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Prospects for Polish Foreign Trade:

Analysis and Recommendations

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Preface, April 1991

The following paper was completed in June 1990 and was written primarily as a policy paper for the Polish Ministry of Foreign Economic Relations. While revising this paper for publication, we faced a dilemma of how to update our earlier analysis, which rapidly became outdated due to the speed of changes taking place in Poland, the Soviet Union and the rest of Eastern Europe. After much thought, we decided against simply updating data in the paper, as we realized that it could destroy the logical cohesiveness of our original analyses and recommendations. Therefore we decided to leave the earlier work unaltered, to stand as a document of thought about the change process then underway. We thought it more appropriate to provide readers with an epilogue, elaborating on major developments within the last six months and evaluating changing prospects for Polish trade.

Since it is rare for a researcher in economic policy to have access to fully up-to-date figures, an element of speculative reasoning becomes an unavoidable part of this type of analysis. This was the case with our original paper and it is the case with the epilogue. Consequently, although the epilogue offers some further recommendations, it does not provide comprehensive solutions for issues discussed earlier. Indeed, we believe that in the rapidly changing environment in Eastern Europe, suggesting definitive solutions is not prudent. At the same time we hoped, and still hope, that this paper will serve not only as a stimulus for further thought and research on these issues but also as a potential aid to the formulation of trade policies in Poland.

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Introduction

As one of the key challenges facing the current Polish government in its efforts to reform the Polish economy is the readjustment and expansion of foreign trade, this paper will review and make recommendations for the potential restructuring of one of the major components of Polish trade, i.e., the trade between Poland and the CMEA (Council for Mutual Economic Assistance) countries, focusing mainly on the Soviet Union. This component of trade is important not only because of the size and value of bilateral trade flows, but also because of its composition, which over the last four decades led to considerable dependence on deliveries of specific inputs to Polish industrial production. These bilateral trade flows are therefore particularly important as Poland, and some other CMEA countries, are undergoing fundamental economic and political changes, and at a time when the Soviet Union finds itself in the midst of perhaps its greatest economic crisis since World War II. Given this context, this analysis will not attempt to devise the theoretically most beneficial model of trade for Poland but instead will offer recommendations for improving existing trade arrangements, particularly between Poland and the USSR, considering both the constraints and opportunities created by the current political and economic climate.

In devising recommendations, the following three questions guided the analysis:

- 1) Is restructuring of Polish-CMEA, and especially Polish-Soviet, trade necessary?
- 2) If so, how should existing trade arrangements be altered? and
- 3) What would be the optimal time frame for implementation of new trade policies, considering the current state of economic and legislative reforms?

To answer these questions, Polish macroeconomic data concerned with trade, the trade arrangements between Finland and the USSR, and existing legislation in Poland potentially affecting trade have been analyzed.

In particular, the macroeconomic importance of Polish-CMEA and Polish-Soviet trade was evaluated as a function of its percentage of GDP, value and composition of trade, and the impact on employment in Poland in each significant industrial sector. In assessing opportunities to restructure trade, attention was paid to the elasticity of demand in Poland for specific imports from the CMEA, to the significance of trade in repaying national debt, and to the possibilities of redirecting some exports earmarked for the CMEA to Western markets.

Finnish-Soviet trade has been selected and examined as a potential model for Polish trade as Poland becomes a market economy, since Finland seems historically to have balanced successfully its economic relations both with the planned and market economies. Finland was considered a good example for comparison due to certain similarities to Poland, such as its geographical proximity to the USSR, similar national security questions stemming from its common border with a superpower, total trade as a percentage of GDP (ca. 21% in 1987), and its composition of trade flows with the Soviet Union. Furthermore, Finnish-Soviet trade arrangements appeared to offer a model of potential benefit to Poland, since trading with the Soviet Union seems to have counteracted the cyclicity of Finland's trade with other market economies.

Subsequently, policies and legislation in Poland concerning taxation, ownership and control, means of privatization, opportunities to repatriate profits, and banking and credit terms have been assessed, as they are significant both for the scope of restructuring and the timing for implementation of new trade mechanisms.

Finally, the specific policy recommendations, although based on careful analyses as described above, contain a speculative element which is unavoidable in the rapidly changing political and economic environment. Because of this and wherever possible, risks to adopting the recommended

policy, as well as contingencies which would alter the specifics of the policy recommendation, have been presented.

Principles of CMEA Trade

Bilateral trade relations between the CMEA Six countries and the Soviet Union have attracted much attention from Western observers, and the majority of them have concluded that these countries, i.e., Poland, Czechoslovakia, Hungary, Romania, Bulgaria, and the former German Democratic Republic, profited from their trade with the USSR due to implicit Soviet subsidization. This argumentation is based on the assumption that the Soviet Union consciously subsidized Eastern European states by selling them raw materials and commodities at prices below prevailing world market prices (WMPs), and by buying machinery and manufactured goods from them at prices above prevailing WMPs (if respective trade flows were compared to what was available to the Soviet Union on world markets). This theory ignores, however, the political and economic reality within the CMEA system, namely the considerable isolation of this trading bloc from the rest of the world. In fact, it can be argued that "distorted" intra-CMEA prices quite accurately reflected supply and demand for commodities and manufactured products within the CMEA, as long as the CMEA system remained relatively closed. Bilateral trade with the USSR was therefore profitable for Eastern Europe because of the guaranteed high demand for their products and the fact that they did not have to incur additional costs for constantly upgrading their technology, as they would have had to have done if they had competed on world markets. Although for the Soviet Union, in most cases, the prices for their exports remained below WMPs due to the abundance of raw materials in the closed CMEA

system. Thus, trade was still profitable for the Soviet Union since the price mechanism reflected relative supply and demand in the closed CMEA system, and because the USSR had access to machinery and manufactured products otherwise unobtainable due to numerous restrictions in international trade. Furthermore, the profitability of bilateral trade worsened steadily for the CMEA Six as the entire bloc increased its trade with the West. Despite partial upgrading of technology by the CMEA Six, the technological gap expanded and the costs of narrowing it widened. This became a major liability as East European economies became increasingly open towards the West.

For the Soviet Union, the opening to the West brought about the opposite effect, i.e., their underpriced raw materials could be sold at higher prices on world markets. (This is assuming that a significant increase in the amount of Soviet commodities, placed on the world markets, would not depress their prices.) It is not surprising therefore that many of the initiatives for restructuring the existing bilateral clearing trade have come from the Soviet side. As the payments situation in the USSR has been deteriorating steadily for the last two years (the national debt reached 34 Bn Rubles, or \$54 Bn by 1990 at the official Soviet exchange rate), the Soviet Union became hard-pressed to increase their hard currency revenues. As early as January 1990, they suggested a transition to dollar-denominated trade, which implied a closer adherence to WMPs, and settling of imbalances in hard currencies.

Is Restructuring Polish-CMEA and Particularly Polish-Soviet Trade Necessary?

The previous argumentation suggests that those CMEA Six countries which are heavily dependent on deliveries of Soviet oil and raw materials should try to maintain the existing trade arrangements at least until such time as their technological gap with the West is sufficiently narrowed to become competitive on world markets. However, the economic data of the Soviet Union, as well as their trade statistics over the last three years, suggest that this may be both difficult and undesirable. During 1989, Soviet imports from the West grew much faster than did their exports to it, which resulted in a trade deficit for the first time since 1976, and what is even more significant, Soviet exports to highly industrialized Western countries increased by 10% in value while they simultaneously dropped by 3% to the CMEA Six. However, during the same period, imports from OECD countries increased by 16% and imports from the CMEA Six decreased by 1%. This contributed to the unwelcomed expansion of the Soviet national debt. Furthermore, for the first time, the Soviets were unable to meet payments for their imports in a timely manner. As of mid-1990, some payments were several months late, whereas in the past, the Soviets adhered to a strict regime of 30-40 days for payments. Western bankers estimated that by the end of 1990, the hard currency shortage could reach as much as \$10 Bn (*The Economist*, May 19, 1990).

In addition, by the summer of 1990, the prices of three major Soviet sources of income, i.e., crude oil, gold, and arms, had been either stagnant or falling, and the volume of Soviet exports of oil and arms also decreased. At the same time, the growth rate of Soviet industrial production has been declining since 1987, when growth was 3.8%, through 1989 when growth was 2.2%. Although the growth rate for 1990 has been projected to be 2.6%, there has been skepticism among both Eastern and Western economists about the reliability of this projection. Furthermore, accord-

ing to Soviet projections, their total GDP has been expected to rise only by 1.1% in 1990, which in reality may mean zero or even negative growth. As production shrank, the financial squeeze on enterprises resulted in a default rate amounting to 19.1 Bn rubles in the first six months of 1989 alone, and the situation has been deteriorating since. This in turn threatened the solvency of some Soviet banks and forced the Soviet State Bank to increase the money supply, which has been fueling inflation, estimated to be between 7-11% in mid-1990 (Instytut Koniunktur i Cen [IKC], Warsaw). It appears that the excess ruble supply, estimated at 400 Bn rubles (reported by IKC, Warsaw), could only be absorbed through consumer goods purchases, which are unlikely to be met through domestic production in the near term. In fact, for the first six months of 1989, the shortage of consumer goods relative to planned production was 37 Bn rubles, and the plan had been scaled down from original estimates of demand. Similar problems have arisen in agricultural production. Although crucial grain production for 1989 was 15M tons higher than in 1988, total sales to the state were *lower* by 1M tons, despite an offer of payments in hard currency. This means that in the season of 1989-1990, the Soviets would have to import 39M tons of grain, the same amount as in 1988-1989, and thus further worsening their payments situation.

All of this suggests that the Soviets will be pressed to reduce less profitable exports to the CMEA Six in favor of exports to the West, for which they can potentially get higher prices and be paid in urgently needed convertible currencies. This will mean further disruptions in the bilateral trade flows of all intra-CMEA trade, as already shown in the case of the bilateral trade between the USSR and the most advanced CMEA countries, such as Hungary or Czechoslovakia. As the Hungarian total trade surplus in 1989 reached 1 Bn transferable rubles, mainly due to trade with the USSR, in January 1990, Hungary suspended realization of trade agreements with its CMEA partners. Having done so, they could divert their exports to the West, where already by August of 1989, they had a trade surplus of \$700M. Czechoslovakia, Poland's third largest trading

partner, attempted to follow the same pattern of diverting exports to the West, but their trade with the West amounted to a much smaller surplus of only \$200M (due mainly to increased exports of raw materials and semi-processed goods, as their efforts to increase exports of machinery and equipment failed because of its to low quality). Bearing in mind that Czechoslovakia's national debt doubled between 1985 and 1990 to \$6.9 Bn, their efforts to intensify profitable exports to the West are likely to continue. This has already been reflected in Czechoslovakia's insistence on having strictly balanced trade with the Soviet Union, and because of domestic pressures in the USSR, the Soviet Union has cut deliveries of oil and other demanded goods to Czechoslovakia.

Another dimension of the growing problems of intra-CMEA trade with potential implications for Poland has been added by the process of German unification. It is not clear at this stage how the German Monetary Union will affect bilateral trade arrangements between the former East Germany and its East European trading partners and the USSR, but should the prices be denominated in hard currencies, the volumes of trade are likely to be reduced substantially due to hard currency shortages in those countries. In addition, since the former East Germany had been the largest CMEA trading partner of the USSR and the supplier of machinery and equipment considered advanced by Eastern European standards, the German Monetary Union could force the USSR to either pay for the same products in hard currency or to find alternate suppliers. If no alternative suppliers could be found in Eastern Europe, this is likely to add considerably to the Soviet Union's deepening payments crisis. The situation is further complicated by the fact that although the Soviet Union is a creditor to several third world and CMEA countries for an estimated value of \$85 Bn, most of these debts are probably uncollectible in the near future, if at all.

Finally, the gradual decentralization of trade in the CMEA countries creates the situation in which the monitoring of and accounting for bilateral trade flows becomes difficult due to the sudden increase in the

number of trading bodies. Given this, and taking into consideration previously described economic pressures being experienced by all CMEA Six countries and especially by the USSR, it can be argued convincingly that unilateral efforts on the part of Poland to preserve a traditional clearing system of trade would be unsuccessful and also probably counterproductive. This does not mean, however, that the maintenance of the current system has no value in the short run or that it should be terminated promptly. There may be value in preserving the existing system, especially in trade dealings with the Soviet Union, until such time as definite trade alternatives beneficial to Poland are identified, and its ongoing economic and legislative reforms are further advanced.

