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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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30 August 1985

EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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INTERNATIONAL AFFAIRS

CEMA IN A CHANGING WORLD DISCUSSED

Budapest KULPOLITIKA in Hungarian No 3, 1985 pp 3-31

[Article by Laszlo Csaba, senior scientific fellow of the World Economy Research Institute of the Hungarian Academy of Sciences: "CEMA in a Changing World"]

[Text] CEMA, the economic integration of the planned economies of East Europe, has a decisive influence on the development of its member nations. This statement applies not only to relations between the member nations and the organization, but to the relations of both to the world economy as well. The external economic shocks that the CEMA countries experienced during the past decade have also made it perceptibly clear that the individual planned economies and their regional integration, whether they want to be or not, are an organic part of the unified world economy. Which in other words means that the CEMA countries, contrary to the usage reflecting the concept generally accepted earlier, do not constitute a separate "socialist world economic system" that is developing (or may develop) according to its own laws. At the same time, however, it is also true that the structural interdependence between the countries of East Europe and the Soviet Union, their specific common system of rules governing regional trade, and also the nature, forms and effects of the regional international division of labor that has evolved over the past 3.5 decades, constitute in their entirety a quality that may be regarded as an integration by the criteria of any theoretical system. On the one hand, this rather peculiar integration of the planned economies is an international extension of their national, mostly command-directed, systems of economic management. And on the other hand, the integration itself helps to reinforce these mechanisms. This reaction manifests itself, among other things, in that the economic units' success indicators and norms of behavior, both of which have evolved adapted to the logic of the domestic economic systems, have asserted (or may assert) themselves, more or less without change, also in large (or decisive) areas of the external economy. In other words, this system of macro- and microeconomic conditions predominantly applies to the member nations' dealings with the world outside CEMA as well. Another way of formulating this relationship is that while CEMA today is unambiguously a part of the world economic system in terms of the system of real economic conditions, institutionally the situation is the exact opposite. Namely, the peculiarities of the institutions, economic structures and norms of behavior within CEMA determine to a large extent how the member nations participate in the world economy. Concentrated on a few large items, the foreign-trade practice of promoting barter or countertrade can serve as a striking example.

A sort of formal, institutional approach dominates most of the professional literature on CEMA. In this article, by contrast, I interpret CEMA primarily as a concept describing the peculiar and multiplane interdependence of the Soviet Union and the East European member nations, as outlined above. This is warranted, among other things, also by the fact that trade with the non-European member nations accounts for less than 10 percent of CEMA's total trade and is conducted predominantly by the Soviet Union. (The Soviet Union's share of the non-European member nations' total trade ranges from 75 to 90 percent.) Instead of describing in detail and evaluating the functioning of the joint institutions, therefore, I intend to analyze the following three topics: (a) real economic performance, i.e., how CEMA has stood its ground in economic world competition; (b) the particular aggregate of processes that may be interpreted also as the start of a new era in East Europe, perceptible in the radical rearrangement of regional cooperation's previous system of conditions; and (c) a summary of the changes that can be expected on the basis of the CEMA summit's resolutions, and which are probable or would be expedient for perfecting the mechanism of international cooperation (and as the groundwork for this mechanism's reform, which will be due eventually).

Real Economic Developments,
Trends of CEMA Participation in World Economic Division of Labor

For my analysis of the CEMA countries in this section, I have divided them into two groups: the Soviet Union, and the CEMA Six. I denote the latter group as East Europe, in accordance with the usage in United Nations statistical practice that makes computations possible. The question as to whether the use of this term is warranted and, if so, what areas it comprises in which periods, has itself been the subject of lively debate in the Hungarian historical literature.¹ Simplicity aside, the use of this term is justified also because, in my opinion, it expresses more to the point the economic and political realities (but only the realities) that developed after World War II, than do such designations as East Central Europe, Southeast Europe, Central East Europe, small CEMA countries or European socialist countries. By definition, therefore, Yugoslavia belongs not here but among the developing countries. And Albania is assigned to South Europe. On the basis of this classification, it would be justifiable to assume that this second group, comprising countries of small and medium size, is more likely to pursue a policy that is more open and extroverted also in general. In small countries, in principle, there are greater contradictions among their supply of productive factors, the range of production activities that can be pursued economically at home, and the structure of the demand in terms of assortment, because the latter's range of products and services is by no means any narrower than in large countries. The more considerations of economic efficiency and international competitiveness permeate practical economic policy and economic management, the more valid this relationship. In the abstract we could assume also the group's ever-greater share of the world market, because in the entire CEMA region the past 35 years have been characterized by the rapid development of socialist industrialization and, as the general rule, the rapid growth of national income. On a political basis one could reason that East-West economic relations developed parallel with the detente curve, the more so because business relations are frequently regarded as a by-product (a "piece") of the foreign-policy processes. The fact that in

the early 1980's the policy of reducing the debt mountain has proven effective could indicate successful (export-led) adjustment processes in the first approximation.

Table 1. CEMA's Share of World Export in 1950-1983 (Percent)

	<u>1950</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1981</u>	<u>1983</u>
CEMA jointly	6.8	10.1	10.5	9.8	8.9	8.1	9.6
Of which:							
Soviet Union	3.0	4.3	4.4	4.1	3.8	4.0	5.05
East Europe	3.8	5.8	6.1	5.7	5.1	4.1	4.65

Sources: Our own computations, based on data published in UNITED NATIONS MONTHLY BULLETIN OF STATISTICS, Jun 78, May 83 and Jul 84.

Table 2. CEMA's Share of World Import in 1950-1983 (Percent)

	<u>1950</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1981</u>	<u>1983</u>
CEMA jointly	6.3	10.3	10.5	9.6	10.1	8.0	8.7
Of which:							
Soviet Union	2.3	4.2	4.1	3.6	4.1	3.6	4.2
East Europe	4.0	6.1	6.4	6.0	6.0	4.4	4.5

Sources: As in Table 1.

The following picture emerges from the real processes summarized in Tables 1 and 2:

Until the mid-1960's, the CEMA group's share of the world market kept rising, although admittedly from a very low base. From 1965 to 1981, however, the trend of declining market share emerged as a long-term trend. The figure for 1983 again shows a substantial increase of more than 1.5 percentage points. This is the more significant because in 1983 world export declined 8.4 percent over 1981, and thus the growing market share accurately reflects the CEMA countries' exceptional efforts to restore external economic equilibrium. But at the same time we must note also the fact that Soviet export accounts for two-thirds of the gain, an indication of the East European group's modest export performance.

Furthermore, we must also bear in mind that the figure for 1983 is still lower than the market share in 1970, i.e., that the 1983 gain has not turned around the long-term trend of declining market share. This contention can be confirmed also in detail by examining the commodity structure of East-West trade. As we very well know, raw materials, fuels and processed materials, farm and semifinished products, and the mass-produced goods of declining industries constitute the bulk of the CEMA countries' export.² It follows from this structure that in the future the CEMA countries' export will encounter a further rise of market-restricting measures and the intensifying competition of more and more developing countries. Therefore the value of this export structure will inevitably decline further and further, which will precipitate mainly as

perpetuating terms-of-trade losses resulting mostly from the unfavorable development of export prices. In 1970-1981, the Soviet Union was an exception to this devaluation, because the price ratios changed in favor of fuels, energy and raw materials, which account for 90 percent of the Soviet Union's export to the West (and are by no means negligible in its CEMA export as well). Consequently, a continuation of the favorable 1981-1983 trend cannot be expected in spite of the anticipated long-term buoyancy of international trade, because such a continuation could be imagined only if the physical volume of CEMA export to the OECD countries were to increase in geometric progression. This is unlikely to happen because the CEMA countries are entering a phase of their development in which they can expect an acceleration of changes in their economic structures and export structures, rather than general economic growth.³ To arbitrarily accelerate the rate of economic growth would lead to balance-of-payments problems that would be serious already in the short run, causing for the rest of the decade conditions even less favorable than the present moderate possibilities for economic growth.⁴ The domestic markets have become especially tight in recent years, and this would not permit such a large volume of export even if there were a significant improvement in its structure. If we consider that the Soviet Union accounted for two-thirds of CEMA's gain, and that simultaneously the terms of trade for fuels and raw materials in the world market have become substantially less favorable since 1982 than previously and are expected to remain so long term, it is very likely that quantitative growth of this most dynamic part of CEMA export will merely serve, mainly or exclusively, to offset the impacts of the unfavorable prices. Therefore the share of CEMA as a whole in world export will probably develop according to the long-term trend observed in 1965-1981.

The trend of a declining share of world export is clearly evident in the export figures for East Europe. The 4.1-percent share in 1981, for example, barely exceeds East Europe's share during the cold war, and the figure for 1983 is lower by more than a whole percentage point than the market share in 1960. Except in 1983, both the Soviet Union and East Europe had their highest shares of the world market in 1965. Which indicates that the 1960's, rather than the 1970's, can be regarded as the period of an opening to the world economy. It is likewise worth mentioning that the price of oil, which accounts for 45 percent of the Soviet Union's export to the West, increased twentyfold between 1970 and 1981, yet the Soviet Union's share of world export did not increase until 1982. From then on the unfavorable development of prices has forced the Soviet Union to adopt a very expansive export policy toward the West, and this is reflected in the Soviet Union's increasing share of declining world export.

