranon 31450
WPS1135	Inflation in Czechoslovakia, 1985-91	Zdenek Drabek Kamil Janacek Zdenek Tuma	May 1993	E. Zamora 33706
WPS1136	The Dynamic Behavior of Quota License Prices: Theory and Evidence from the Hong Kong Apparel Quotas	Kala Krishna Ling Hui Tan	May 1993	D. Gustafson 33714

Policy Research Working Paper Series

	Title	Author	Date	Contact for paper
WPS1137	Railway Reform in the Central and Eastern European Economies	Philip W. Blackshaw Louis S. Thompson	May 1993	TWUTD 31005
WPS1138	The Economic Impact of Military Expenditures	Daniel Landau	May 1993	C. Jones 37699
WPS1139	Should Sub-Saharan Africa Expand Cotton Exports?	Jonathan R. Coleman M. Elton Thigpen	May 1993	G. Ilogon 33732
WPS1140	How Retail Food Markets Responded to Price Liberalization in Russia after January 1992	Bruce Gardner Karen M. Brooks	May 1993	C. Spooner 32116
WPS1141	Foreign Direct Investment in a Macroeconomic Framework: Finance, Efficiency, Incentives, and Distortions	Maxwell J. Fry	May 1993	R. Vo 31047
WPS1142	Rent-Seeking Trade Policy: A Time-Series Approach	Martin Rama	May 1993	D. Ballantyne 37947
WPS1143	Tariff Rates, Tariff Revenue, and Tariff Reform: Some New Facts	Lant Pritchett Geeta Sethi	May 1993	M. Fernandez 33766
WPS1144	The Foreign Trade Dimension of the Market Transition in Poland: The Surprising Export Performance and Its Sustainability	Bartlomiej Kaminski	June 1993	P. Kokila 33716