How Should Existing Trade Arrangements Be Altered?

In order to define the opportunities and limitations for restructuring Polish trade, it is important to first recognize the relative significance of trade to the entire Polish economy, and the relative importance of trade between Poland and the CMEA countries, especially the Soviet Union. According to the data provided by the World Bank in its Country Report on Poland of 1987, it can be established that total Polish imports amounted in 1986 to ca. 16.5% of GDP, and total exports to ca. 17.8% of GDP. Of this, industrial trade accounted for ca. 90% of total imports and exports. Furthermore, ca. 40% of the value of total Polish foreign trade continues to be accounted for by trade with the CMEA countries, especially the Soviet Union, which still remains the largest trading partner of Poland, with 24.5% of value of total exports and 22.6% of total imports in 1988 (Foreign Trade Research Institute, Warsaw).

The relatively small percentage (compared to certain advanced market economies) of GDP accounted for by trade, and particularly by trade as a

percentage of GDP with the Soviet Union, could suggest a certain degree of flexibility in attempts to restructure trade. However, it must be borne in mind that there exist at least three major considerations which can complicate this argument in the context of ongoing economic and political changes in Poland:

1) As 68.9% of total imports in 1989 were accounted for by inputs to production (in 1987, 75% of imports from the non-socialist sector, and 66% of imports from the socialist sector), and as imported inputs remained relatively constant as a percentage of GDP over the last five years (World Bank and IKC data), the seeming relative inelasticity of demand for imported inputs would make Polish industry very sensitive to sudden changes in the structure of its trade;

2) The large debt burden carried by Poland in 1989 (\$39.6 Bn owed to the West, and 5.9 Bn rubles owed to the East, 90% of which is owed to the USSR) limits opportunities for trade restructuring, since export earnings will remain crucial to balancing the current account and servicing the debt; and

3) Since industrial production accounts for 90% of exports, contributes ca. 50% to national income, and employs ca. 30% of the labor force, (World Bank and IKC data), sudden alterations in its trade partners could create economic difficulties and social unrest unless new export markets could be found to prevent a large rise in unemployment.

Taking each issue in turn, the inelasticity of demand in Poland for inputs would suggest trying to retain current trade arrangements with the Soviet Union. However, the Soviet Union has been increasing pressures to decrease supplies to Poland, and indeed the decline in Polish industrial production in 1989 (down by 3.4% for the year and by 10.6% in December alone, relative to December of 1988) can be attributed largely to irregular and insufficient imports of raw materials and semi-processed inputs from the ruble zone. As evidence of this fact, the 5% decline in production in the fuel and energy sector has been attributed partly to insufficient oil deliveries; the 5.5% decline in production in the metallurgy industry has

been attributed to insufficient deliveries of ferrous ore and manganese from the USSR; and the 1.7% decline in the electromachinery industry, is said to have resulted from insufficient deliveries from the USSR of tools and machinery for production, ball bearings, and cast iron, etc. (IKC, Warsaw). Because domestic production could not compensate for these unexpected shortages, in order to substitute for declining deliveries from the USSR the Poles had to seek alternate sources of supply in the West. Yet this attempt was only partially successful in maintaining production, seemingly because the high costs of Western inputs limited the volumes which could be imported (See Chart 1, Appendix A).

As a result of this substitution, Poland's trade surplus with the West decreased from \$941M in 1988 to \$50M in 1989 (despite the fact that the planned trade surplus with the West for 1989 was \$1.1 Bn.). Although by May 1990 Polish trade with the West showed an unexpected surplus of \$3 Bn, much of this surplus could probably be attributed to a relative decline in the importation of Western inputs due to high costs, and an increase in exports of existing inventories which could not be sold on the shrinking domestic market. At the same time, an undervalued zloty helped to boost exports. Nevertheless, this trend does not seem to be sustainable because of production declines caused by decreased importation of required inputs.

Consequently, despite the fact that opportunities to alter trade arrangements seem to be constrained by Poland's rather inelastic demand for imported inputs, the declining supply of Soviet inputs pushes Poland toward obtaining those inputs on world markets (for a diagram of Polish import and export volume trends with each trading region, see Charts 2a and b, Appendix A). However, until Poland can successfully and profitably redirect a considerable portion of its exports to Western markets, the costs of importing large volumes of inputs from the West could be prohibitively high, and even out of reach for many enterprises accustomed to receiving subsidized inputs. While decreased Soviet exports to Poland force Poland to refocus on trade opportunities with the West in the long

term, in the short term, because switching from utilization of Soviet inputs to Western inputs is likely to result both in increased costs and in further deterioration of the balance of payments, there seems to be an argument for adhering to existing trade arrangements while alternate markets for exports in the West are being accessed.

This argument is particularly salient in the case of imports of oil, which in 1989 amounted to 40% of Polish imports from the Soviet Union. Despite the fact that Poland depended on oil to provide only 11.4% of its total energy supply in 1986 (for a breakdown of Poland's energy consumption and supply by type see Table 1, Appendix A), the demand for oil seems to be highly inelastic. Indeed, as mentioned earlier, the energy and fuel sector of the Polish economy was among the three sectors with the greatest declines in production in 1989 (down 5% relative to the previous year), due partly to diminished deliveries of Soviet oil. Furthermore, from the beginning of 1990, total industrial production continued to decline (by 20% in January alone, in comparison to January of the previous year). Due to lack of available data, it is not known what percentage of this decline could be directly attributed to further declines in the deliveries of oil (as opposed to its higher price or insufficient credits due to economic reforms). Yet, it is known that these deliveries shrank by 18.5% in January, and the Soviet Union threatened to reduce deliveries for 1990 by nearly 30% relative to deliveries of the previous year.

Despite Soviet threats to reduce oil deliveries, Poland could still benefit from maintaining current trade arrangements with the Soviet Union, since by so doing it would avoid paying for these deliveries in cash. This is an important consideration at a time when Poland is facing significant cash costs to reforming its economy, modernizing its capital stock, and increasing output, production and efficiency. Furthermore, in view of the fact that Poland has historically realized a lower price of oil from the Soviet Union than available at WMPs (a direct comparison of the prices of Soviet oil sold to Finland and to Poland show that even with the sliding pricing system, Finland paid a premium over the price paid by the Poles

[data from the U.N. International Trade Statistics Yearbook, 1987]), even if the Soviet Union considerably cut the supplies of oil available to Poland, the Poles could gain an added benefit from retaining some existing trade arrangements with the USSR since they might continue to negotiate successfully for oil prices discounted from the WMPs. The irony was that as a result of the sliding pricing system for oil, by 1990 the Poles were apparently paying prices above WMPs for oil. This would mean that renegotiating current prices would be essential to obtaining benefits to continued trade with the Soviets.

The critical issue in the scenario presented is whether or not the Poles can increase their bargaining power sufficiently to negotiate with the Soviets for favorable terms of trade, i.e. where the prices for their machinery and consumer exports adequately reflect costs of inputs and value, and where the price of oil reflects some discount from WMPs. Central to securing negotiating power for Poland will be the inelasticity of Soviet demand for imports of Polish products. (For a full breakdown of Polish-Soviet trade by product, see Table 2, Appendix A.) Given the current debt levels and hard currency shortages of the Soviet Union, as well as their ongoing economic difficulties, it appears unlikely that the Soviets will substitute imports from the West for all current imports from the CMEA. Furthermore, given that importing products from the former East Germany and Hungary could become even more difficult (in the first case due to the ambiguities imposed by the German Monetary Union, and in the latter case due to the ability of the Hungarians to divert successfully their exports to Western markets), the Soviets may be pressed to retain as many other CMEA imports as possible in order to conserve their hard currency reserves. This creates an opportunity for Poland to increase its bargaining power relative to the USSR and to benefit from continuing trade with the Soviet Union, at least in the short term.

If in the meantime the Poles are seeking and gradually accessing new Western markets for their exports, Poland can further increase its bargaining position with the Soviet Union by reducing its dependence on the

Soviet market for manufactured goods. Any visible progress in this field could help in negotiating favorable terms for bilateral trade and, by extension, for eventual repayment of their 5.9 Bn ruble debt to the Soviets. Although economically it would probably be better to delay repayment of their debt to the Soviets (or not to repay it at all), keeping needed products at home to satisfy domestic demand, it is unknown whether the Polish government can successfully resist the pressures from the USSR to repay its current ruble debt.

In fact, the growing disruptions in the Soviet economy have already resulted in the situation in which Poland has been repaying its ruble debt through a current account surplus, even ahead of the agreed schedule. In 1989, the Polish trade surplus with the Soviet Union amounted to 995M transferable rubles, and was nearly 80% higher than the surplus in 1988. This resulted *not* from an increase of Polish exports, but from a failure on the part of the Soviets to deliver agreed upon imports. Bearing in mind that Poland's interest and principal repayment obligations for that year amounted to 745M transferable rubles, Poland not only met those obligations, but was left with an additional trade surplus of 250M transferable rubles, which the Soviets could have credited as payment in advance. However, the Soviets declined to credit it as an advanced payment of Polish debt. This was particularly disturbing to the Polish authorities who were in the process of renegotiating the terms for repayment of debts to the West, on which Poland had defaulted for the first time. This implies that there exists a drastic need for introducing new controlling mechanisms for bilateral trade flows. The decentralization of trade in Poland vis-a-vis the still relatively centralized trade system of the USSR makes termination of unwanted surpluses virtually impossible, even when the Soviets unilaterally violate trade agreements. If Poland could introduce effective controlling mechanisms on bilateral clearing trade, it would be more likely to benefit from continued trade with the USSR, at least from the point of view of debt repayments. This need for the implementation of new controlling mechanisms brings this analysis to the previously

mentioned model of Finnish-Soviet bilateral trade (henceforth referred to as the Finnish model), since this model contains certain elements which the Poles could usefully employ in their trade with the USSR.

Although, Finland employs a similar means of controlling trade with the Soviets as the CMEA Six countries, i.e. their system of setting Five Year Plans or "Agreements" is supplemented with annual "Protocols" to modify the level of imports and exports in response to changes in WMPs or official exchange rates. Beyond this, they introduced provisions for emergency meetings to adjust the balance of trade for changes in prices or exchange rates, and additionally for problems encountered by either party in producing sufficient volumes to meet trade targets. Furthermore, Finland managed to impose rather stringent trade credit constraints on the Soviet Union, limiting them to 300M rubles per year. Although they have agreed to denominate trade in rubles, there is no actual physical transfer of rubles between the parties, as Finland retains an account at the Soviet Bank for Economic Development which reflects a surplus or deficit according to the outstanding trade balance. This system is workable precisely because the legal trade agreements mandate that the Bank of Finland and the Soviet Bank for Economic Development simultaneously monitor and agree upon the outstanding balance. Because these two entities seem to be in constant communication, and additionally because the total trade credit available to either party stands at 300M rubles (with interest accruing at world market rates on all balances above 100M rubles) and balances are payable either in hard currency or through traded goods, the Finnish model for trade with the Soviet Union provides considerable incentives for controlling the balances on the clearing account.

It is not clear, however, that the Poles would be in a position to effect such controls over trade arrangements with the Soviet Union, unless, as noted earlier, they managed to increase their bargaining power with the Soviet government. If like Finland, Poland managed to develop alternate export markets in the West, it would substantially increase its negotiating power. This will be particularly critical as Polish-Soviet trade moves

towards dollar-denominated trade, as agreed in May 1990. This concept assumes that pricing of bilateral trade flows would be done with much greater adherence to the prevailing WMPs, and that any outstanding trade imbalances would be settled in convertible currencies. The implication is that since WMPs of comparable machinery and equipment can be difficult to estimate (even with machinery technologically upgraded with inputs from the West), the Poles must be able to negotiate a fair price for their products. On the one hand, if this were achievable, moving to a system of dollar-denominated trade could prove to be an asset for Poland (despite an unfavorable official dollar-ruble exchange rate), especially if Poland, through increased bargaining power, could successfully negotiate prices which would compensate for technological upgrades of their products. Under this circumstance, continuing to trade with the Soviets would simultaneously help Poland to upgrade its products while retaining existing markets, adding pressures for increased efficiency and gradually redirecting products to Western export markets. However, recent evidence suggests that the Soviet Union, experiencing considerable economic pressures of their own, have actually been pressuring Poland to reduce the prices for its machinery. Poland's success in being able to negotiate favorable prices for their products with the USSR would depend, on balance, on whether the Soviet need for Polish products outweigh their own domestic pressures, and on whether the Polish authorities could take advantage of this situation.