The first thing one finds striking upon reviewing the development of import is that export is not the only area available to prove the validity of the statement about the 1960's, rather than the 1970's, being the real period of an opening to the world economy. Despite their much publicized large-scale investment projects and commissioned huge plants, the 1970's merely slowed down the long-term process of declining import share. It is worth noting that the Soviet Union's 4.3-percent [sic] share of world import in 1983 was the same as its share in 1960, while East Europe's 4.5-percent share is merely a half percentage point higher than during the cold war. These figures unambiguously demonstrate that in the period after 1970 there was no question of an

excessive opening to the external economy, because even CEMA's share of world import showed a long-term declining trend. And if the much maligned "excessive opening" did not actually occur, then our international payments problems can hardly be remedied by "optimizing" or further curtailing the external economy's openness, as this is being suggested repeatedly by certain analysts and practical decision-makers. From the table it is clearly evident that the causes of indebtedness cannot be traced to the excessive growth of import. The exact opposite is true: in the period after 1970 when CEMA was "the world's most dynamically developing region" (as it was customary to point out with a certain formalism), the performance of export developed so poorly that it was not enough to finance the import expanding at a rate even lower than the average for world import. In addition to other factors, this too reflects fairly unambiguously (and comprehensively) on the development policies and management methods of the 1970's (which in certain circles it is still customary to regard, illusorically, as the period when everything was still going smoothly.)

The main conclusion to be drawn from a comparison of Tables 1 and 2 is that the relatively good results in the reduction of indebtedness during the first half of the 1980's can be attributed primarily to the curtailment of import, i.e., to a remedy that is being applied to the other side of foreign trade than the one where the payment difficulties are originating. Even from this brief outline of the CEMA countries' reproduction characteristics it is obvious that any further curtailment of import would jeopardize not only our already modest growth possibilities and not too strong international adaptability, but even the simple functioning of the economy in many instances. Further proof appears unnecessary to substantiate the need for the new type of growth model, that of export-led growth.

Numerous studies have analyzed in recent years the commodity structure of the CEMA countries' foreign trade. But studies that analyze the geographic structure of the turnover, and the growth of trade by provenances and destinations, are far less common. By reviewing a few more series of data that are essential from this point of view, we will obtain a clearer picture also of the interrelations between the economic and political processes on the one hand, and the theoretical principles on the other. With the help of the series of data presented in Tables 3-10, we will get a better understanding also of the relationship between trade within CEMA and trade outside CEMA.

Table 3. Value of Soviet Export by Principal Destinations in 1970-1983
(billion dollars)

Year	Total <u>export</u>	Developed market <u>economies</u>	Developing <u>countries*</u>	East <u>Europe</u>	Asian planned <u>economies</u>
1970	12.8	2.716	2.688	6.759	0.638
1975	33.318	9.582	6.188	16.449	1.100
1979	64.762	21.362	12.871	28.314	2.215
1981	79.003	26.938	15.856	33.613	2.592
1983	91.330	29.996	11.790	39.219	3.251

*UN statistics include Yugoslavia among the developing countries.

Sources: As in table 1.

Table 4. Geographic Breakdown of Soviet Export in 1970-1983
(in percent, based on dollar value)

Year	<u>Developed market economies</u>	<u>Developing countries</u>	<u>East Europe</u>	<u>Asian planned economies</u>
1970	21.2	21.0	52.8	5.0
1975	28.8	18.5	49.4	3.3
1979	33.0	19.9	43.7	3.4
1980	35.3	18.5	42.1	4.1
1981	34.1	20.0	42.6	3.3
1983	32.8	21.7	42.9	3.6

Sources: As in Table 1.

Table 5. Value of Soviet Import by Principal Provenances in 1970-1983
(billion dollars)

Year	<u>Total import</u>	<u>Developed market economies</u>	<u>Developing countries*</u>	<u>East Europe</u>	<u>Asian planned economies</u>
1970	11.732	3.073	1.789	6.635	0.235
1975	36.971	14.514	6.177	15.680	0.599
1979	57.744	21.849	8.121	26.647	1.126
1981	72.960	28.957	13.629	29.320	1.054
1983	80.267	28.333	13.010	37.083	1.541

*UN statistics include Yugoslavia among the developing countries.

Sources: As in table 1.

Table 6. Breakdown of Soviet Import by Principal Provenances in 1970-1983
(in percent)

Year	<u>Developed market economies</u>	<u>Developing countries</u>	<u>East Europe</u>	<u>Asian planned economies</u>
1970	26.2	15.2	56.6	2.0
1975	39.3	16.7	42.4	1.7
1979	37.8	14.1	46.1	2.0
1981	39.7	18.7	40.2	1.6
1983	35.3	16.2	46.2	1.9

Sources: As in Table 1.

Table 7. Value of East Europe's Export by Principal Destinations in 1970-1983
(billion dollars)

Year	<u>Total export</u>	<u>Developed market economies</u>	<u>Developing countries</u>	<u>Soviet Union</u>	<u>East Europe</u>	<u>Asian planned economies</u>
1970	18.168	4.762	1.397	6.635	5.000	0.374
1975	45.029	11.945	4.282	15.680	12.306	0.816
1979	71.391	20.017	7.468	26.647	15.663	1.596
1981	80.382	21.596	11.821	29.320	16.247	1.398
1983	83.852	19.467	8.728	37.083	17.078	1.496

Sources: As in table 1.

Table 8. Breakdown of East Europe's Export by Principal Destinations in 1970-1983 (in percent, based on dollar value)

Year	Total <u>export</u>	Developed market <u>economies</u>	Developing <u>countries</u>	Soviet <u>Union</u>	East <u>Europe</u>	Asian planned <u>economies</u>
1970	100	26.2	7.7	36.5	27.5	2.1
1975	100	26.5	9.5	34.8	27.3	1.8
1979	100	28.0	10.5	37.3	21.9	2.2
1981	100	26.9	14.7	36.5	20.2	1.7
1983	100	23.2	10.4	44.2	20.3	1.8

Sources: As in Table 1.

Table 9. Value of East Europe's Import by Principal Provenances in 1970-1983 (billion dollars)

Year	Total <u>export</u>	Developed market <u>economies</u>	Developing <u>countries</u>	East <u>Europe</u>	Soviet <u>Union</u>	Asian planned <u>economies</u>
1970	17.186	4.066	1.158	4.981	6.662	0.319
1975	47.259	14.378	3.390	12.403	16.375	0.718
1979	73.125	20.589	6.670	17.638	26.864	1.364
1980	82.014	22.347	10.708	18.379	29.070	1.510
1981	76.314	18.999	8.568	17.584	29.836	1.327
1983	78.304	19.664	8.028	18.130	31.628	0.854

Sources: As in table 1.

Table 10. Geographic Structure of the Breakdown of East Europe's Import in 1970-1983 (in percent)

Year	Total <u>export</u>	Developed market <u>economies</u>	Developing <u>countries</u>	East <u>Europe</u>	Soviet <u>Union</u>	Asian planned <u>economies</u>
1970	100	23.7	6.7	29.0	38.8	1.9
1975	100	30.4	7.2	26.2	34.6	1.5
1979	100	28.2	9.1	24.1	36.8	1.9
1980	100	27.2	13.1	22.4	35.4	1.8
1981	100	24.9	11.2	23.0	39.1	1.7
1983	100	25.1	10.2	23.2	40.4	1.1

Sources: As in Table 1.

The Soviet Union's total export expanded 7.1-fold from 1970 to 1983. Among the various destinations, expansion was the fastest, 11-fold, to the developed industrial countries. During this same period Soviet export to East Europe increased 5.8-fold; and to developing countries, 4.4-fold. Which means that Soviet export to the West increased nearly twice as fast as to the Soviet Union's traditional CEMA partners. If we consider only the period after 1975,

when in the United States the effects of the Foreign Trade Act containing the Jackson-Vanik Amendment were already making themselves felt and therefore the policy of economic detente was by then already past its peak, we are able to determine from Table 3 by computation that Soviet export to the West continued to grow faster (3.1-fold increase) than to the CEMA countries (2.4-fold increase).⁵ Accordingly, the share of countries with developed market economies in the Soviet Union's total export increased from 21.2 percent in 1970 to 28.8 percent in 1975, peaked at 35.3 percent in 1980, and then slowed down somewhat to 32.8 percent in 1983. As evident from Table 4, Soviet export shifted 11.5 percentage points in favor of the OECD countries. And as the developing countries' share changed hardly at all during this entire period, this shift occurred primarily at the expense of the East European countries' share. In 1983, these countries' share of total Soviet export was 42.9 percent, having dropped more than 10 percentage points. These proportions clearly show how far the proposals have strayed from reality that advocate autarchy at the CEMA level: in the final outcome they would expect the Soviet Union to renounce the greater part of its foreign trade, for the benefit of the old-fashioned requirements that have never gained joint acceptance at the policy-making level.

Tables 5 and 6 present the data on Soviet import, and the processes that are outlined here parallel those in export. From 1970 to 1983, the Soviet Union's total import increased 6.8-fold. Within this, however, import from the West increased 9.2-fold; from East Europe, 5.6-fold; and from developing countries, 7.3-fold. These proportions mean that the Soviet Union's import from the West expanded nearly twice as fast as from East Europe. Therefore a striking realignment of Soviet import's geographic structure can be seen, although it is slightly less pronounced than in the case of export. The Western suppliers' share of total Soviet import rose from 26.2 percent in 1970 to 39.7 percent in 1981, and then eased back to 35.3 percent in 1983. This is the mirror image of a drop of 10 percentage points in the share of the East European trading partners.

In order to draw further conclusions, we must compare the marked shift in the Soviet Union's external economic activity with the trends in East Europe's foreign trade, reflected in the data of Tables 7 through 10. From 1970 to 1983, East Europe's total export rose much more sluggishly than the Soviet Union's, attaining merely a 4.6-fold increase. Among the various principal export destinations, the developing countries' share of East European export rose the fastest, attaining a 6.2-fold increase (even despite the significant slowdown in 1981-1983). The second fastest-growing destination was the Soviet Union (5.2-fold increase), and the countries with developed market economies ranked only third, with a 4.1-fold increase. Export to other East European countries rose at the slowest rate, attaining a 3.7-fold increase. East European export to the West increased at about two-fifths the rate at which Soviet export to the West rose. Thus it is evident that there was no question of the East European countries' diverting their export allocations to the West, at the expense of the Soviet Union. Naturally, the poor growth of export to other East European countries is also a reflection on development policy. The decline of the small and medium-sized countries' mutual trade is in accord with the changes that took place in the world economy at that time, and it stems primarily from the strong parallelisms between the East European economies (there are shortages

or surpluses of the same productive factors, and often of the same types of goods and services, in the individual small countries, and therefore they are unable to better complement one another).