If favorable terms of trade with the Soviet Union could be negotiated, Poland would stand to gain two important benefits currently experienced by Finland and of particular importance to Poland in a transitional period during which it would gradually redirect its trade to Western markets. First, Finland has managed to offset cyclically declining volumes in trade caused by market economies entering recession with a relatively steady trade with the Soviet Union. (In its current period of economic reforms, Poland can not afford to be fully exposed to the market's cyclical pressures, especially given some current world recessionary indicators).

Second, Finland benefits from having 140,000 people (approximately 5.5% of the total work force) employed in production of exports targeted almost exclusively to the Soviet market. Furthermore, it has been argued that much of this Finnish production lacks a comparative advantage on world markets and that trade is only possible with the Soviet Union due to its limited opportunities to purchase Western products from other sources (for a more detailed analysis of Finnish-Soviet trade, see Appendix B). In this sense, trade with the USSR created for Finland opportunities to expand production and employment in their economy which might not have existed exclusively through trade with Western partners. From the Polish perspective there are dangers of failing to respond to Western competitive stimuli, especially in the technological field, but if appropriate domestic pressures are applied to enterprises to make them seek alternate Western markets, Poland could benefit in the short term from continuing to trade with the Soviet Union. This bilateral trade could moderate social pressures associated with the increasing unemployment brought on by economic reforms implemented so far.

Indeed, unemployment seems to be one of the factors which will play a major role in deciding the scope and pace of economic restructuring in Poland. Bearing in mind that there was no official unemployment in Poland until December 1989, when the first 9,600 unemployed were registered and that as a result it is unknown what the level of social tolerance for unemployment in Poland is, it is not insignificant that by the end of March 1990 the unemployment surpassed 220,000 and was growing. In fact, unemployment appears to be one of the major concerns of the Polish population and estimates for projected unemployment figures vary dramatically and add to social unease. In this situation, where a significant number of underemployed workers could lose their jobs as a result of economic restructuring (for example, in the case of agriculture which officially employs 30% of Polish workers in the production of 16% of GDP), it is important to realize how many jobs are potentially at stake through the restructuring of trade to the socialist sector. It is possible to estimate

from the total employment figures for each industry (provided in Table 3, Appendix A) approximately how many jobs are at risk if contributions from these sectors towards exports to socialist countries are taken into consideration. Specifically, by taking a measure of employment in each industrial sector and from that a percentage of production which goes towards exports and again from that a percentage of exports in that industry which goes to the socialist economies (for a detailed breakdown of exports by industry and payment area see Table 4, or Charts 3a and b for updated information, in Appendix A), then it is possible to estimate approximately how many employees could lose their jobs if trade with socialist countries were terminated.

For example, in the electroengineering sector, which accounts for the bulk of Polish industrial exports to the socialist sector (57.3% of value in 1986) and for 10% of total Polish employment, approximately 290,000 employees would be at risk of losing jobs if Polish trade to the socialist sector were to be terminated. Performing similar calculations for the remaining largest six industrial sectors yields the following: in light industries, ca. 36,000 employees would be exposed to risk of unemployment; in the chemical industry, the number would be ca. 33,000; in the fuel and energy sector, ca. 32,500; in construction, ca. 29,000; in food and agriculture, ca. 22,000; in metallurgy, the number would be about the same as in food and agriculture; and in the wood and paper industry, only ca. 6,000. That means that the total number of jobs at risk if trade with the socialist sector were terminated would be ca. 470,000, disregarding any multiplier effects, which could significantly inflate this number. (N.B. These estimates are only rough approximations extracted from aggregate data and are given here only to illustrate the approximate scale of the potential problem. In fact, the accuracy of these estimates depend on such unknown factors as the productivity per worker in production for different export markets, or on assumptions used by the World Bank for weighting the values of exports to each payment area [included as a percentage in the above calculations].) If unemployment in Poland due to economic

restructuring continues to rise, the Polish government may find it difficult to adopt policies aimed at suddenly reducing trade with the socialist sector.

In summary, it can be stated that, on balance, there appears to be a greater benefit for Poland in maintaining bilateral trade arrangements in the short term with the USSR than in yielding to pressures to terminate them. This is particularly true in the specific instances where lack of other *immediate* viable alternatives would force enterprise closure before longer term opportunities could be accessed. Furthermore, in the drive to move Poland as quickly as possible towards a functioning market economy, it is important to guard against over-optimistic assessments of opportunities on Western markets, which could lead to premature termination of links with the socialist sector and virtual decimation of some existing enterprises. On the other hand, due to the increasing difficulties of trading with the Soviet Union as previously discussed, the future for Polish trade in the long term appears to be linked optimally to Western markets. This conclusion seems to be validated once again by the example of Finland, i.e. the country which despite historically beneficial trade relations with the USSR seems, in the face of growing Soviet economic problems and the decentralization of their trade, to be trying to redirect parts of its economy oriented towards the Soviet economy to Western markets. It seems convincing that, if the Finnish model of trade with the Soviet Union could not work for Finland with its relatively strong market economy, it seems highly unlikely that it could work for Poland with its currently outdated capital stock, underdeveloped infrastructure, inefficient utilization of inputs, low productivity, lack of a proper incentive structure, and lack of financial discipline. This does not mean that Poland should eventually seek to close the door entirely on trade with the Soviet Union. In select areas, an open door could become a source of future trade opportunity both for domestic producers as well as Western businesses looking to invest in Poland. In the meantime, while maintaining bilateral trade arrangements with the Soviets, the Poles should start implementing

measures which would begin to improve prospects for successful penetration of Western export markets and which would protect them from abuses by their more powerful Soviet partner.

In this context, cooperation between the reforming CMEA countries should be encouraged. Despite the fact that the intra-CMEA trade has recently been declining (mainly due to intense efforts on the part of some CMEA states to increase their exports to the West), if the reforming CMEA countries would cooperate among themselves, all would stand a better chance of succeeding in their efforts to increase exports. Secondly, it is highly recommended that Polish authorities in charge of trade arrange as quickly as possible for an assessment of individual industries' abilities to access Western export markets either with their current products or with modified products. At the same time it is imperative to convey to enterprises which are capable of exporting to the West a sense of urgency to do so. One means by which such a message could be sent is via a sort of preferential tax treatment for enterprises exporting to the West. Although this may appear to be discriminatory against industries exporting to the socialist sector, tax policies are often used to create microeconomic incentives in market economies. Furthermore, this may be necessary to strengthen Poland's bargaining power with the USSR, something which is essential for renegotiating better terms of trade. It may be necessary, in addition, for Polish trade authorities to emphasize the importance of moving to a Western export focus either by increasing the visibility of its preferential tax message or by increasing the stakes for the enterprise manager/owner.

What Would Be the Optimal Time Frame for Implementation of New Trade Policies, Considering the Current State of Economic and Legislative Reforms?

Although Polish bilateral trade with the USSR amounts only to ca. 4% of Polish national income and for only ca. 3% of the total workforce (disregarding multiplier effects), addressing the problems of this bilateral trade and creating opportunities for their resolution remain important in the face of efforts to fundamentally restructure the Polish economy. In this context, determining the optimal time frame for implementing new trade policies must be conditional on the establishment of certain legislative frameworks and economic policies critical both to the restructuring of the economy and to promoting profitable foreign trade. As the Ministry of Foreign Economic Relations can not function independently from the rest of the Polish government, and because the successful restructuring of trade can not be divorced from the successful restructuring of the economy, the Ministry of Foreign Economic Relations will have to work together with other government bodies to ensure that appropriate economic policies and legislative frameworks exist to promote trade restructuring. One important economic policy to be addressed is a review of the current tight credit approach, which may currently be invoking irrevocable damage on certain enterprises, but which must nevertheless be evaluated in conjunction with critical ongoing efforts to ensure a relatively stable value for the zloty. In terms of legislation, provisions regarding ownership and control, means of privatization, opportunities for repatriation of profits, and tax assessments affecting trade opportunities must be in place before trade can effectively be restructured.

Concerning credit policies, policy makers will have to attempt to weigh on balance and continually over time whether the burden upon enterprises begins to overshadow inflationary pressures which tend to undermine the value and the stability of the Polish zloty. If it continues to

appear inadvisable to offer easier access to credit throughout the economy, then it might be advisable to assess requirements on an enterprise by enterprise basis for greater access to loans and in certain cases to grant preferential terms for borrowing. Quite apart from being discriminatory, this would reflect an effort, during a transition period, on the part of the banks (primarily controlled through the central bank) to evaluate firms in a manner similar to that employed by Western capital markets. The result would be that efficient producers with established or demonstrable profit potential would be lent money at lower interest rates. It is important to avoid critically wounding some of these very same enterprises, since in the present environment it could be prohibitively costly for these firms to contract and then attempt to expand and re-establish markets once credit becomes more easily accessible. For this reason, a review of current tight credit policies to enterprises should be the focus of ongoing efforts.

In the legislative field, it is important that specific terms for ownership and control be defined as quickly as possible. The ownership issue is critical to advancing economic as well as trade reforms. In the first case, securing ownership rights is critical to the introduction of fiscal and managerial responsibility, even if this at first affects only small private enterprises which are gradually surfacing throughout Poland. As far as trade is concerned, establishing secure rights for ownership and control will be central to attracting foreign investors and the Western capital so important to the industrial modernization which in turn is necessary for profitable trade with the West.

A closely related issue crucial to promoting economic and trade restructuring is privatization. Privatization is important not only in order for the government to draw cash into its coffers so that it can repay some of its debt, but perhaps more significantly as a means to target improved business performance through private ownership and fiscally responsible management. Polish legislation should focus more on achieving the latter than the former. In this situation, where possible, the privatization of

businesses should strive to place equity control in the hands of competent managers. This would suggest discouraging the placement of shares primarily in the hands of the Polish public (although they should be entitled to buy shares). At the same time, employees should be offered the opportunity to buy shares in the firm, with equal access to allotments as the general public, but at slight discounts to share prices set. This proposal for establishing employee ownership of perhaps a significant but not a controlling share of the equity is recommended based on some economic analyses carried out in the West which suggest that employee effort and productivity rises with the onset of employee share ownership and with increases in the percentage of shares owned.

Polish authorities seem to be making progress on the matter of privatization. Draft legislation provides for enterprises to initiate their own bids to privatize, with requests requiring approval of a central Agency for Privatization, which would review applications and grant approval only to those businesses judged to be potentially successful. However, a distinction must be made here between sales of shares to the Polish public (whose confidence in shares the Privatization Agency is clearly justified in safeguarding) and sales to Western interests. While in the first situation a case can be made for retaining a bureaucratic screening mechanism, in the latter situation, free market interests should determine which firms possess the best prospects. Although it is granted that valuations of enterprises remain a principal obstacle to privatization (with accusations having been launched that many Hungarian firms were sold too cheaply), with the passage of time and the gradual realization of more stable product market prices and credit costs, it should become possible to produce more reliable valuations using the discounted cash flow method, as commonly employed in the West. (N.B. This method estimates future cash flows — including earnings projections — returned to the business through ongoing operations. In the Eastern European market, to date the greatest impediments to using this method have been the difficulty in estimating cash flows due to inaccurate measures of costs, revenues and

profits, and the virtual impossibility of assessing the cost of capital to the firm by which to discount its cash flows.) Still, even once obstacles to valuation are overcome, efforts to privatize may be setback at times by the sudden reappearance of often expatriate one-time owners demanding compensation for their enterprises which were nationalized.

Perhaps by providing legislation for repatriation of profits, these individuals could be encouraged to make some investment in the ongoing enterprise, perhaps at a discount to the prices set for shares, so that a form of compensation could be provided to them in a relatively cost-free manner. Such legislation on profit repatriation will also be critical in order to win the competition among reforming CMEA countries for Western investment. Czechoslovakia is already considering a law which would allow repatriation of profits each year up to 20% of the total amount invested: under the best performance scenario, this would allow investors to recoup their investment within 5 years. If Poland is to compete successfully for Western capital, it should offer legislation on profit repatriation which would allow investors, especially those who can bring with them managerial expertise, the opportunity to recoup their investments in a period of 5 to a maximum of 10 years. Given the relatively short investment time horizons of many Western investors, defining, through legislation on profit repatriation, the minimum time range required to recoup costs could become an important guiding factor in attracting investment.

The last piece of legislation which must be enacted before trade arrangements can be effectively restructured focuses on the tax treatment of foreign trade. One issue in particular which should be addressed is the current tariff on Western imports. If these imports are used as inputs to production and appropriate managerial incentive structures are in place, the government should not have to employ a tariff to restrict Western inputs. In other words, if an enterprise faces market-imposed capital costs and must pay out of its own funds for purchases, and if managers are rewarded for cutting costs and boosting revenues, a decision to purchase an input from the West should already represent an optimal managerial

decision. In this situation, the tariff imposed on managers who are being rewarded through incentive structures for making the best decisions for the firm will harm most precisely those firms whose best opportunities include the utilization of Western inputs. Given this analysis, the firms with perhaps the greatest profit potential will suffer, and with them the size of tax revenues to the government, and economic and trade reforms. Even if in the short run this policy could lead to temporary hard currency cash flow problems, the situation should improve with the greater stability of the zloty, and the greater inflow of capital.

Although legislative and policy reforms need to be put in place before trade can be effectively restructured, these efforts would probably benefit from having deadlines imposed on them, and their weighty tasks can probably be accomplished within six months. Bearing this in mind, recommended changes to trade policy are as follows:

- For the remaining six months of this year (1990), bilateral trade with the Soviet Union should not be altered, although efforts should be made to enhance controls of trade flows in order to avoid excessive surpluses in the case of Soviet violations.

- At the same time, maximum efforts should be launched to establish and evaluate the potential of individual enterprises to penetrate Western export markets. In the first place, firms with an established export record should be selected for evaluation, in order to channel assistance to companies with the highest export potential.

- Efforts should get underway immediately to provide education and training for business managers of enterprises already exporting to the West or with the potential to penetrate those markets.

- The government of Poland, having accepted the principle of dollar-denominated trading, should now concentrate on getting the Soviets to share the costs of transition, i.e. a guarantee that they will not depress the prices of Polish products for which they are demanding technological upgrades and that they will offer some discounts on commodities. The

success of this arrangement is likely to depend on the degree to which the previously mentioned conditions are met.

—The new trade arrangements should be accepted only for a one year period, which for the Polish side should be a testing period for their ability to enforce new terms of trading agreements, respect for pricing, delivery volumes, schedules, etc.

—The above proposals should be continually evaluated both in the context of the Soviet Union's willingness to cooperate on the new terms, and in view of opportunities to redirect trade to the West. Consequently in January 1992, a decision should be made based on these criteria as to whether to extend this agreement with the USSR for another year or to drastically readjust trade with them.

Appendix A: Macroeconomic Data on Poland

Chart 1: Dynamics of Imports of Inputs vs. Dynamics of Production, 1985-1989

Chart 2a: Dynamics of Export Volumes by Trade Zone, 1980-1989

Chart 2b: Dynamics of Import Volumes by Trade Zone, 1980-1989

Table 1: Sources and Uses of Energy Supply, 1970-1990

Table 2: USSR Trade with Poland, By Product, 1985 and 1986

Table 3: Poland: Employment by Sector, 1970-1986

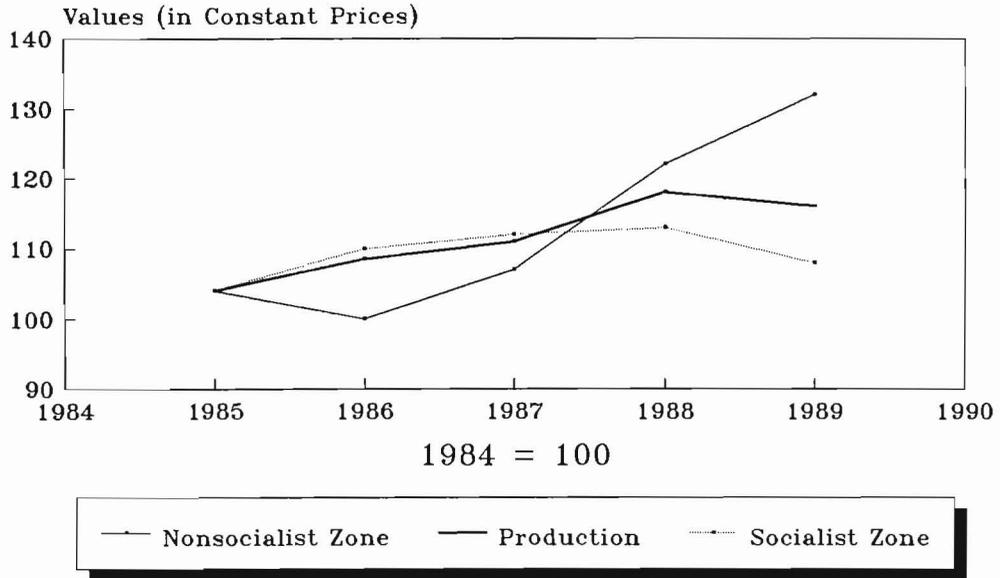
Table 4: Structure of Socialist and Non-Socialist Trade By Sector, 1986

Chart 3a: Structure of Exports by Industry Sector and Trade Zone, 1989

Chart 3b: Structure of Imports by Industry Sector and Trade Zone, 1989

Chart 1

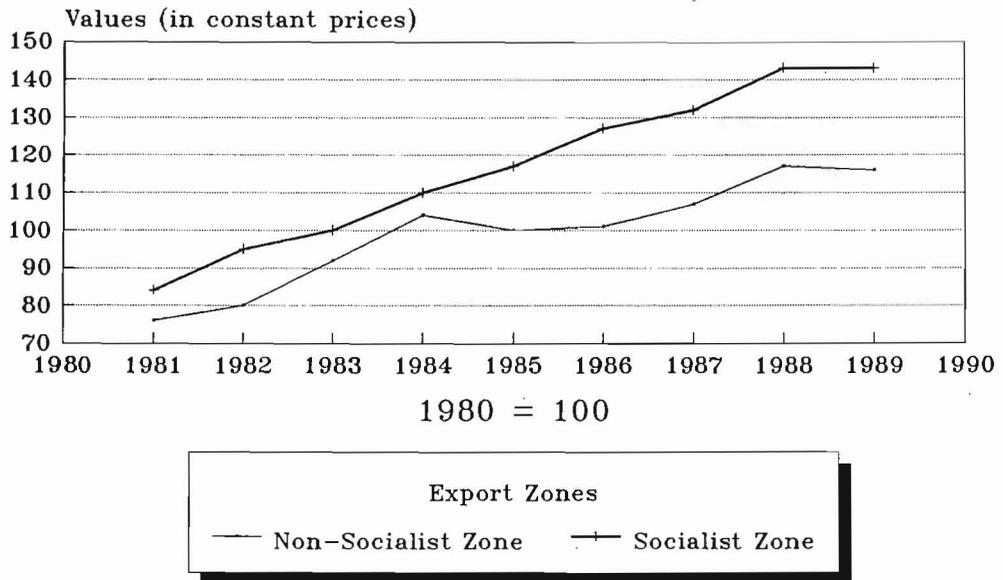
Dynamics of Imports of Inputs vs. Dynamics of Production, 1985-1989



Source: IKC, Warsaw, 1990

Chart 2a

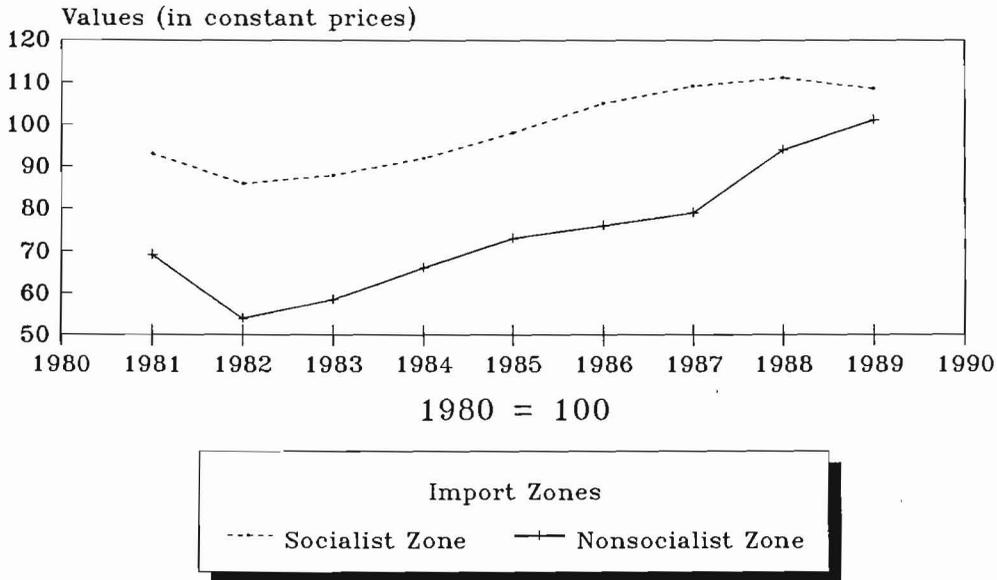
Dynamics of Export Volumes by Trade Zone, 1980-1989



Source: IKC, Warsaw, 1990

Chart 2b

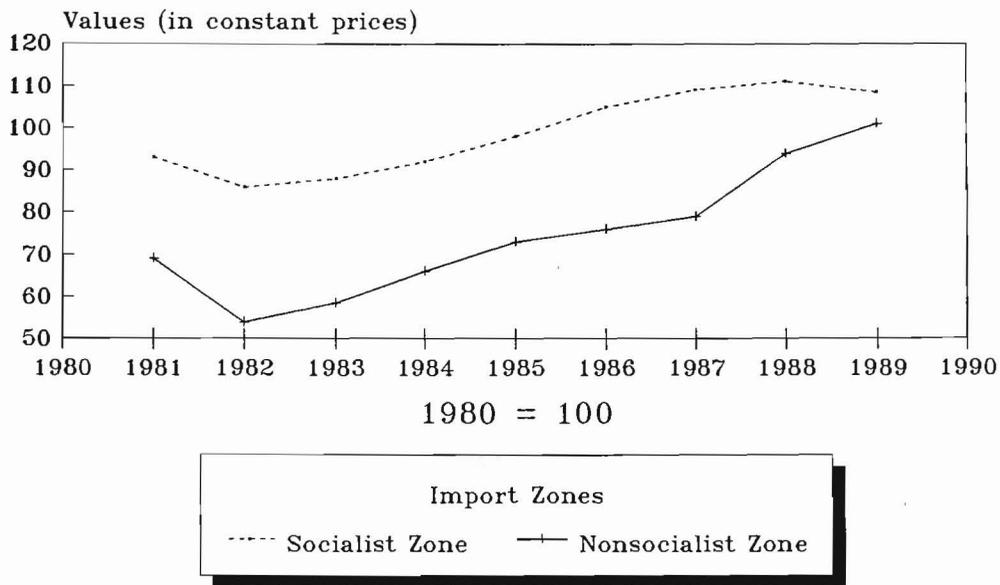
Dynamics of Import Volumes by Trade Zone, 1980-1989