The most surprising feature of East European foreign trade's geographic structure is that a development which in theory could be expected has not occurred in practice, namely a shift toward the countries with developed market economies. In contrast with the frequently voiced theoretical hypotheses, the most striking structural characteristic of East European export is a rise of no less than 8 percentage points in the significance of the Soviet Union as East Europe's export market; in 1983, the Soviet Union's share of East European export was already 44.2 percent. The developing countries' share rose, but the share of the Western countries already declined in 1983 after a decade of stagnation (on the basis of averaging the fluctuations). This development curve is in sharp contrast with the trends of Soviet foreign trade.

Turning now to the trends in import, we find that East Europe's total import shows a 4.6-fold increase. Import from the West rose essentially at the average rate, attaining a 4.8-fold increase. In other words, the rate of expansion was half that of Soviet import from the West. Import from the Soviet Union rose at nearly the same rate, attaining a 4.7-fold increase. This also proves that East Europe's import from the West cannot be rated by any standard as excessive, and its rate of expansion as unjustifiably fast. Consequently, East European indebtedness cannot be attributed to allegedly grandiose import policies. Specific examples of inadequate circumspection in procurement are easy to find, but this is not the point at the macroeconomic level (if the controversy is over the amount of import, and not the evaluation of its structure). Naturally, the questions of import structure, and of the set of domestic conditions for the efficient utilization of import, deserve separate analyses. According to the data summarized in the tables, in East Europe--unlike in the Soviet Union--we do not find a geographic realignment of foreign trade, because in the 1970-1983 period as a whole there was no opening to the world economy. Trade between East Europe and the West rose only temporarily, and even then the rise was due in part to statistical distortions, because the nominal price level of trade within CEMA at that time undervalued the relative importance of this trade as compared with the real price level. The 25.1-percent import share expressing the relative importance of the developed market economies in 1983 is barely higher than their share in 1970, the base year. At the same time, deliveries from the Soviet Union regained their earlier importance and in 1983 already accounted for 40.4 percent of East Europe's total import. So far as the other provenances are concerned, interesting is the slight decline of import from other East European countries, in favor of the developing countries' share of import.

From the viewpoint of the world economy and of the debates within CEMA as well, it will be interesting to examine the international competitiveness of industrial development in the CEMA countries, especially in comparison with other countries. On this occasion I will dwell briefly on only one aspect of this complicated range of questions, on the ability to export. It is customary to characterize the competitiveness of export by the growth rate, and the proportion within it, of machinery and transport equipment (Section 7 of SITC

[Standard International Trade Classification]], which I computed in a breakdown by total export and export to the developed market economies. Naturally, this is a very rough yardstick, and it would be in order to raise also the theoretical question as to whether it is warranted to characterize export performance by the proportion of a single (or any) commodity section. But since the development of the machine industry and, moreover, the expansion of its export have been a preferential objective of economic policy in every CEMA country for decades and in the past 15 years in particular, and because every country's trade policy during the investigated period has been strongly urging an increase of the proportion of machinery within export, it is undoubtedly justified to draw certain conclusions from the data presented in Tables 11 and 12.

Table 11. Trends in the CEMA and Developing Countries' Export of Machinery and Transport Equipment (SITC 7) in 1970-1982

Year	CEMA Countries of which								
	Developing countries			East Europe			Soviet Union		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
1970	54,944	1,431	2,6	17,725	6,872	38,7	12,80	2,775	21,7
1975	210,477	7,131	3,4	44,048	18,152	41,2	33,310	6,378	19,1
1978	301,649	15,776	5,2	60,218	26,640	44,2	52,216	10,410	19,9
1981	344,357	31,628	5,6	77,660	33,630	43,2	79,003	10,912	13,8
1982	486,483	32,136	6,6	78,152	34,038	43,6	86,949	11,368	13,1

Sources: Computed on the basis of UNITED NATIONS MONTHLY BULLETIN OF STATISTICS, Jun 79, May 83 and May 84.

Key: 1 - Value of total export (billion dollars)
2 - Value of export in SITC Section 7 (billion dollars)
3 - Percent of machinery export, (2):(1)

Table 12. Trends in the CEMA and Developing Countries' Export of Machinery and Transport Equipment (SITC 7) to Developed Market Economies in 1970-1982

Year	CEMA Countries of which								
	Developing countries			East Europe			Soviet Union		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
1970	39,758	0,757	1,9	4,316	0,486	11,3	2,716	0,143	5,3
1975	147,710	3,645	2,5	10,617	1,644	15,5	9,582	0,547	5,7
1978	214,563	8,747	4,1	14,944	2,379	15,9	14,356	0,752	5,2
1981	367,400	16,052	4,4	19,300	2,941	15,2	26,936	0,740	2,7
1982	312,152	17,442	5,6	19,383	2,688	13,9	29,365	0,777	2,6

Sources: Computed on the basis of UNITED NATIONS MONTHLY BULLETIN OF STATISTICS, Jun 78, May 83 and Jun 84.

Key: As in table 11.

Pursuing extremely diverse paths with varying success, the large group of developing countries increased their total export 8.9-fold in 1970-1982. (1982 was the latest year for which comparable data were available at the beginning of 1985.) During this same period, their export of machinery and transport equipment increased 22.5-fold, and hence the proportion of machinery and transport equipment within their export increased 2.5-fold. Both the very low starting base and the unprecedented rapid rate of expansion are evident from the data. Especially commendable is the fact that this growth has not tapered off even after 1973, despite the recession in the world economy and world trade, and the intensifying restrictions on access to markets in Western Europe. The growth rate of the East European countries' total export was only half the developing countries' growth rate. This is unwarranted, the more so because East Europe, even with its paucity of natural resources, is economically more developed. Machinery export rose faster than on average, but its growth rate was only a fourth of the corresponding growth rate in the developing countries. Although the countries of East Europe are economically more developed, both the protection of regional industry and the preference for CEMA trade are reflected in the high proportion of machinery within total export. As this statement was valid already in 1970, it would naturally be nonsensical to expect the East European countries' foreign trade to increase the proportion of machinery within total export at the same rate as in the developing countries.

In the Soviet Union, unlike in East Europe, total export rose faster than the export of machinery (6.8- and 4.1-fold increases respectively). This development provides food for thought even if, from the Soviet Union's viewpoint, it was reasonable to avail itself of the advantages stemming from changes in the world market's price ratios. After all, Soviet economists and the leaders of Soviet foreign trade have been striving continuously since the 1960's to increase the proportion of machinery within total export. Therefore the lagging proportion of machinery is unfavorable even if in 1973-1981 specifically this structural underdevelopment produced substantial windfall price profits. The Soviet Union's profit from the terms of trade in 1970-1980 can be estimated at 20 billion dollars; without this profit, the Soviet Union's present net foreign debt of about 10 billion dollars would have trebled. Considered from a different point of view, the Soviet Union's profit from higher prices between 1978 and 1981 was sufficient to pay for its entire grain import.⁶

It will be worthwhile to review the values of the same ratios computed for the export to countries with developed market economies. The data under the three column headings in Table 12 are directly comparable, for all three provenances strived to increase their exports of machinery to the West.

The developing countries' total export to the West in 1970-1982 increased 7.9-fold, while their export of machinery increased no less than 23-fold. Viewed from a different approach, a characteristic feature of the developing countries' machinery export is the fact that if a "Southern" exporter can sell machinery at all, he is able to do so even in the most demanding competitive markets. This relationship is outlined even in bolder relief if we compare the CEMA countries not with the very wide group of developing countries, but with the new industrial countries. The latter are more suitable for comparison and are competing more directly with the CEMA countries' finished products in OECD markets. In the Hungarian economic literature, several authors have

already made detailed comparisons of this kind,⁷ and therefore it will be unnecessary to repeat their results.

In conjunction with the trends of East European export to countries with developed market economies, already the fact provides food for thought that not even the growth rate of the total export is able to keep pace with the total export of the developing countries. Regrettably, this is even more true of the growth rate of machinery export. While the developing countries' machinery export to the West increased 23-fold, the growth rate in East Europe was less than a fourth of this (with a 5.5-fold expansion). The developing countries' machinery export is characterized by even and continuous growth, and its proportion rose from 1.9 percent in 1970 to 5.6 percent in 1982. In contrast with this, improvement of the export structure in East Europe ground to a halt in 1975, and there has even been a pronounced worsening trend in the 1980's: while the proportion of machinery export still rose in 1970-1975 from 11.3 to 15.5 percent, in 1982 it was only 13.8 percent. Likewise noteworthy is that the countries of East Europe were trailing the developing countries in the growth rate of machinery export already in 1970-1975: while the "Southern" export increased 4.8-fold, East Europe's export increased only 3.4-fold. As can be calculated from the data in Table 12, the value of East European machinery export to the West, at current prices, increased by only 60 percent in 1975-1982, while the value of the developing countries' machinery export increased 4.8 fold. These data also indicate that the customary references to the absence of markets, respectively to the trade-restricting practices of the countries of Western Europe, are likewise unacceptable excuses for the modest East European export performance. Namely, the new industrial countries account for over three-fourths of the growing export of machinery, and the Common Market is not giving them any tariff concessions.