Source: IKC, Warsaw, 1990

Chart 2b

Dynamics of Import Volumes by Trade Zone, 1980-1989



Source: IKC, Warsaw, 1990

Table 1. Sources and Uses of Energy Supply, 1970-1990
(In millions of tons of coal equivalent)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	Target 1990
1. Domestic production	<u>136.7</u>	<u>164.8</u>	<u>175.3</u>	<u>149.1</u>	<u>169.6</u>	<u>172.0</u>	<u>175.1</u>	<u>177.1</u>	<u>179.3</u>	<u>184.2</u>
Solid fuels	<u>129.8</u>	<u>156.6</u>	<u>167.9</u>	<u>141.6</u>	<u>163.3</u>	<u>166.1</u>	<u>168.6</u>	<u>170.3</u>	<u>173.2</u>	<u>178.2</u>
Oil and oil products	0.6	0.8	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.1
Natural gas	5.9	6.8	6.1	6.4	5.5	5.1	5.7	5.9	5.4	5.5
Other (e.g., hydro electricity, nuclear power, etc.)	0.4	0.6	0.8	0.7	0.5	0.5	0.5	0.6	0.5	0.4
2. Imports	<u>15.0</u>	<u>24.7</u>	<u>34.0</u>	<u>28.8</u>	<u>29.1</u>	<u>29.7</u>	<u>30.6</u>	<u>31.2</u>	<u>34.2</u>	<u>35.3</u>
Solid fuels	1.2	1.1	1.0	1.1	1.0	1.0	1.0	1.1	1.2	1.1
Oils and oil products	12.6	20.6	26.7	22.5	21.3	21.4	22.2	22.5	23.7	23.5
Natural gas	1.1	2.8	6.3	6.0	6.4	6.8	6.8	6.9	8.2	8.8
Other	0.1	0.2	0.3	0.2	0.4	0.5	0.6	0.7	1.1	1.9
3. Exports	<u>33.1</u>	<u>42.7</u>	<u>32.8</u>	<u>16.6</u>	<u>29.1</u>	<u>35.2</u>	<u>42.8</u>	<u>35.9</u>	<u>33.2</u>	<u>38.1</u>
Solid fuels	31.3	40.3	30.4	15.4	27.5	33.2	40.3	34.1	31.6	38.0
Oil and oil products	1.7	2.1	2.0	1.0	0.7	0.5	0.5	0.4	0.5	0.1
Natural gas	-	-	-	-	-	-	-	-	-	-
Other	0.1	0.3	0.4	0.2	0.9	1.5	2.0	1.4	1.1	-
4. Changes in stocks	<u>0.1</u>	<u>1.1</u>	<u>0.2</u>	-	<u>8.1</u>	<u>3.8</u>	<u>- 5.8</u>	<u>- 3.1</u>	<u>- 0.2</u>	<u>- 2.0</u>
Solid fuels	0.2	0.7	- 0.8	0.1	7.6	4.9	- 5.9	- 3.1	- 0.2	- 2.0
Oil and oil products	- 0.1	0.4	1.0	- 0.1	0.5	- 0.6	0.1	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-	-
5. Consumption and losses in the energy sector	<u>36.0</u>	<u>44.8</u>	<u>54.0</u>	<u>48.6</u>	<u>50.2</u>	<u>52.9</u>	<u>54.4</u>	<u>57.2</u>	<u>59.4</u>	...

Table 1 (continued). Sources and Uses of Energy Supply, 1970-1990
(In millions of tons of coal equivalent)

	1970	1975	1980	1981	1982	1983	1984	1985	1986	Target 1990
6. Total domestic consumption										
(= 1+2-3-4-5)	<u>82.5</u>	<u>100.9</u>	<u>122.3</u>	<u>113.7</u>	<u>111.3</u>	<u>109.8</u>	<u>114.3</u>	<u>118.3</u>	<u>121.1</u>	...
By source										
Solid fuels	43.5	45.3	52.1	46.9	47.0	44.8	46.9	49.9	51.2	...
Oil and oil products	7.8	13.3	16.4	15.4	13.5	14.0	13.9	13.5	13.8	...
Natural gas	4.8	7.5	10.0	10.5	10.2	10.2	11.0	10.6	10.9	...
Other *	26.4	34.8	43.8	40.9	40.6	40.8	42.5	44.3	45.2	...
By User:										
Industry	39.2	47.0	57.7	52.5	48.3	47.3	49.1	52.2	53.2	...
Construction	1.0	2.2	2.7	2.5	2.3	2.4	2.6	2.3	2.3	...
Agriculture	1.5	2.6	3.9	3.7	3.5	4.1	4.5	4.5	4.4	...
Transportation	10.8	10.6	9.4	8.6	8.3	8.3	7.9	7.0	7.1	...
Household	30.0	38.5	48.6	46.4	48.9	47.7	50.2	52.3	54.1	...

(Cumulative percentage change)

	<u>1975</u>	<u>1980</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
	1970	1975	1980	1982	1983

Memorandum item:

Domestic energy consumption per unit of material output	- 23.3	14.2	9.4	- 6.9	- 1.4
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* Defined to include electricity and heat generation, over 95% of which is based on coal.

Source: Extracted from the Country Report on Poland of the World Bank, 1987.

Table 2. USSR Trade with Poland

January-December	million roubles*	
EXPORTS, fob (including re-exports)	1985	1986
Machinery & transport equipment	776.9	806.2
metal cutting machine tools	51.6	54.0
mining, hoisting, excavating machinery	60.0	94.5
tractors	107.5	88.5
motor vehicles & garage equipment	135.8	155.5
Coal & coke	59.6	64.0
Petroleum products	2,653.7	2,742.2
Metal ores & concentrates	239.3	249.6
Pig iron	105.1	108.1
Rolled ferrous products & pipes	105.5	99.8
Chemicals	176.5	173.5
Wood, paper & manufactures	122.0	114.8
Textile fibres & yarn	141.9	138.9
raw cotton & waste	137.1	133.8
Cereals	23.6	-
Domestic appliances, clocks & cameras	146.3	151.2
Total, including other items		
million roubles	6,531.5	6,813.8
mn \$	8,482.5	9,961.7

Note: Commodity totals are additions of items given in the trade accounts and may be incomplete.

* Non-commercial rate: end 1985 0.770 roubles = \$1.00; end 1986 0.684 roubles = \$1.00

Source: The Economist Intelligence Unit, *Report on Poland, 1986*.

Table 2 (continued). USSR Trade with Poland

January-December	million rubles*	
IMPORTS, fob	1985	1986
Metal cutting machine tools & presses	133.8	123.5
Power generating equipment	83.6	67.1
Electrical equipment	274.2	275.6
Hoisting & conveying equipment	97.9	111.0
Equipment for food industry	49.4	46.4
Equipment for chemical industry	88.3	87.3
Equipment for building industry	42.2	34.8
Excavators	107.1	89.3
Agricultural machinery	90.5	99.3
Railway rolling stock	169.3	176.9
Motor vehicles & garage equipment	165.1	172.9
Ships & boats	340.9	391.5
Other machinery & transport equipment	1,127.7	1,192.1
Ores, base metals & manufactures	173.0	204.7
Chemicals	475.4	559.4
Textiles, clothing & footwear	382.9	417.5
Domestic appliances	36.8	35.8
Total, including other items		
million roubles	5,600.1	6,127.2
mn \$	7,272.9	8,957.9

Note: Commodity totals are additions of items given in the trade accounts and may be incomplete.

* Non-commercial rate: end 1985 0.770 roubles = \$1.00; end 1986 0.684 roubles = \$1.00

Source: The Economist Intelligence Unit, *Report on Poland, 1986*.

Table 3. Poland: Employment by Sector

[Persons x 1000]

	1970	1978	1979	1980	1981
				[Yearly Averages]	
Industry	4452.9	5234.2	5236.5	5244.9	5237.2
Socialized Industry	4043.6	4763.5	4754.0	4741.2	4716.5
of which:					
Food Processing	456.0	531.7	526.8	526.1	536.0
Electro-engineering	1233.7	1619.9	1630.9	1625.1	1593.8
Fuel & Power	474.4	518.1	538.0	548.8	554.2
Metallurgy	239.1	259.9	260.7	259.5	251.9
Chemicals	288.0	326.9	325.4	327.4	325.2
Minerals	270.0	282.5	275.7	271.4	267.1
Textile & Leather	736.5	826.1	804.5	798.4	786.1
Wood & Paper	248.8	285.4	269.5	262.9	256.1
Mining	451.6	474.8	491.1	499.7	504.5
Construction	1074.9	1394.1	1372.0	1336.6	1294.1
Agriculture	5209.8	5048.8	5099.0	5143.1	5197.9
Forestry	182.5	159.8	158.1	155.0	152.9
Transport & Communications	939.7	1103.0	1110.0	1119.3	1107.8
Trade	1046.4	1284.3	1299.7	1304.7	1356.1
Community Services	252.3	372.0	385.8	401.3	418.3
Housing & Non-Material Community Services	146.4	182.1	193.2	200.4	204.3
Science	72.5	150.6	149.7	148.5	144.0
Education	596.0	721.1	733.3	747.4	782.6
Cultural Services	83.7	81.1	82.5	82.7	83.1
Health Service & Social Welfare	424.5	563.2	583.7	598.7	632.3
Tourism, Recreation, Sports	27.2	101.0	101.4	103.8	101.0
State Administration & Justice	240.7	225.6	229.1	227.4	225.9
Finance & Insurance	134.6	154.5	156.6	157.1	156.3
Others	290.9	333.3	338.4	353.8	326.1
Total Employment	15175.0	17108.7	17229.0	17324.7	17419.9

Source: World Bank Country Report on Poland, 1987.

Table 3 (continued). Poland: Employment by Sector

[Persons x 1000]

	1982	1983	1984	1985*	1986	
	[Yearly Averages]			I	II	
Industry	4986.1	4973.5	4997.4	5000.1	4876.0	4906.7
Socialized Industry	4474.0	4430.8	4406.8	4380.7	4257.0	4266.8
of which:						
Food Processing	524.2	531.9	528.2	530.6	447.0	421.9
Electro-engineering	1487.7	1451.5	1435.7	1414.3	1414.0	1407.7
Fuel & Power	579.3	593.7	603.4	609.3	609.0	630.1
Metallurgy	234.8	229.6	225.9	226.6	226.0	222.8
Chemicals	305.4	301.5	297.3	291.2	291.0	289.4
Minerals	254.1	249.9	245.9	238.5	238.0	232.5
Textile & Leather	710.2	687.6	686.2	685.1	685.0	685.4
Wood & Paper	241.5	238.5	231.6	229.9	229.0	228.1
Mining	528.1	537.4	541.6	543.6	543.0	555.3
Construction	1223.5	1218.9	1243.3	1282.4		1316.5
Agriculture	5173.9	5062.0	4964.2	4958.4		4896.0
Forestry	153.5	157.8	160.7	162.9		162.9
Transport & Communications	1061.4	1058.0	1057.8	1057.0		1053.2
Trade	1316.5	1324.7	1325.0	1333.0		1476.6
Community Services	423.8	429.1	439.5	445.6		444.4
Housing & Non-Material Community Services	200.7	204.0	206.3	207.4		216.3
Science	117.9	112.0	109.4	110.9		112.6
Education	821.3	861.5	888.1	905.3		911.6
Cultural Services	82.2	83.3	85.7	90.2		91.3
Health Service & Social Welfare	658.4	679.8	695.2	716.7		757.5
Tourism, Recreation, Sports	94.2	96.3	101.5	111.7		115.9
State Administration & Justice	223.6	228.9	252.6	270.6		275.5
Finance & Insurance	152.4	153.6	159.2	162.2		158.4
Others	306.2	307.5	312.1	322.3		341.0
Total Employment	16995.6	16950.8	16998.0	17136.7		17236.5

* Change in methodology in industry

Source: World Bank Country Report on Poland, 1987.

Table 4. Structure of Socialist (S) and Nonsocialist (NS) Trade by Sector, 1986 (percentages)

	Imports			Exports			Trade Shares	
	S	NS	<u>NS</u> Total	S	NS	<u>NS</u> Total	<u>Total X</u> Prod. ^b	<u>Total M</u> Sales
Fuel & Energy	30.7	5.0	9.5	9.1	17.9	62.7	20.2	18.5
Metallurgy	7.8	8.5	41.5	6.4	9.0	54.5	13.3	11.3
Engineering	37.8	31.8	35.2	57.3	23.2	25.7	18.8	19.6
Chemicals	7.5	23.4	66.8	9.8	11.0	49.0	22.5	22.2
Wood & Paper	1.9	1.5	34.3	0.8	4.0	80.4	6.3	6.8
Light Industry	6.0	5.8	38.5	5.6	7.4	52.8	6.9	7.5
Food & Agric.	5.0	21.2	73.2	4.0	18.4	79.8	N.A.	N.A.
Min., Constr., etc.	<u>3.3</u>	<u>2.8</u>	<u>34.1</u>	<u>7.0</u>	<u>9.1</u>	<u>64.9</u>	<u>N.A.</u>	<u>N.A.</u>
Total:	100.0	100.0	39.2	100.0	100.0	46.1	16.5	15.5
Total Value (US\$ b) ^a	6.8	4.4		6.5	5.6			

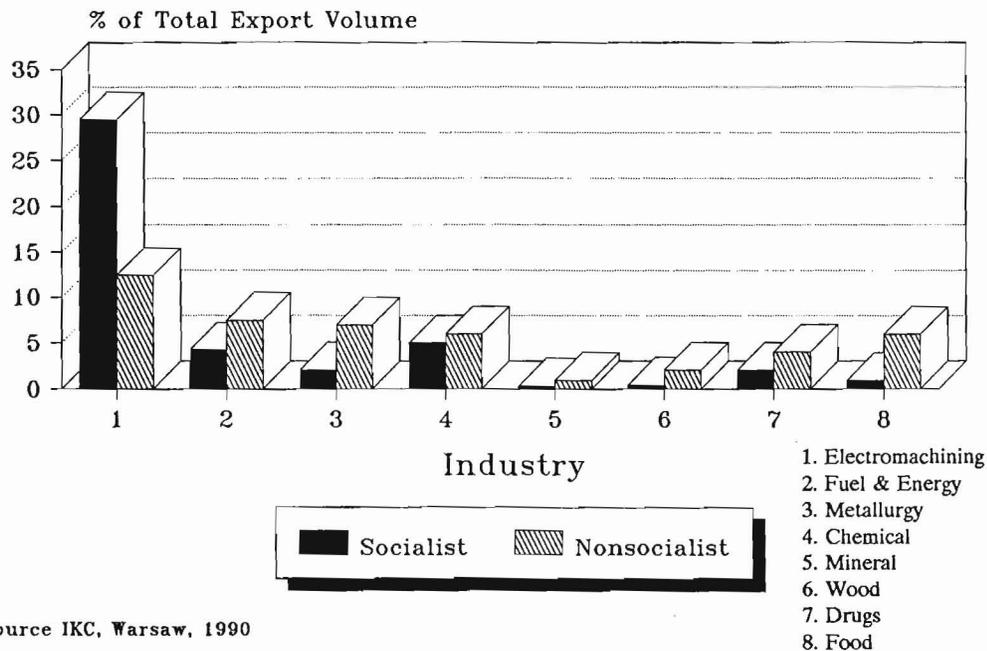
Note: ^a US\$1.00 = Z1 175.23
= TR 1.903

^b This column refers to 1985, production totals for 1986 being unavailable.

Source: *Concise Statistical Yearbook 1987*, 236-7 and 136

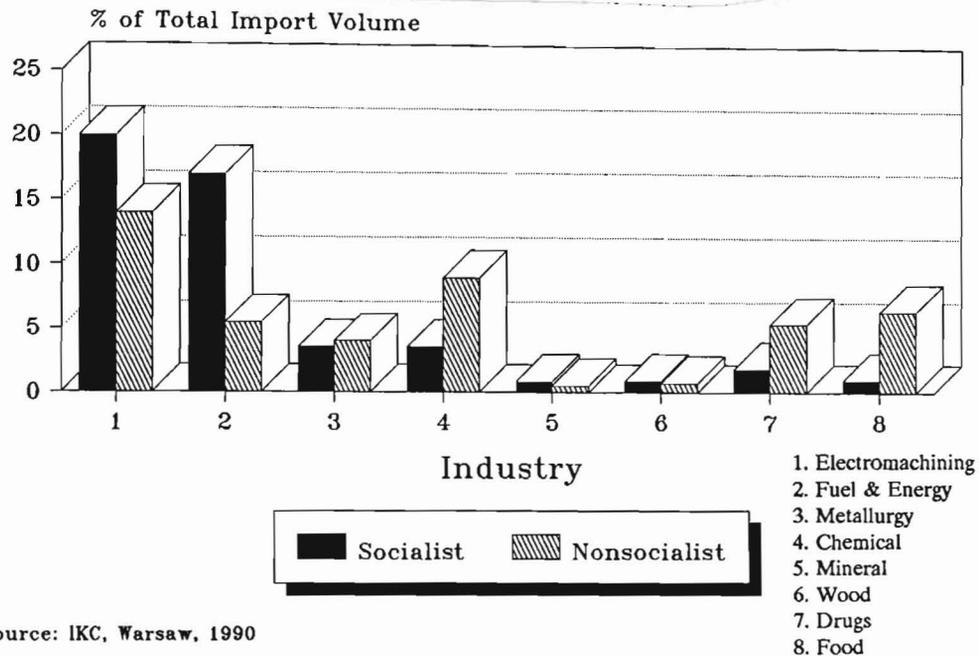
Chart 3a

Structure of Exports by Industry Sector and Trade Zone, 1989



Source IKC, Warsaw, 1990

Chart 3b
Structure of Imports by Industry
Sector and Trade Zone, 1989



Source: IKC, Warsaw, 1990

Appendix B: An Analysis of Finnish-Soviet Trade

This appendix is intended to provide information on the size and industrial composition of Finnish trade in general and with the Soviet Union in particular. It will also describe pricing terms, the use of exchange rates and the logistics of trade negotiations with the Soviets. The Finnish-Soviet trade model was evaluated to assess its merits and potential applicability to Polish-Soviet trade.

In 1987, total exports from Finland accounted for 22% of GDP and total imports for 21%, a percentage not significantly different from Poland's. The portion of Finnish GDP accounted for by trade has remained fairly constant over the last decade. On average over the last five years, Finnish-Soviet trade has constituted 1/5 of all Finnish trade and 4% of all Soviet trade (and 1/8 of the Soviet's trade with all of the OECD). The composition of trade between the two countries as of 1985 was as follows:

Soviet exports to Finland, by sector as a % of total exports to Finland:

- Oil and Oil products	72%
- Coal	3%
- Gas	3%
- Electricity	3%
- Wood	4%
- Basic metals and minerals	3%
- Chemicals	3%
- Machinery, eqpt., and vehicles	3%
- Other	6%

Finnish exports to USSR, by sector as a % of total exports to USSR:

- Foodstuffs	6%
- Chemicals, plastics	6%
- Paper products	19%

- Iron, steel	3%
- Machinery, eqpt. and vehicles	45%
- Apparel and shoes	12%
- Textiles	2%
- Other	7%

While the precise composition of trade has fluctuated over time, the listing above is representative of the relative importance of specific traded products. In particular, it reflects the very large component of Finnish imports from the USSR accounted for by oil, and Finnish exports to the USSR accounted for by machinery and equipment. Although Finnish authorities are quick to note that Finland is not, as sometimes thought, only a transit station for trade between the East and West but rather a full-fledged trader of production in its own right, Finland has benefited historically from being one of the few Western nations engaged in trade with the Soviet Union. It has been argued by many analysts of Finnish trade that this long-term relationship with the USSR has helped Finland to gain a comparative advantage in producing and marketing goods ideally suited to the Soviet market. As a consequence, while there are actually fairly tight regulations on foreign components in Finland's exports to the Soviet Union, Finland can still benefit by meeting Soviet demand for any new technology it *can* export. The means by which Finland has benefited from trade with the Soviet Union is largely a factor of the trade arrangements employed. Trade between Finland and the Soviet Union has historically been carried out bilaterally, with a clearing payments system designed to fund one country's imports with the proceeds from its exports to the other country. Items traded are priced according to their WMPs. In the case of oil, pricing terms are clear, since oil is traded at spot dollar WMPs and trade agreements provide for continual adjustments. In the case of "soft" goods, where product differences make it difficult to establish the "fair" WMP, Finland, unlike Poland, seems to have received what

authorities considered to be fair compensation for their machinery and equipment. In other words, products which were upgraded reflected the higher cost of Western components, where this was relevant. Presumably the reason why Finland has succeeded in negotiating "fair" prices, i.e., adequate compensation for technological upgrades, while Poland has failed is due to Finland's bargaining power relative to the Soviet Union. Barring political considerations, Finland gains bargaining power in trade arrangements with the Soviets thanks to a degree of independence brought about by effective trade with the West. In addition, the relatively inelastic demand (within budget constraints) on the part of the Soviet Union for whatever Western technology the Finland can supply also provides bargaining power to Finland.

Even with this bargaining power, Finland has shown flexibility in some trade arrangements with the Soviets. For example, trade is denominated in rubles and the official Soviet exchange rate relative to hard currencies is accepted with, as noted above, provisions for continual adjustment to exchange fluctuations. In effect, the ruble acts as a unit of accounting, and trade imbalances are recorded simultaneously on the accounts of the Bank of Finland and the Soviet Bank for Economic Development, held at the Soviet Bank for Economic Development. What makes this system workable, where the Soviet Union maintains the accounts for both parties, is that according to mandates in trade agreements, the Soviet Bank for Economic Development and the Bank of Finland keep independent records and are obliged to continuously report to each other and agree upon account balances.

Trade agreements limit the amount of credit which can be extended to either party. Historically, 100M rubles was the upper limit, but recently Finland agreed to extend further credits to the USSR and the official ceiling on credit was reset to 300M rubles. Yet, when a deficit on the account exceeds 100M rubles, there are provisions to assess an interest charge, set at a world market equivalent rate, on the amount in excess of 100M rubles until the trade account balances. Eliminating the outstand-

ing balance on the account can be done through payments in hard currency or by compensating deliveries of goods by the country in deficit. It is expected and understood that the party in deficit will try to clear that deficit as quickly as possible. In addition to providing credits for trade deficits, Finland has relaxed other provisions for trade with the Soviets. For example, the payments system was changed by allowing the Soviets to pay less for certain large ticket items up front, e.g., whereas the Soviet Union used to pay three quarters of the price of ships before delivery and the final one quarter on delivery, the percentage of payments is now reversed, allowing the Soviet side to delay their payments.

Perhaps it is the long-standing Finnish-Soviet trade relationship which allows Finland to deal so flexibly in setting trade arrangements with the USSR. The history of cooperation between Finland and the Soviet Union dates back to 1947, when the first Trade Agreement was signed. On 6 April 1948, the Treaty of Friendship, Cooperation and Mutual Assistance was concluded. This was followed by the Agreement to the Development of Economic, Technical and Industrial Cooperation on 20 April 1971, and by the Long-Term Program on the Development and Deepening of Commercial and Economic, Industrial and Scientific and Technical Cooperation signed on 18 May 1977.

Out of these programs grew provisions for specific trade "agreements". These trade "agreements" set approximate targets for trade over a five year period, with specified "upper and lower limits" (ceilings and floors) which set ranges for proposed trade of each product. These ranges provide guidelines for the annual "Protocols on the Exchange of Goods," which fix actual levels for imports and exports by product. These annual "protocols" allow for some adjustment to price or exchange rate movements. In addition, the logistics of the trade mechanisms provide for intermittent and emergency negotiations to address these issues and to adjust for either party's inability to deliver goods as promised.

In order to conduct this sort of bilateral trade, both Finland and the Soviet Union employed a relatively centralized trading system. For Fin-

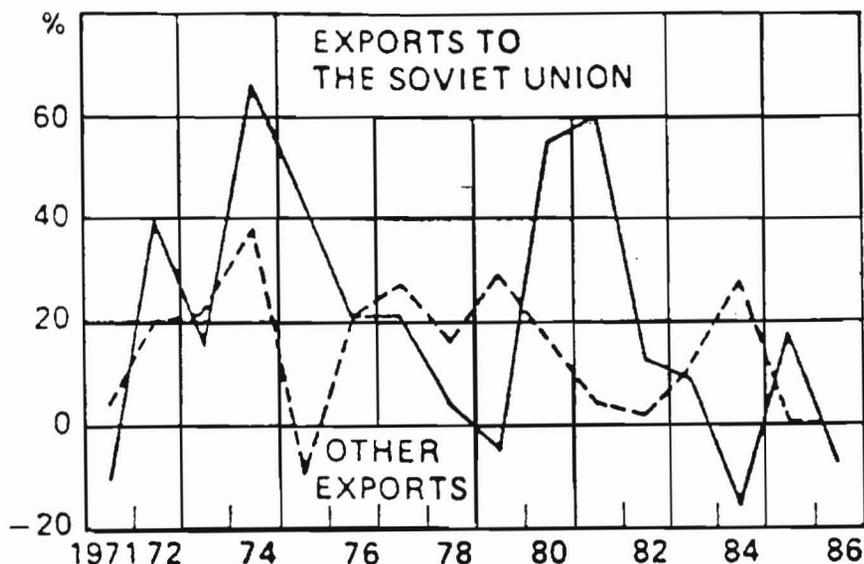
land, this meant imposing a form of centralization on an otherwise decentralized, market economy. Trade arrangements were agreed to by the government, but individual enterprises were left to negotiate terms for delivery. Cash proceeds from this bilateral clearing trade (i.e., without cash transactions) were distributed to individual enterprises participating in trade with the USSR by the Bank of Finland as the goods were delivered. In contrast to these rather elaborate Finnish efforts to employ bilateral clearing trade in a market economy, Soviet trade had historically been centralized. However, with recent moves toward decentralization, 14,000 new, independent trading enterprises have been recognized in the Soviet Union. This decentralization reduces prospects for continuing effective trade with the Soviet Union, not only for Finland but for other partners who would attempt to conduct trade through bilateral clearing agreements. Already, Finland seems to be looking to divert some of their trade away from the Soviet market.