The corresponding data for the Soviet Union reveal that its machinery export to the West is growing much more slowly than its total export to this destination. In 1970-1975, a period in which the effects of the first oil price shock were already being felt considerably, the commodity section's share of total export still rose, from 5.3 to 5.7 percent. Thereafter it declined to 2.6 percent, or less than half, in 1982. Which means that at current prices (!) the Soviet Union achieved only 42 percent growth in 7 years. This fact indicates that what is involved here is not merely the utilization of the advantages that favorable price ratios offer, and sensible exploitation of the abundance of natural resources, but also a serious deficiency in the Soviet machine industry's ability to compete internationally.

This last conclusion leads us directly to the debates on trade within CEMA. Soviet economists⁸ have been strongly urging for years a radical transformation of the sectoral structure of CEMA cooperation. They are proposing that the traditional intersectoral division of labor--it involves primarily the exchange of Soviet fuels and raw materials for East European finished products--should be replaced gradually by intrasectoral cooperation that in principle is more modern. This proposal is in harmony not only with the efforts of Soviet trade policy during the past two decades to link the improvement of the structure of foreign trade to an increase in the proportion of Soviet machinery sales, but also with the general trends in the world economy and the theory of regional economic integration. In full awareness of the absolute limits that the

objective situation of the Soviet Union's energy and raw-material sectors set for procurement, it is imperative to consider this idea, especially if trade policy wants to preserve by and large the geographic proportions of the East European countries' foreign trade, i.e., if its intention is to maintain to a certain extent the momentum of CEMA commodity trade, in spite of the mentioned limits.

First of all, it must be made absolutely clear that this proposal is feasible in principle. However, there is one thing that can be pointed out with certainty, without having to outline on this occasion the present international mechanism's features that are prejudicial to cooperation in manufacturing. (Incidentally, many other authors besides Smelev, the proposal's author, agree that these features must be liquidated as a prerequisite for the proposal's realization.) Namely, that the viability of this proposal would require, from the viewpoint of the real economy, far more competitive supply by the Soviet machine industry than at present. For if the unfavorable trends of the 1975-1982 period are not turned around during the rest of this decade, this in itself would prevent--or, more accurately, would seriously hamper even in the case of institutional changes--the expansion of intrasectoral cooperation within CEMA, based on economic interests.

However, the cited Soviet proposal must not be regarded merely as an abstract discussion, for it leads directly into the center of the search for practical solutions to the principal directions of integration policy. Essentially these debates are attempting to clarify how it would be possible to adjust, in a mutually acceptable manner, to the region's drastically changed situation, which therefore may be interpreted as a start of a new era within CEMA.

Radical Transformation in the 1980's of the System of Conditions for Regional Cooperation

The most simple way to demonstrate the essence of the changes is to compare two official standpoints that may be regarded as typical of the given period. One is a 1973 Hungarian brochure that sums up the advantages of socialist economic integration as follows: "Through mutual deliveries of energy sources and raw materials, socialist integration has enabled the individual member nations to develop, independently of their domestic raw material base, modern sectors that are playing a decisive role in technical and technological development" and "has contributed to the industrialization of the less developed member nations, and to attaining high levels in the per capita consumption of fuels and industrial materials, notably steel and cement."⁹ A decade later, two semiofficial analysts reported in a journal close to the Soviet Ministry of Foreign Affairs that the 1984 CEMA summit meeting urged the member nations less well endowed with natural resources to conserve energy and raw materials, and to strive to develop less energy- and material-intensive industries. They formulate "qualitatively new tasks" in conjunction with the production of energy and raw materials. "Essential in this context is not a further increase in the output of fuels, but a radical improvement of their consumption at the highest possible level of efficiency. There are still enormous untapped reserves for improving the efficiency of energy consumption."¹⁰

The main causes of this new situation can be identified as the following six factors.¹¹

First, Soviet output of fuels and raw materials, with the exception of natural gas, is not increasing meaningfully in any of the areas significant from the viewpoint of total trade. This is due to objective reasons that include, among other things, financial, credit, technical, technological, geological, climatic, organizational, manpower, transportational, regulatory and infrastructural factors. On this occasion there is no need to dwell again¹² on them in detail, and it will be sufficient to recall the final conclusion: this is an objective process, and also an irreversible one under the conditions that at present can come realistically into consideration.

Secondly, in the process of socialist industrialization--first as a result of the uncritical copying of Soviet practice, and later by following the doctrine that socialism frees industrialization from the limitations imposed by natural and productive factors--East Europe developed industrial structures that were extremely wasteful of materials and energy, and the expanded capital replacement of these industrial structures has taken place at a rapid rate. Although the change in the practice of contractual pricing came unexpectedly in February 1975, it finally brought home to East European decision-makers something they had already known on the basis of the wrangling over a decade and a half: that the period of increasing deliveries of low-cost fuels and raw materials had ended once and for all. In spite of this, essentially nothing was done even in 1975-1979 to change the mentioned economic structures that were removed many times over from the real economic conditions.

Thirdly, we may regard as actually a separate factor the loss of at least an entire decade during which East Europe failed to introduce structural-policy and economic-mechanism changes that could have significantly reduced the economies' material- and energy-intensity.¹³ By now it is probably unnecessary to prove that to delay the changes, to maintain the unfavorable economic structures unaltered and even to replace their capital on an expanded scale--in other words, to pursue for decades, amidst the changes in the real economic conditions internationally and within CEMA in particular, a policy of import substitution and quantitative growth that assigned practically absolute primacy to domestic (national) conditions--turned out to be a serious mistake. Here I would like to point out with special emphasis that the energy shortage within CEMA is by no means the transmission or "ripple effect" of the changes in the world economy, since specifically the disproportions between extractive industry and manufacturing that had intensified at the regional level already by the early 1960's warranted the substantial long-term investment credits that the East European countries provided for the Soviet Union (and partially for one another as well). The shifting of the energy question into the forefront of attention left its clear imprint also on the Comprehensive Program's practical provisions, and it will be remembered that all the agreements on participation in large-scale investment projects were concluded before the first oil price shock.

The energy shortage within CEMA developed not only earlier than in the world market, but also for different reasons and through different action mechanisms.

The problem of energy and raw materials arose within CEMA primarily as a growing physical disproportion between the limited capacities of extractive industry and the insatiable demand of manufacturing (and basically this is the situation even today). In other words, the shortage that was regarded as significant already in the 1960's and has intensified since is not being transmitted primarily through prices, and not through the world-market prices in any event, but is being felt first of all by the central planning agencies in the course of coordinating internationally the five-year national economic plans.¹⁴ The way this occurs is as follows: Even after several rounds of reconciling the lists of offered deliveries with the lists of requirements, there appears on the input side of national economic planning's system of balances a physical deficit of a structural nature, and it does not disappear even when the international coordination of the plans has ended and the targets have been refined. A detailed description of the coordination procedures,¹⁵ which were introduced long before the method of pricing was changed, clearly illustrates this. The shortage of energy and raw materials arose within CEMA as a physical shortage already before 1975 (when any direct impact of the world market was being denied, especially in 1973 and 1974) and has existed since then as a traditional source of tension in foreign trade; it has not arisen and continued predominantly as a result of the economic units' behavior, eyeing the opportunities in the world market and attempting to maximize profit. On the other hand, reference to the developments in the world market offered producers a very effective (irrefutable), but nonetheless secondary, explanation for the growing shortages; they responded to these shortages by considerably expanding financial participation in investment projects already in 1972-1973, and fought the imbalance of demand over supply also by means other than prices. Thus it is a mistake when certain--mainly Western--analysts attempt to interpret the question of energy and raw materials within CEMA in terms of financial categories, on the basis of motives that are absent from the CEMA mechanism, i.e., by assuming sacrificed profit or profit maximization, both of which actually are of secondary importance. Namely, an entire series of practical decisions that are in conflict with the logic of sacrificed profit is typical of Soviet behavior. Thus the Soviet Union diverted its petroleum sales to the world market not when it could have gained the most according to this logic (in 1974 and 1975, respectively in 1979-1981), but in 1982-1984, at the time of softening petroleum prices in the world market (whereas this logic would have required the Soviet Union to cut back its export, in the interest of price stability). The petroleum industry's share of investment failed to grow specifically when (in 1973-1977) its growth would have been the most warranted according to the mentioned logic.¹⁶ In the petroleum market, unlike in the gold market, the Soviet Union's behavior is not characterized by even partial profit maximization: the Soviet Union does not cut back sales when prices are falling, it does not coordinate its business policies with those of other large-scale producers, etc. Since the Soviet Union's actual production and marketing policies do not fit at all into the logic that Western authors presume, the secondary and supplementary nature of Soviet references to world-market prices is quite obvious. These are precisely real economic disproportions of an internal, non-financial nature, i.e., they are readily perceptible (and perceived) also in the traditional planning system's own conditions and instruments. By delaying

their decisions, East European planners have indeed committed a much greater mistake than merely failing to consider sacrificed profit or "implicit subsidies," the logic of which is foreign to their way of thinking and their system of motivation.