However, it is not only due to recent Soviet trade decentralization that Finland has been looking to redirect some of their trade. While Finland has gained several advantages from trading with the Soviets, these benefits are diminishing. One advantage which remains is the number of people (140,000, or 5.5% of the workforce) employed in production for trade with the USSR, especially since many industries serving the Soviet market (e.g., apparel and leather wear) are labor-intensive. On the other hand, one benefit of trading with the USSR which has lately eluded Finland is the positive effect in fundamentally offsetting the cyclicity of trade conducted with market economies. This effect is shown in Figure 1 below.

Previously, if the price of oil increased and trade with market economies declined as they were pushed into recessions, opportunities for Finland to export with the USSR would grow because the clearing system Finnish exports would have to compensate for the increased price of oil imports. This system worked well throughout most of the 1970s and the early 1980s when oil prices were relatively high. Since the mid-1980s, however, with oil prices falling Soviet trade has not effectively balanced

the cyclical nature of trade with the market economies. Theoretically, it was expected that as the price of oil fell and export volumes to the Soviets declined, demand for exports to the market economies (while experiencing a cyclical upswing) would increase. However, Western demand for Finnish exports failed to materialize and, as a result, Finland has been pressed into extending greater credits to the Soviet Union (to 300M rubles) to balance Finnish trade surpluses. In addition, Finland has entered into new agreements for “compensating” trade, which include Finnish development in the Soviet Union of Soviet industrial projects and co-production in several areas. These represent combined Finnish-Soviet efforts to diversify Soviet production and export possibilities so that Soviet trade deficits can be reduced.

Figure 1: Changes in Finnish Exports, 1971 - 1986. The percentage is the change from the previous year.



Source: Bank of Finland, *Bulletin*, February 1987.

In summary, some advantages remain for Finland in trading with the Soviet Union. For example, when the Soviet Union exceeded allowed deficit balances, Finland managed to negotiate for payments through extra deliveries of oil at favorable prices, which they were then allowed for the first time to sell to Western markets since this supply exceeded their own domestic demand. However, the increasing complexity of trade mechanics seems to be leading the Finns to look into diverting some of their trade away from the Soviet market.

Epilogue

Although the original paper contained a certain degree of conjecture, difficult to avoid in the rapidly changing political and economic environment, we strove to limit speculation to issues which offered sufficient data to permit a reasonable extrapolation of developments. There were, however, certain exogenous changes which were impossible to predict and which wielded considerable influence over the direction of the transformation of Polish trade. For example, the shock to economies dependent on oil imports caused by the Persian Gulf Crisis was as significant as it was unanticipated, and the speed of both German unification and the virtual disintegration of the CMEA were difficult to foresee. However, the most cogent example for East European trade considerations has been the speed and the degree of the deterioration of the Soviet economy, which by now may be said to have taken on crisis dimensions.

Within one year, the Soviet national debt increased from an estimated \$54 Bn to almost \$64 Bn (calculated according to official Soviet exchange rates). The amount of surplus rubles in circulation is estimated to have increased by 100 Bn rubles to a total of ca. 500 Bn rubles and the inflation rate has risen from an estimated 7-11% p.a. to an estimated 20-25% p.a. Furthermore, net material product declined by nearly 5% from rates of one year earlier, which implies a negative GDP growth rate in excess of -4%. However, from the point of view of Polish trade with the USSR, the three most important factors have been (1) the Soviet current account deficit was estimated to have risen to over \$5 Bn by the end of 1990; (2) the shortage of consumer goods in the USSR was estimated to be in the range of 200 Bn rubles (relative to estimates of 37 Bn rubles in the first 6 months of 1989); and (3) in the middle of 1990, the decentralization of Soviet foreign trade was authorized by Gorbachev.

Perhaps the extent of these upheavals is best reflected by the change in Soviet attitudes towards prospects for trade with the East European

countries. It is now well known that in January 1990, at the CMEA conference in Sofia, the Polish delegation succeeded in introducing two new principles for trade which were accepted by the Soviet Union and all other CMEA members. First, all new trade arrangements were to be bilateral (and not multi-lateral as initially suggested by the Soviets) and second, the transition to the new trading system would be gradual and would not allow for costs or benefits to be incurred unilaterally by any one party. For the first half of 1990, the Soviets went along with the Sofia agreements which provided, among other things, for a two year transitional period during which a clearing system similar to the Finnish-Soviet model of trade would be implemented (i.e. only imbalances would be settled in convertible currencies on a periodic basis). However, in the second half of 1990, when the Soviet payments situation started to deteriorate rapidly, Gorbachev decreed (in unilateral violation of Sofia agreements) that the Soviet Union would start trading from January 1, 1991, with all East European countries in the same way in which it traded with capitalist economies. In essence, the Soviet Union's desperate shortage of hard currencies pushed it to abandon efforts to sustain an East European trading bloc. Poland, together with other former CMEA countries, was therefore thrust prematurely into new trading arrangements with the USSR. For one thing, these new arrangements implied an increase in prices of imported raw materials and inputs to production, which were intended to reflect full world market prices from January 1, 1991. Bearing in mind that the majority of imports from the Soviet Union have traditionally been accounted for by inputs to production, this would be bound to fuel inflation and most likely diminish levels of production. The Polish government now estimates that the costs of importation of Soviet oil and natural gas alone will rise by ca. \$1 Bn in 1991. In this light, the leap into new agreements was difficult for Poland to justify given both the state of its economy and its uncompleted program of legislative and economic reforms.

Indeed, the Polish economy remained vulnerable throughout 1990. By December, the industrial production (sold) amounted to only 76.1% of

1989 levels (not including the private sector). In fact, in the four key branches of industry, the results were even lower: in light industry, production sold was 64.7% of 1989 levels; in electroengineering, 70.4%; in fuel and energy, 74.2%; and in chemicals, 74.4%. Within the same period, unemployment increased from 55,800 in January 1990 to 1,124,000 (ca. 6.5% of the labor force) in January 1991. Despite considerable tightening of monetary policies and initial success in controlling inflation, which was down to 1.8% per month in August (according to the Main Statistical Office, Warsaw), the inflation rate began to pick up towards the end of the year and is estimated to have surpassed 5% per month by January 1991. Because of returning inflation, the Polish government responded by raising interest rates, which by now exceed 75% per annum. This makes the servicing of debt very difficult for enterprises already vulnerable to other pressures of economic reform, and may further constrain levels of production.

Surprisingly, in the circumstances, Poland's trade balance with the "socialist" countries reflected a surplus of \$4,116 M in 1990; and trade with Western economies showed a surplus of \$4,717 M for the year (data from the Ministry of Foreign Economic Relations). Although part of these surpluses can surely be attributed to a decline in imports of inputs to production, (e.g. imports of oil from the USSR [down from 12.3 million tons in 1989 to 7.5 million tons in 1990] and imports of cotton [down from the "socialist" zone from 94,900 tons to 54,600 tons, and down from 48,100 tons to 27,100 tons from the West in 1990]), part of these surpluses are also due to increases in exports. These increases in exports were most likely stimulated by sales of built up inventories, existing because of considerable declines in domestic demand, and further aided throughout the year by an undervalued zloty. If the official data available is accurate, it will be difficult to sustain these high levels of exports for a long period of time. In order to continue to maintain trade surpluses (which are necessary to service the national debt), it will be essential either to stem the flow of imports or to increase prices or volumes of exports.

Although imports could be discouraged rather readily by a devaluation of the zloty, the benefits of such a move would be offset on a macro level by increases in the zloty value of Polish debt denominated in hard currencies. At the same time, on a micro level, devaluation would make Polish exports more attractive, potentially increasing export volumes by dropping the real hard currency price, or alternately increasing zloty revenues realized by enterprises maintaining export volumes but keeping real hard currency prices constant. Given the high cost of credit and the increased price of imported inputs which would be caused by devaluation, increasing production and realizing increased revenues through increased export volumes at lower hard currency prices does not seem to be an implementable outcome in the short term. However, realizing higher zloty export revenues at constant hard currency prices is a reasonable expectation of devaluation. It is essential to recognize, nonetheless, that although keeping hard currency prices constant and gaining greater zloty revenues would ease pressures on many Polish enterprises, boosting trade surpluses through devaluation does not represent a long term solution which can be repeated indefinitely (especially given outstanding debt levels). Consequently, unless Polish enterprises are actually able to boost export volumes or prices through product quality improvements, Poland will be unable to sustain its trade surpluses long term.

Although devaluation offers some opportunity for Polish enterprises to boost volumes of production because of higher revenues (offsetting some of the constraints of expensive domestic credits) in the short term, the higher zloty cost of imported inputs to production could offset this advantage unless domestic substitutes could supply most of these needs. However, unless certain fundamental economic problems like inflation (and associated wage pressures, which higher zloty enterprise revenues could exacerbate) are addressed, production could decline further and the viability of Polish manufacturing enterprises would remain under threat. Furthermore, officially lower levels of state production are unlikely to be compensated for by new or expanded manufacturing enterprises, deterred

from growing as long as interest rates remain over 75% per annum. In this scenario, it would be difficult to find competitive domestic sources to substitute for imported inputs to production. As a result, the need for increased macroeconomic stability and for the legislative reforms which could promote enterprise growth and efficiency respectively seem clear; unless Polish enterprises improve their efficiency and international competitiveness, long term trade surpluses will be unsustainable. Given the current pressure from exporting enterprises favoring devaluation which would effectively soften their budget constraints, it is critical to ensure that proper incentives for managers to increase efficiency are in place.

Perhaps the most important initiatives yet to be implemented effectively and broadly are those surrounding the privatization program. In order to gain efficiencies essential to boost either prices or volumes and therefore to secure long term trade surpluses through comparative advantage, Poland must introduce an effective program of privatization of its industry in order to increase managerial accountability and rewards for effectiveness. As of February 1991, the privatization effort has yielded few concrete results; only five state companies were offered for privatization, out of about 7500 state-owned enterprises. This is mainly because to date Poland has been unable to come up with a method of privatization which would prevent the sale of national property at bargain prices, while at the same time allowing for fast privatization and inflow of capital. Efforts have been complicated by a resistance to selling companies to foreign nationals, an unwillingness to sell large blocks of shares to individual investors, and by the retention by the Polish government of up to 30% of shares in the privatized enterprises. Consequently, given a shortage of foreign investors, the government seems inclined to bend to the considerable pressure for distribution of vouchers to Polish citizens entitling them to purchase shares. Unless it is recognized that the sale of shares has two important functions, i.e. to change ownership and control as well as to increase the inflow of capital, the potential positive effects of privatization will not be realized.

Privatization in a free market should place shares in the hands of those who value them most and thus more readily recognize opportunities to improve the net worth of the enterprise. If constraints are placed on the number of shares one party can acquire, thereby eliminating any real opportunities to place control in new hands, there will be no upward valuation of the enterprise's potential. The result will be just as we have witnessed so far, namely, little interest in acquiring shares in a firm with questionable potential at best. Moreover, giving away vouchers entitling the populace to shares in these enterprises will only reinforce the perception of an enterprise with inherently low value; because few potential buyers exist, citizens may view the provision of vouchers as a means by which the government is seeking to unload unprofitable enterprises with little potential.

The only means by which to ensure a successful future for privatization are for the Polish government to be prepared to give up controlling interests to individuals or firms (domestic or foreign) able to increase the value of these enterprises through well-honed managerial skills. One of the ways of addressing this problem would be to offer a block of 51% of shares, with a reservation price per share, to bidders. If the share price is set realistically, opportunities to garner additional paid-in capital should materialize. Such large investments would serve as an indicator to other investors that the enterprise not only has potential, but that there is a major new stakeholder who believes that s/he can increase the value of the enterprise once s/he controls it. Once this is recognized, domestic investors should show increasing willingness to make small capital investments of their own. However, if the state does not relinquish a larger portion of ownership and control, investors are likely to remain skittish and capital inflow will probably be constrained in value and speed. In short, privatization efforts are unlikely to achieve desired goals.

Without the necessary legislative reforms and while the economic situation remains tenuous, efforts to sustain Polish trade surpluses with the West are similarly unlikely to succeed. At the same time, as noted

above, new trade arrangements with the Soviet Union have made that trade increasingly less attractive. The Ministry of Foreign Economic Relations estimated that dollar denominated trade and the switch to world market pricing would require a 20-25% volume boost in Polish exports to the Soviet Union to acquire previous levels of raw material imports. However, as discussed previously, Polish enterprises are not well-positioned to offer an increase in exports. Perhaps, therefore, the best solution remains to identify a trade policy which reduces the strains on the economy during the transition period while reforms are underway. This is particularly true if broader economic and enterprise reforms (implemented, for example, through privatizations) increase efficiency partly at the expense of jobs. Although the Poles have been surprisingly tolerant of unemployment levels over 1.1 million, any efforts to alleviate pressures to cut employment while not compromising economic gain are advisable, especially as it is difficult to quantify what percentage of workers who lost jobs within the last year was reemployed in the growing private sector of the economy. Furthermore, given that, for example, some 150 electroengineering enterprises still sell anywhere from 25 to 90% of their products to the USSR and have shown little ability to readjust, if trade arrangements could be set which enable positive economic value to accrue to Poland, this trade should continue. Indeed, with the right trade policy arrangements, this trade could actually add value to the Polish economy.

There are two main factors which should permit Poland to realize economic value through such trade. The first one is the dependence of the Soviet market on imports from East Europe and especially from Poland. For example, in 1990, 85% of all machinery imported to the Soviet Union came from Eastern European countries, and imports from Poland amount currently to 10% of total Soviet imports. Secondly, Gorbachev's decision to give certain trading powers to the republics created an opportunity for designing a "dual system of trade" between the USSR and Poland. In November 1990, Poland signed an agreement with the Soviet central government which permitted Poland to establish direct

trading relations with the republics. As explained earlier, Moscow, in search of hard currency revenues, rejected a clearing payments model of trade. Yet, at the same time the republics remained highly interested in it. Furthermore, during the recent trade talks in Uzbekistan and Kazakhstan, the Polish representatives discovered that Polish machinery, cloth, consumer goods, etc. which Moscow tried to purchase at discounted prices were received with great interest by local trade representatives. What is important to Poland is that republics like Kazakhstan are capable of delivering in exchange most of the natural resources that Poland needs. Kazakhstan can also sell to Poland commodities currently imported from the West, such as wheat from Canada. In the case of Uzbekistan, large quantities of cotton could be exchanged for Polish mutton and cloth, in which Moscow traders showed very little interest. Although direct trade with the republics could turn into a clearing system, it is more likely that an unsophisticated barter exchange will dominate early stages of trade. While it may require much patient effort on the part of the Poles negotiating with inexperienced and unstructured counterparts, it is possible that higher value for Polish exports through such trading arrangements could be realized, thus reducing the need for hard currency cash payments; a point not insignificant in Poland's current payments situation.

The clearing trade with the Soviet republics cannot, however, be divorced from the second element of the "dual system", i.e. trade arranged through the Soviet central government. For one thing, oil and natural gas production and exportation are still controlled by Moscow. As oil and natural gas still account for a large percentage of Polish imports from the USSR, Poland may develop "surpluses" in trade with individual republics and incur "deficits" with Moscow. Moreover, since it is the central government in Moscow which controls the redistribution of hard currency earnings to Soviet enterprises, the total value of trade flows will depend not only on the ability of the Poles to find Soviet importers willing to import Polish products, but on ensuring that those importers can obtain from the central government hard currency for payments. Given the level

of Soviet foreign payment obligations, the value of trade could shrink considerably. On the other hand, it is important to remember that Moscow finds itself under extraordinary domestic pressures to provide consumer goods and therefore the "dual trading arrangement" could ease the pressure of consumer good shortages, at least on the level of the republics.

The Soviet need to import goods has therefore another implication: although according to the latest "Protocol" signed between the Polish and Soviet governments Moscow indicated its willingness to sell to Poland only 4.5 million tons of oil (a decrease of 40% in relation to 1990), the Polish government should still be able to negotiate discount prices from the Soviets. Given their desperate need for hard currency revenue and the relative glut of oil on world markets, the USSR cannot easily redirect its oil exports without incurring additional costs. Furthermore, as the Poles have already shown their ability to compensate for cuts in Soviet deliveries of oil and have been openly engaged in searching for alternative sources of oil and gas supplies (mainly from Norway), their bargaining position has strengthened and offers some room for negotiating better deals.

Therefore, if the Polish Government can manage this balancing act between clearing payment arrangements with the Soviet republics and hard currency trade arranged through the central Soviet government, it may achieve more than simply buying time for its internal reforms to permit readjustment of the economy for trade to the West. Given that Poland is well ahead of its former CMEA partners, due mainly to its much faster decentralization of foreign trade, and by extension a greater readiness of individual enterprises to pursue new opportunities, Poland is in a better position to benefit from trade with the Soviet republics than other former CMEA partners.

Since it appears that a clearing payments system of trade could be beneficially established between Poland and the Soviet republics (elaborated on in the original paper as a form of the Finnish model), it would be irresponsible not to mention what has happened to the actual trading arrangements between Finland and the USSR. As of January

1991, the old clearing payments system was terminated and was replaced with a convertible currency payments system; arrangements similar to those which exist with the East European countries. This fact, does not, in our opinion, weaken the case for establishing clearing trade with the Soviet republics. The specific current economic situations of Finland and the Soviet Union made this model too burdensome for either side.

Finnish-Soviet trade arrangements were terminated primarily because the Soviet Union could not clear their deficits either through hard currency payments or through increased deliveries of oil, which historically amounted to ca. 75% of Soviet exports to Finland. The Soviet Union has been so strapped for cash that the Finns have been unable to collect \$100M left as an imbalance on the clearing account, and had to allow the USSR a full year (to the end of 1991) to pay. Furthermore, in 1990, the Soviet Union was able to supply only 73.6% of the oil it delivered to Finland in 1989, despite an unchanging Finnish demand for oil. The Soviets have been threatening further cuts in oil deliveries as the obsolete Soviet oil industry encounters more and more problems maintaining current levels of production. Additionally, as the Soviet Union's share of Finnish foreign trade declined (exports down 11% from 1989 levels, and imports down 16%), the value for Finland of participating in the elaborate clearing payments system (both in terms of total trade value and counter-cyclical effects to trade with market economies) was reduced. Finally, in view of the continuous decline of the Soviet economy, Finland has had little incentive to try to defend their old system from being replaced with new arrangements.

In the case of the Polish economy, however, where many enterprises still remain dependent on the Soviet market, where access to hard currency remains limited, and where the scale of prospective economic reforms remains daunting, a clearing system of trade with the Soviet republics could be of greater benefit than to Finland. Since many of the Finnish enterprises which served the Soviet market could be adjusted to serve Western markets more easily than Polish enterprises could, there is less

incentive for Finland to engage in contorted trade arrangements which offer few immediate benefits and an uncertain future. Poland, on the other hand, could use a clearing model of trade to diminish hard currency payments for imports, to establish new markets for some of its products, to increase the value realized for some of its current exports, and to find some alternative sources of raw materials. In the process, it could establish stronger relations with the increasingly independent Soviet republics (some of which could soon become Poland's new independent neighbors). Also it might be able to increase its bargaining power and its opportunities to execute lucrative trade agreements with the central Soviet government in the future. At the same time, the authors would like to reiterate that Poland *must* aim at establishing its presence on competitive Western markets, and at no time should other alternatives take precedence and dissuade Poland from pursuing this primary goal.

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Bibliography

1987 International Trade Statistics Yearbook, volumes 1 and 2, United Nations, New York, 1989.

"Changes in the Clearing Payments System in Trade Between Finland and the USSR", in the *Bank of Finland Bulletin*, October 1988.

"Charting Poland's Economic Rebirth", (an interview with Jeffrey Sachs) in *Challenge*, February, 1990.

Country Report: Analysis of Economic and Political Trends Every Quarter: Finland, The Economist Intelligence Unit, 1986-1988.

Country Report: Analysis of Economic and Political Trends Every Quarter: Poland, The Economist Intelligence Unit, 1986-1988.

Economic Survey, Finland, Helsinki, Economics Department of the Ministry of Finance, 1986 and 1989.

Finland 1995: Economic Prospects, Helsinki, Economic Planning Centre, 1981.

Finland in the Changing International Division of Labor, Regional and Country Studies Branch, Division for Industrial Studies, United Nations Industrial Development Organization, 6 September 1985.

“Finland’s Trade and Economic Cooperation with the CMEA Countries”, by Terhi Kivilahti, Head of Office, Bilateral Trade Department, Bank of Finland, 1 August 1988.

Finnish-Soviet Economic Relations, ed. Kari Mottola, O.N.Bykov, and I.S. Korolev, in association with the Finnish Institute of International Affairs, London: Macmillan Press, 1983.

Gospodarka Swiata i Polski w 1989 i 1990 roku, Instytut Koniunktur i Cen Handlu Zagranicznego, Warszawa, 1990.

McDonald, Kevin. “Poland’s Biggest Factory Struggles to Survive”, *Wall Street Journal*, 8 May 1990.

OECD Economic Surveys: Finland, Organisation for Economic Co-operation and Development, 1988-1989.

Official Finnish Government Press Releases on Finnish-Soviet Trade: 25 September 1984, and 26 October 1989.

Poland: Reform, Adjustment and Growth, A World Bank Country Study, 1987, volumes 1 and 2.

“Poland Introduces Bold and Wide-Ranging Economic Reforms: Fund-Supported Program Aims To Slash Inflation, Liberalize Economy”, *IMF Survey*, 19 February, 1990.

Polish Foreign Trade in 1988: Annual Report, Warsaw, Foreign Trade Research Institute, 1989.

Ptaszek, Jan. *Polska-Zwiazek Radziecki. Wspolpraca-integracja*. Warszawa, Panstwowe Wydawnictwo Ekonomiczne, 1978.

“Recent Developments in Trade Between Finland and the Soviet Union”, by Jouko Rautava and Hannu Tervonen, Bilateral Trade Department, Bank of Finland, in the *Bank of Finland Bulletin*, February, 1987.

“Rediscovering the Wheel” in “Privatisation in Eastern Europe”, *The Economist*, 14 April 1990.

Reforma Gospodarcza: Dodatek “Rzeczpospolitej”, Warszawa, 11 January 1990.

Repo, Timo. “Finland and the USSR as Trading Partners”, *Scandinavian Review*, Winter 1987.

“Russia’s Latest Queue: For Creditors”, *The Economist*, May 19, 1990, p. 75.

Sachs, Jeffrey. “Management Positions Available: Call Warsaw”, *Wall Street Journal*, 21 March 1990.

“Trade and Economic Cooperation Between Finland and the Soviet Union”, issued by the Ministry for International Affairs, Helsinki.

Trade Between Finland and the Soviet Union in the Finnish Economy, Helsinki, The Research Institute of Finnish Economy, 1986.

Wihtol, Ake. “Some Views on the Present and Future Economic Relations Between Finland and the Soviet Union”, *Ulkopolitikka*, April, 1984.

Wydanie nadzwyczajne Rzeczpospolita, Warszawa, Styczen, 1990.

“Zamiast Rubli”, (an interview with Dariusz Ledworowski, Deputy Minister in Poland’s Ministry of Foreign Economic Relations) *Polityka*, 22 December, 1990.