As the fourth factor we may mention the growing objective necessity of regrouping the Soviet Union's export allocations, due to declining fuel prices. This necessity stems from the fact that the Soviet mining industry's output, already at a very high level (and objectively incapable of any further increase), represents by and large a given supply that faces a demand which intentionally is infinite, because neither the present Soviet domestic mechanism nor the CEMA international mechanism has an effective instrument to curb demand. The curtailment of deliveries cannot be regarded as such an instrument because it--unlike the price increase that reduces effective demand--does not motivate the user to voluntarily refrain from ordering additional quantities later, and to seek alternative sources of supply, substitutes, conservation methods, etc., instead of concentrating every effort on acquiring "at all cost" the source of supply once already denied. Thus the greatest difficulty stems from the combination of a new and unforeseen task (related to export earnings) and of a long-known shortcoming of the system of economic management. In the given international situation, the Soviet leadership obviously has decided not to let the country's foreign debt exceed its present, easily manageable, order of magnitude (although the willingness of international bankers to provide loans would make this possible). And if the Soviet Union's import demand from hard-currency provenances may be regarded as given, then the international monetary (political) objective can be achieved only by increasing the volume of export. Export earnings can be increased through a sudden and large-scale improvement of the commodity structure--this does not follow from the earlier trends--or by curbing domestic consumption. (Another substantial profit from rising prices in the world market can hardly be expected.) Although the high Soviet domestic consumption has been sharply criticized particularly in recent years, and even a preferential state target program has been adopted to reduce it, there is no justification to expect--in spite of the occasional results--a sharp break in the consumption trends of raw materials and energy at the macroeconomic level during the remainder of this decade. This ties in primarily with the methods of management, particularly with the preponderance of gross value indicators (which Soviet economists so often criticize) in the system of enterprise incentives. For example, the plan indicator of the volume and assortment of deliveries, and sales of the output. According to present expectations, indicators of this type will be used to rate enterprise performance also through the end of this decade.¹⁷ Of course, the shortage-economy characteristic--in other words, the phenomenon that there are shortages of fuels and raw materials in the country that is the world's largest producer of fuel and raw materials (and that the shortages are not merely ad hoc and local in their nature)--does not depend on the type of indicators employed, but stems directly from the entire system of national economic planning and management.¹⁸ And it is likewise a historical fact that in the Soviet Union, as in every large country, we find a certain turning inward; i.e., if it comes to choosing between domestic and external (economic) objectives, because both cannot be achieved simultaneously in the given case, then usually the domestic considerations prevail. According to the official Soviet explanation, such considerations motivated the

temporary suspension of natural gas and petroleum deliveries to Western European partners in the winter of 1984-1985. Consequently, if randomly chosen reports from the Soviet daily press uniformly attest to the fact that in the supply of materials and equipment the situation between suppliers and customers is even worse and less certain than on average because of shortages, then objectively the Soviet Union, due to the combined effect of the factors listed so far, is not in a position to increase its deliveries of raw materials and energy to East Europe (or even to maintain them long term); in other words, to give preference to CEMA export among the mutually competing uses, or to even seriously consider such a possibility. To the contrary, the earnings necessary for the balance of hard-currency payments can be (and have been) ensured only by shifting the export allocations. I would also like to emphasize in particular that not the transferable-ruble price level, which is rising above the world-market price level, is limiting the East European countries' energy and raw-material demand. The transferable-ruble prices had been rising sharply already in 1975-1981, and yet the October 1981 decision on the curtailment of coordinated deliveries was needed to trigger changes of a permanent nature in the macroeconomic proportions of energy consumption in East Europe. It must be clearly recognized that these processes cannot be attributed at all to the absence of East European purchasing power, as some analysts are doing.¹⁹ The preceding review of the real processes has already demonstrated this. The relationship manifests itself directly as well: when CEMA trade is transacted in real hard currency and not units of account, then among the East European purchasers, for example, Hungary is so strong in purchasing power that over more than a decade it has always been able to attain a surplus. Actually, this only illustrates the relationship comprehensively proven in economics: that in the case of a unit of account for bilateral clearing--for that is what the transferable ruble essentially is²⁰--there can be no talk of purchasing power; furthermore, that the individual contractual prices serve neither to constrict nor to expand trade. This follows from the fact that the foreign and the domestic prices are divorced from each other, and from the nature of CEMA clearing as a bilateral monopoly; it does not mean that prices in their aggregate, i.e., the balance-of-payments situation does not affect the terms of trade and influence the real trade processes. Specifically this is the essence of the discussed problem: not even a substantial rise in the level of contractual prices has been able to curb the East European countries' demand for Soviet fuels and raw materials. Financial participation in investment projects is an effective instrument for curbing demand but, for a variety of reasons, this form can (or could) be employed only in a fraction of CEMA trade in energy and raw materials. However, since not prices but the somewhat subjective categories of hard and soft goods are indications of the paucity or abundance of goods, and since the coordination of the national economic plans, which takes place also at a high (political) level, determines the principal proportions of trade, the Soviet Union in the final outcome is left with no effective and objective instrument with which to curb demand. And, as we have seen, this statement applies to the Soviet mechanism as well.

As the fifth factor we can mention a by-product of the change in setting contractual prices. While the system of CEMA cooperation as a whole remained unchanged, one element of this mechanism was modified. This upset the regional

international monetary system's earlier harmony, and it also raised numerous and still unanswered practical questions regarding the payment mechanism's techniques and directly influenced the real processes as well.²¹ The most striking of these effects was that the East European countries accumulated a debt of several billion transferable rubles to the Soviet Union. It follows from the partial nature of the 1975 modifications that annual pricing was introduced in trade with the Soviet Union while the instruments for regulating the volumes of bilateral trade remained unchanged, but the closely related additional modifications were not "carried through" the monetary system. For example, long-term credits--except under special intergovernmental agreements--still remain among the "forms requiring further development."²² This is reflected also in the fact that while the countries of East Europe offset with real performances 80 percent of the Soviet Union's 1973-1985 terms-of-trade profit that can be estimated at 30 billion transferable rubles, and thus long-term credits would be needed to finance only around 5.0 billion transferable rubles representing about a fifth of their terms-of-trade losses,²³ at this writing the question is still not solved satisfactorily.

The fact that the transferable ruble, considering its economic content, is a unit of account precludes from the very outset the possibility that a debt in transferable rubles may directly be regarded as being of the same nature as a debt in hard currency, or that the same remedies should be employed in the case of a transferable-ruble debt as of one in hard currency. Even a net deficit in clearing is of a special nature, because it did not arise as a result of one partner's shipping less than what the bilateral agreement specified. (These are the oscillations that under a traditional clearing system must be offset the following year.) In the given case, however, the point is that there will be a net deficit even if the exact quantities specified in the course of the national economic plans' coordination are supplied. This stems from the international monetary system's one-sided modification that sticks out from the cooperation mechanism's entire logic; and it reflects the purposeful interference of a "visible hand," not the effect of East Europe's higher-than-warranted internal consumption. Predominantly the system of national economic balances specifies how each CEMA country spends its national incomes domestically, and in this system the resources available for spending are determined as a function of the final outcome of the national economic plans' international coordination. In this context the East European countries' raw-material and energy consumption was entirely warranted because it was based on the quantities specified in the course of the national economic plans' coordination, and there was no overconsumption in relation to these quantities. For under the present system of the national economic plans' international coordination, the coordinated quantities are the independent variables, and the monetary processes are the dependent variables. This relationship is not an absolutely valid one because, as can be seen, the state of the consolidated balance reacts upon the real processes (but without shaping them decisively). Thus the entire problem stems predominantly from a method of pricing that sticks out from the logic of the entire system of cooperation.

The contradiction could be resolved in principle by reverting to prices that remain fixed for several years. The economic literatures of several CEMA countries propose this, either directly,²⁴ or indirectly when they mention the contradictions between the physical and the monetary forms of the national

economic plans' international coordination.²⁵ Another possible solution is to develop a bank-credit mechanism for the recycling of "petrorubles." This was proposed in the literature years ago,²⁶ but practice has not even budged in this direction. Both solutions are theoretically clear, but the practical conditions for their realization are lacking. From the preceding it therefore follows that as the only economically substantiated solution for the medium term we may regard the essentially automatic "rescheduling" of the remaining 20 percent of the terms-of-trade losses. This, in my opinion, is a by-product of the decision, an organic concomitant of the resolution, by which the CEMA countries have committed themselves to a system of economic regulation that is not in harmony with the basic system of cooperation in planning. And since the theoretical contradiction arose as a resultant of a compromise among different interests, from the preceding it also follows that the mentioned "rescheduling" is an outcome, rather than a modification, of the 1975 agreement. For it was then decided (and, incidentally, confirmed also by the CEMA Executive Committee at its October 1980 and January 1985 sessions) that the present method of setting contractual prices would function within the framework of the traditional system of cooperation. Since the modification of the method of pricing is not a by-product of the entire mechanism's change, the "rescheduling" may be perceived also as the price for maintaining the mentioned mechanism. And although the amount involved is evidently insignificant in comparison with the scale of CEMA cooperation, or even with the terms-of-trade losses, at the time of concluding this article it cannot be said that a general economic solution to this question has been found.

As the sixth and final factor we should mention the radical transformation of the structure of Soviet demand. While traditionally the CEMA division of labor was founded on the basic formula that converts Soviet raw materials and fuels into East European finished products, this has been changing with increasing intensity since the late 1970's. In his book published originally in 1979, the author who usually is very close to the official Soviet standpoint already formulated these new emphases on demand when he urged an increase in the East European supply (deliveries) of two main commodity groups [in the CEMA nomenclature] that previously were not subject to national economic balances: food products, and industrial consumer goods.²⁷ This new structural emphasis was stressed further in the next round of coordinating the national economic plans, following CEMA's Budapest session in 1982. Since then it has also been formulated in many articles published in the professional literature. Most recently a deputy chairman of Gosplan, the Soviet Union's State Planning Committee, voiced with unmistakable explicitness the requirement that energy and raw-material producers must be compensated both in kind and in cash²⁸ (which he interprets as "an internationalist obligation of the socialist community").²⁹

Besides offering many interesting items of practical information in conjunction with the current round of the national economic plans' coordination, the deputy chairman of Gosplan makes the following clear: "The production of petroleum and other shortage items requires substantial one-time investments, and the Soviet Union justifiably expects effective compensation for them. Since the development of Sector B (the Soviet term for industries producing consumer goods) has been neglected, in exchange for the continuation of our deliveries of raw materials and fuels (this applies to the planned continuation through

1990 of the quantitative level actually attained in 1985) we expect to be able to obtain larger quantities of products that are of similar national economic importance, such as food products, industrial consumer goods, pharmaceuticals, metallurgical products, and technically advanced machinery." In addition, "the Soviet Union is interested in modernizing the food-industry, light-industry, local-industry and service enterprises on its own territory, with the support and active participation of the other CEMA countries." This is straight talk, and the fact that machinery and equipment, under the traditional commodity structure, account for about two-thirds of the export to the Soviet Union lends it added significance. For the East European suppliers, the quoted Gosplan deputy chairman set also new structural requirements for the composition of the Soviet Union's machinery import, requirements that differ significantly from the structure that has evolved. The essence of these requirements is to substitute industrial consumer goods, technically the most advanced and internationally the most competitive products, mining machinery, transport equipment, and material- and energy-efficient technologies, for the earlier deliveries of machinery and equipment for investment purposes. In the same way as [Soviet Prime Minister Tikhonov] in his address at CEMA's Havana session,³⁰ the author thus recommends a radical transformation of the division of labor within the machine industry, by subsectors, and of its product structure as well. To this is added the requirement of the "economically warranted pricing" of parts and subassemblies. Although the quoted article does not explain this in detail, in the writings of Soviet economists this usually means their traditional efforts³¹ to price machinery in CEMA trade on the basis of the nominally much lower Soviet domestic prices, and to set the prices of parts commensurately with the prices of the finished products. These latter pricing proposals have been debated within CEMA for decades, and it has been demonstrated repeatedly that they are economically unfounded. For one thing, the prices of parts on the world market are 2.5 to 3 times higher than the commensurate proportions of the final product, and the level of the contractual prices for this range of products is even lower than their world-market prices are. Furthermore, since the contractual prices and the producer prices are not at all directly comparable,³² a proposal based on domestic prices would lead into a blind alley from the very outset, and it obviously may be regarded merely as a tactic to depress the prices of machinery. Authoritative Soviet analysts³³ sum up the range of CEMA trade's structural problems as follows: the Soviet Union is demanding of the East European countries deliveries of products that it expects to be in short supply in Soviet economy also long term, and not merely temporarily. According to the Soviet concept, specifically this assessment makes the changing of the East European export structure a suitable compensation for maintaining at their 1985 level the deliveries of raw materials and fuels (which are needed also for export to hard-currency destinations), in spite of the sharply rising production costs. It will not be superfluous to point out once again that all the mentioned Soviet sources emphasize that the rising production costs must be better offset in physical terms, and reference to the financial aspect of sacrificed profit is entirely absent from their arguments. Incidentally, this is true also of other Soviet sources not quoted here directly. None of them demands higher prices, only counterdeliveries in a harder commodity structure.

It is essential that we understand the following: what are formulated in these proposals are not abstract arguments, but the objective national economic interests of the Soviet Union. These approaches stem from the internal proportions of the Soviet economy and cannot be regarded merely as ideological, foreign-policy or trade-policy aspirations (such as, for example, the initiatives over the past two decades to increase the proportion of machinery within export or to employ the domestic prices in pricing). Which means that we are not even able to interpret these categories, let alone to provide on the basis of this system of concepts an economically substantiated answer to the challenge that the new tasks pose. For there can hardly be any doubt that the answer we have to find must be an economic one, otherwise adjustment to the real conditions within CEMA would be utterly impossible. Even without detailed arguments, it is easy to see that in trade with both principal destinations and provenances there are unfolding changes that require of the countries of East Europe even greater external economic performances than during the past decade. Or more accurately, what is also involved here is not that we have to work "more intensively" and accomplish more, but must do something else and do it differently, so that external economic equilibrium can be maintained within society's tolerance limit in an economically sensible manner. And it is common knowledge that only the radical unfolding of economic reform can provide the prerequisites for this.

In his cited work,³⁴ N. Inozemtsev expresses the opinion that in East Europe all the conditions are given for the changes he requires in the structure of trade: the technical and material base, the skilled labor, the production traditions, and also the production capacities. Others point out that the presently employed traditional planning methods (in physical terms) and centralized forms of management are suitable only for the nature of the extractive industries producing sources of energy and raw materials. For manufacturing activities, however, they would require the development of direct relations between enterprises.³⁵ From this contrast there would follow also the development of the entire system of economic and legal conditions that at present are lacking.

The conclusion is by no means self-evident. Soviet economists are debating whether the conditions exist for direct relations between enterprises. The answer varies because direct relations mean different things in the concepts of the individual authors. Some say that "of course the essence of direct relations is not that the individual enterprises, combinations and associations are free to transact any business they like" but "the further development of plan-conforming methods of cooperation."³⁶ This concept has already created the general conditions of this form of cooperation.³⁷ According to a modified variant of this approach, the 1984 regulations on direct relations established these general conditions. The essence of the latter³⁸ is the establishment of an almost automatically functioning price-equalization fund to solve the price problems that up to now have been plaguing the Soviet enterprises; furthermore, at the discretion of the branch ministry and the Ministry of Foreign Trade, permission may be granted to enter into direct production cooperation, and this is even being encouraged with certain financial incentives and personal bonuses. Besides the branch ministry's permission, very important is the provision that the Soviet foreign-trade enterprise must not be omitted under

any circumstances from the direct relations; its task is to safeguard the interests of the national economy (primarily to ensure the equilibrium of bilateral trade and to enforce discipline in deliveries, in accordance with the considerations of trade policy; i.e., to build the direct relations into entire plan-conforming trade).

For this very reason, other authors are of the opinion that the system of conditions for real cooperation between enterprises has yet to be developed in the future.³⁹ Hungarian economists share this opinion, and it is also the official Czechoslovak standpoint on this issue.⁴⁰

What Has to Be Done?

First of all we must find an answer to the question as to how a longer-term strategy of adjustment, over and above symptomatic treatment, can be developed that will be in accord with the preceding section's six factors that sum up the system of conditions for the new era in East Europe. The solution we seek must be able to turn around the long-term process of declining world-market share, outlined in the first section. At both the national and the regional level, economic policy and the system of economic management must choose solutions that will improve the ability of CEMA and of its member nations to compete in the world market. This requirement, among others, is included also in the published joint documents on the CEMA summit meeting.⁴¹ These policy decisions reveal in many respects the outlines of the development of integration in the coming years. Since I already had an opportunity to analyze these decisions in detail elsewhere,⁴² let a general statement suffice on this occasion. The impression one gains after perusal of the documents is that "it would be a mistake to conclude that the solutions to all the specific questions of our further development are within our grasp. Although the joint documents adopted at the CEMA summit designate the principal directions of development, they also require that we seek jointly the further solutions."⁴³

It would be unwarranted and scientifically unsubstantiated to attempt, or even to expect within the limitations imposed by a section of an article in a journal, a comprehensive solution to the complex range of questions outlined above. On a subject of such importance, the elaboration of recommendations that could be directly implemented in practice would require the joint (but not hierarchically subordinated) efforts of the representatives of several scientific disciplines, and of public administration officials and practical experts from the enterprises.

The theoretical postulate that the present system of CEMA cooperation needs to be rebuilt, so that it will be able to solve in due time and in agreement with the member nations' interests the practical difficulties that arise within the integration,⁴⁴ can serve as our starting point. The need to concentrate on the questions of everyday practice the joint studies that often are perfunctory and sometimes autotelic, the requirement of much greater flexibility than at present, and criticism of the joint organizations' red tape and often cumbersome and irrelevant workstyle were voiced also at the 1982-1984 sessions of CEMA.

When charting the paths of further progress, we have to bear simultaneously in mind two requirements that are mutually conflicting. On the one hand, it is an indisputable fact that more than 90 percent of the national economic plans' coordination, which is the main instrument of cooperation, consists of determining the details of foreign-trade deliveries. This is essentially a task that the higher level undertakes on behalf of the enterprises but is unable to handle suitably, already because it lacks knowledge of the commodities and other information, and also because it is far more structured. At the same time, the national economic plans' coordination has no strength left for truly macro-economic functions, including the realization of one of the great advantages that cooperation among planned economies offers in principle, the advance harmonization of developmental objectives. Therefore the condemnation of our present cooperation in planning is justified for neglecting its real national economic tasks and exaggerating the importance of short-term business considerations,⁴⁵ even if this necessarily follows from the cooperation mechanism's demonetization and is thus partially forced on the planners from the outside.

On the other hand, it is likewise true that "if we allocate an excessive amount of economic resources to the solution of cooperation's 'strategic' tasks or artificially accelerate the transformation of the structure of mutual deliveries, to which there is added also a definite transformation of the system of interests that has evolved within CEMA, then equilibrium and growth will be in jeopardy. But it is likewise a known fact that this influences significantly our longer-range prospects. Therefore we cannot refuse to improve the (East European) population's supply as a prerequisite for higher productivity, to raise the standard of living, or to service foreign debt that is likewise a heavy burden."⁴⁶ Which in other words means that when we are designing grandiose theoretical structures, their impact must be coordinated with the short-term national economic interests as well.

In this context it is easier to find a compass for the solution of the short-term problems. In his article quoted above, one of the leading Hungarian experts on this subject formulates three strategic tasks: to uncover new areas of regional cooperation, to perfect and reform the international mechanism, and to ensure long term the deliveries of the most important fuels and raw materials. Of these three topics, it seems worthwhile to give further thought particularly to the third one. The long-term trends in Soviet extractive industry that I have attempted to present in an earlier study,⁴⁷ and the interrelations outlined in the two preceding sections warrant that we seriously think through also an alternative that could serve as deliberate preparation for the acceptance, and the socially and economically acceptable control, of the processes marking the beginning of a new era that will inevitably come. We should start out from this alternative when choosing our developmental and trade-policy objectives, and should concentrate our efforts on the factors that the countries of East Europe are themselves able to shape directly (for example, the choice of economic management system, national investment objectives, and trading partners), because even the short-term successes can go wrong without a long-range concept (or target model). The trends that developed in the world economy during the past decade have generally devalued stability and security of every kind at every level of management; and these same processes have placed a premium on, and are demanding, flexibility, competitiveness, social and economic willingness to undertake technological and product renewal, and

consistent market orientation. The example of the countries which are adapting successfully reminds us that it is worth making also short-term sacrifices in the interest of developing these abilities that are not natural endowments and are distributed very unevenly among the individual countries (but can be acquired with the help of suitable policies). On the other hand, consistent avoidance of short-term conflicts at all cost could thwart even the possibility of any future recovery.

All this does not mean in the least that the changes in the structure of trade, which are inevitable in the long run, could occur immediately, or even that they can be derived directly from the concepts of trade policy outlined above. The fact that in the documents of the CEMA summit also the countries of East Europe have accepted the system of requirements regarding the commodity structure's transformation and the offsetting of trade, requirements that only the Soviet Union supported at the preceding CEMA session, clearly illustrates that changes are inevitable. This policy standpoint seems to have asserted itself in the practice of coordinating the national economic plans. On the other hand, the economic press of every CEMA country is showing signs of beginning to realize that the basically intersectoral structure of the division of labor within CEMA is something that is objectively given long term, and therefore its transformation within the foreseeable future into international trade of a very different macroeconomic structure is neither warranted nor likely. This is due to the fact that the basic formula of the present structure of CEMA trade is founded on differences in the availability of productive factors (of natural resources in particular), and on decades of cooperation agreements and structural interdependence, in such a way that many industries have arisen or have been organized specifically to supply the partners' demand. And last but not least, strong economic and noneconomic interests argue in favor of maintaining this intersectoral character, even if it is indisputable that commodity trade can be mutually advantageous also long term only if its commodity structure becomes much more competitive.⁴⁸

The gradual gains of intrasectoral division of labor, and the fact that also the joint CEMA programs are spreading at present to areas increasingly sensitive to technological development and continuous product renewal--such as electronics, computers, the production of robots, and microprocessor technology--obviously warrant significant changes in the mechanism of cooperation. For example, cooperation in planning should take into consideration not only the objective differences in the feasibility of planning the individual branches of the economy,⁴⁹ but also the methodological limitations of the present practice of five-year planning. Rigid and one-sided insistence on a five-year planning horizon fails to take into consideration modern economic development's dual trend that both expands and constricts the possibility of foresight. Development of the infrastructure and educational system, and the sensible control of economic growth's natural and social consequences require long-term action programs and also demand of economic planning--especially in view of the developed industrial countries' unfavorable experience, and of the difficulties along our own road of development--to reckon with the foreseeable. But in areas most receptive to innovation and technological development, and in the external economic processes as well, a variety of reasons make impossible the foresight that the traditional planning methods require and assume, especially

in the customary detail. Therefore, instead of the periodically recurring attempts to lengthen one-sidedly the planning horizon, and to broaden in time and space the scope of the immediate planning decisions and indicators (even to areas that obviously are outside the influence of the CEMA countries' planning agencies),⁵⁰ it would be more expedient to take cognizance of the objective limitations of medium-range planning in physical terms. In other words, present planning that is aimed at quantity, at the detailed assortment in production and trade, ought to be replaced by market-oriented planning that starts out from the foreseeable demand, is geared to the world economy, and makes its decisions on the basis of financial categories. More specifically, the forecasts ought to start out from the world market's effective demand rather than the domestic production capacities; i.e., instead of seeking markets to load and utilize existing capacity, the world market ought to be regarded as given, and production, planned and organized as a dependent variable, ought to be adjusted to it. In this concept the plan's chapter on external economic relations cannot be content with being merely one of the national economic plan's many sectoral subconcepts. What we need is by no means a chapter devoted in the plan to external economic relations, but planning with a world economic approach, and decisions regarding economic policy and the economic mechanism that start out from the requirement of adjusting to the international economic processes.⁵¹

The requirement that CEMA ought to switch from collective import substitution to a common export orientation was recognized years ago.⁵² It could be made self-evident by successfully abandoning the traditional efforts to insist on the realization of concepts for the joint development of production in every advanced industry. Also instead of having regional cooperation duplicate the performances that world technological development has already achieved once, we should concentrate on applying this technological development and on creating an economic environment for its application, because such an environment is by no means a gift of nature under the practical conditions prevailing within CEMA. This way CEMA cooperation could contribute toward remedying the member nations' pressing problems. Naturally, the mentioned changes could unfold in their entirety only after a comprehensive reform of the mechanism of cooperation. Until then, the listed and similar changes in approach, and the many modifications--these concern primarily the payment mechanism's techniques--that are feasible even under the present conditions, could pave the way for more comprehensive measures that may be placed on the agenda in the future. Therefore in conclusion, and in harmony with the present period's system of conditions, I would like to call attention to the fact that the development of a long-term strategy of national adjustment, and the urging and taking of small steps that are possible under the given conditions, are tasks equal in importance.

FOOTNOTES

1. Emil Niederhauser, "The Concept of East Europe in Hungarian Historiography," *MAGYAR TUDOMANY*, No 7-8, 1978; Jeno Szucs, "A Sketch of Europe's Three Historical Regions," *TORTENELMI SZEMLE*, No 3-4, 1981.

2. Andras Koves, "Integration of the World Economy and the Direction of Economic Development," GAZDASAG, No 4, 1977; Bela Kadar, "Szerkezeti változások a világgazdaságban" [Structural Changes in the World Economy], KJK [Publishing House for Economics and Law], 1979, Chapters VIII and IX.
3. Jaroslav Fingerland, "CEMA Looks Ahead Realistically and With Optimism," CZECHOSLOVAK ECONOMIC DIGEST, No 3, 1984.
4. Laszlo Csaba, "Kelet Europa a világgazdaságban: alkalmazkodás és gazdasági mechanizmus" [East Europe in the World Economy: Adjustment and Economic Mechanism], KJK, 1984.
5. According to the statistical data, East-West trade still developed very dynamically until 1976, and satisfactorily until 1978. However, due to the fact that the Foreign Trade Act's amendment deprived the Soviet Union of Eximbank credits, and indirectly of huge loans from American private banks (which could have been expected had the bilateral trade agreement been ratified), the concept of developing Siberian resources on the basis of huge foreign loans fell through, and thereby East-West trade was deprived of a significant driving force on both sides. Andras Koves, "A világgazdasági nyitás: kihívás és kenyszer" [The Opening to the World Economy: A Challenge and Necessity], KJK, 1980, pp 281-300.
6. Ed A. Hewett, "Energy, Economics and Foreign Policy in the Soviet Union," The Brookings Institution, Washington, 1984, p 17.
7. Andras Inotai. "The Export of Non-OECD Countries to OECD Countries," IPARPOLITIKAI TAJEKOZTATO, No 10-11-12, 1983; Mrs Nemeth nee Eva Palocz, "The CEMA and Developing Countries' Export of Finished Products to the Developed Capitalist Countries," KULGAZDASAG, No 11, 1980.
8. Nikolay Smelev, "New Tendencies in the World Economy and Their Impact on the Economic Interests of the CEMA Countries, ACTA OECONOMICA, No 3-4, 1979.
9. Istvan Palfai, "A szocialista gazdasági integrációról" [About Socialist Economic Integration], Kossuth Publishing House. 1974, pp 35-37.
10. Yu. Shirayev and O. Rybakov, "Socialist Economic Integration: New Frontiers (A Contribution to the Results of the CEMA Summit), MEZHDUNARODNAYA ZHIZN', No 8, 1984, pp 23-24.
11. Laszlo Csaba, op. cit, pp 35-38.
12. Ed A. Hewett, op. cit.; Laszlo Csaba, "The Effect of the World Economy's Changes on CEMA," GAZDASAG, No 1, 1981; V. Voznyak, "The Development of Petroleum and Natural Gas Deposits in Western Siberia," VOPROSY EKONOMIKI, No 12, 1984.
13. For the contemporary formulation of this still irrefutable question, see Karel Kouba and Josef Goldmann, "Bevezetés a szocialista gazdasági növekedés elméletébe" [Introduction to the Theory of Socialist Economic Growth],

KJK, 1970. (The Czech original appeared in 1966.) This relationship was formulated subsequently, but again in due time, by Josef Goldmann, "The Czechoslovak Economy in the 1970's," CZECHOSLOVAK ECONOMIC DIGEST, No 1, 1975. (Its Hungarian-language review appeared in KOZGAZDASAGI SZEMLE, No 7-8, 1975.)

14. On the question of how CEMA prices fail to reflect these real economic disproportions, detailed economic studies were published in the 1960's by Oleg Bogomolov, Tibor Kiss, Sandor Ausch and Ferenc Bartha, among others. In other words, years before this range of questions became fashionable in the Western professional literature.
15. Tibor Kiss, "International Planning Cooperation Within CEMA," KOZGAZDASAGI SZEMLE, No 6, 1975.
16. For other aspects of this range of questions, see Andras Koves, "'Implicit Subsidies' and Some Questions of Trade Within CEMA," KOZGAZDASAGI SZEMLE, No 10, 1984; Raimund Dietz, "Advantages, Disadvantages in USSR Trade With Eastern Europe: The Aspects of Prices," Vienna Institute for International Economic Research, FORSCHUNGSBERICHTE, No 97, August 1984, particularly pp 45-58; and Abram Bergson, "The Geometry of Comecon Trade," EUROPEAN ECONOMIC REVIEW, No 14, December 1980.
17. For a description of the present system of plan indicators, see V. G. Starodubrovskiy, "Development of the Economic Mechanism in the Soviet Union," in R. N. Yevstigneyev (editor), "Razvitiye khozyaystvennykh mekhanizmov v stranakh SEV" [Development of the Economic Mechanisms in the CEMA Countries], Ekonomika Publishing House, Moscow, 1983. For the main features of the experimental mechanism that is to be employed, according to the plans, in the entire Soviet Union in 1986-1990, see "The Economic Experiment, I and II," EKONOMICHESKAYA GAZETA, No 47, 1984 (supplement).
18. Janos Kornai, "A hiány" [Shortage], KJK, 1980.
19. Jochen Betkenhagen, "The Energy Factor in East-West Trade," DIW VIERTEL-JAHRESHEFT, No 4, 1983; idem, "Oil and Gas in CEMA Intrabloc Trade," DIW ECONOMIC BULLETIN, February 1984.
20. Sandor Ausch, "A KGST egyuttmukodes helyzete, mechanizmusa, tavlatai" [The Situation, Mechanism and Prospects of CEMA Cooperation], KJK, 1969; Imre Vincze, "A KGST nemzetkozi valutarendszere" [The CEMA International Monetary System], KJK, 1978; Petr Chvojka, "The Transferable Ruble, in Eight Points," KULGAZDASAG, No 10, 1981; Petr Spacek, "The International Bank for Economic Cooperation, the Main Link in the CEMA Countries' Payments and Credit System," FINANCE A UVER, No 7, 1984.
21. V. Grinev, "Mutual Advantage," EKONOMICHESKAYA GAZETA, No 50, 1984.
22. Ferenc Bartha, "The Prospects of CEMA's Further Development," KULPOLITIKA, No 3, 1984, pp 141-142.

23. Raimund Dietz, op. cit., pp 32-36.
24. I. Totu, "Efforts to Perfect Collaboration Among the CEMA Countries," REVISTA ECONOMICA, No 4, 1984, pp 21-24.
25. Miroslov Doychev, "Coordination of the National Economic Plans, the Main Method of Controlling the Processes of Integration Within CEMA," VNESHNA TARGOVIYA, No 1, 1984, pp 2-6.
26. Kalman Pecsí, "Some Problems of Pricing in Mutual Trade Within CEMA," MIROVAYA EKONOMIKA I MEZHDUNARODNYYE OTNOSHENIYA, No 9, 1979.
27. Yu. Shiryayev, "Szocialista integracio es nemzetkozi munkamegosztas" [Socialist Integration and International Division of Labor], Kossuth Publishing House, 1981, p 31.
28. Other authors outlining the Soviet official standpoint demonstrate in detail why trade within CEMA is advantageous for the Soviet Union as well, and therefore this hypothesis can be interpreted only as a different sharing of the advantages. After all, there is no loss that would have to be reimbursed (unless, as Rybakov suggests, we regard all foreign trade as a sacrifice). O. Rybakov, "Long-Term Strategy for Intensifying the CEMA Countries' Socialist Integration," PLANOVOYE KHOZYAYSTVO, No 8, 1984, pp 83-44; Yu. Konstantinov, "New Frontiers of the CEMA Countries' Economic Integration," DENGÍ I KREDIT, No 11, 1984, pp 4-5; "Progress Plus Invulnerability," NOVOYE VREMYA, No 40, 1984.
29. For a discussion of this question in greater detail, see O. Rybakov and Yu. Shiryayev, op. cit.; and N. Inozemtsev, "Coordination of the CEMA Countries' National Economic Plans," KOZGAZDASAGI SZEMLE, No 1, 1985.
30. N. Tikhonov's speech at the 39th session of CEMA, in Havana, reported in SOTSIALISTICHESKAYA INDUSTRIYA, 31 October 1984.
31. S. Silvestrov, "The CEMA Countries' International Production Cooperation," EKONOMICHESKIYE NAUKI, No 3, 1982.
32. Cf. Laszlo Csaba, "Kelet Europa . . ."; Sandor Ausch, op. cit.; Imre Vincze, op. cit.; and P. Spacek, op. cit.
33. O. Rybakov, op. cit., pp 80-81.
34. N. Inozemtsev, op. cit.
35. N. Vazin and L. Bibik, "Further Development of External Economic Relations Among the Countries of the Socialist Community, in the Light of the Economic Summit," EKONOMICHESKIYE NAUKI, No 10, 1984, p 72.
36. N. Bautina and Yu. Shiryayev, "The Problems of Employing Commodity and Money Levers to Implement Integration Measures," PLANOVOYE KHOZYAYSTVO, No 3, 1984.

37. V. Sitnin, "New Frontiers of Socialist Economic Integration," IZVESTIYA AN SSSR, SERIYA EKONOMICHESKAYA, No 6, 1984, p 11. See also N. Inozemtsev, op. cit.
38. V. Grinev, op. cit.
39. Yu. Konstantinov, op. cit., p 7.
40. Lubomir Strougal, "The Coordination of Economic Policy, a Qualitatively New Form of Cooperation," UJ SZO, 5 July 1985.
41. "The Published Documents of the CEMA Summit," NEPSZABADSAG, 16 June 1984.
42. Laszlo Csaba, "Some Timely Questions of CEMA Cooperation," EGYETEMI SZEMLE, No 3, 1985.
43. Konstantin Ruzhakov, "New Milestones of Cooperation and Development," BEKE ES SZOCIALIZMUS, No 10, 1984, p 6.
44. O. Rybakov and Yu. Shiryayev, op. cit., p 25.
45. Yu. Shiryayev, "The CEMA Countries' Economic Integration and the Intensification of Socialist Production," VOPROSY EKONOMIKI, No 9, 1984, p 85.
46. Ferenc Bartha, op. cit., p 136.
47. Laszlo Csaba, "The Effect of . . ."
48. Zdenek Sedivy, "About the Socialist Economy - The Processes of the New Stage," BEKE ES SZOCIALIZMUS, No 11, 1984, p 110; O. Rybakov, op. cit., pp 84-85; Jozsef Marjai, "A KGST csucsertekezlet es hazank" [The CEMA Summit and Hungary], Kossuth Publishing House, 1984, pp 13, 14.
49. J. Fingerland, op. cit.; N. Varin and L. Bibik, op. cit.
50. V. Kuznetsov, "International Experience of Coordinating Plans," MEZHDU-NARODNAYA ZHIZN', No 6, 1984.
51. On the specific application of this concept to practical planning, see, for example, Ivan Szegvari, "Economic Processes in 1979-1984," Planned Economy Institute of the National Planning Office, Budapest, 1984 (manuscript); idem, "Comments on the External Economic Concept," Planned Economy Institute; and Bela Kadar, "Comments on the Industry Ministry's Plan Concept for 1986-1990," World Economy Research Institute of the Hungarian Academy of Sciences, 1984.
52. Jozsef Bognar, "CEMA's Linkage to the World Economy After the Start of the New Era," in Jozsef Bognar (editor), "A fejlodes es egyuttmukodes szazadvegi fordulopontjai" [The Turning Points of Development and Cooperation at the Close of the Century], KJK, 1980.

1014

CSO: 2500/455

30 August 1985

CZECHOSLOVAKIA

SOVIET MICROCOMPUTERS TO BE SOLD IN CSSR MARKETS

Prague TECHNICKY TYDENNIK in Czech No 24, 1985 p 1

[Text] Soviet microcomputers are being delivered to our markets through the foreign trade enterprise Metal and Electronics Equipment [Kovo a Elektronorgtechnika] in accordance with the agreements on mutual imports and exports of computer technology between the USSR and Czechoslovakia.

From the Moscow enterprise "Energopribor" we get the SM-1300.01 microcomputer, which is the functional part of a central data processing system and is used, for example, in the automation of design planning, at offices using computer graphics, and in automation of measuring systems; in addition, it is program compatible with the SM-4 and SM-1420 microcomputers.

The central computer technology of the SM-1300.01 is based on the KR1820 microprocessor and works with a timing frequency of 4.2 MHz; the module has a permanent memory of 512 kilobyte capacity and a semiconductor operational memory of 256 kilobyte capacity. The programming of the microcomputer permits it to work in the following operating systems: OSRV for work in real time with the use of a 50 Hz timer; RAFOS in an operating system with distributed functions; DIAMS for an interactive mode; and PPSTO, which is a collection of programs for the SMEP microcomputer.

Individual operations of the central computing unit take place in times on the order of milliseconds, for example, a two-address instruction register to register takes 2 ms, a two-address instruction register to memory 4.5 ms, loading 8 ms, and execution 12 ms. The dynamic memory of 256 kilobyte capacity consists of K56RU5 integrated circuits and is protected by a reserve current of plus 5 V to preserve data, for example, during a failure of the electric power grid. Three peripheral equipment units can be connected to the SM-1300.01 microcomputer through the IRPR and IRPS interface units.

The second microcomputer being offered is called the Iskra-226 and it is built using the K155, K556, K565, K580, and K589 integrated circuit series. It is used in planning and statistical process in research of automated systems in electrochemical and biochemical laboratories, in design organizations' laboratories, in education, and in medicine; it works using the BASIC language.

It is possible to input information into the computer from the keyboard, disc memory, cassette tape memory, analog equipment, from communications channels through the S2 or IRPR interface units, and from digital and registration equipment. Output from the computer is through the screen of the picture tube, printer, drawing table, to disc memory, cassette memory, communications channel (again through the S2 or IRPR), and through equipment interface units of digital measuring and registration instruments.

The instrument's operational memory has a capacity of 128 kilobytes and a machine word length of 13 bits. The individual operations of the Iskra-226 microcomputer also take place in milliseconds of time, for example, an arithmetic transfer takes 1 ms, exponential operations 20 ms, and elementary functions 50 ms. The picture tube screen can display a maximum of 1,920 characters in the format of 24 lines of 80 characters and there are 256X512 panels available for display in the graphics mode. The microcomputer also makes it possible to edit programs and the use of a light pen in the graphics mode.

The Iskra-226 is produced in six models and has available a total of 10 interface units, three various memory units. It is also possible to connect a nine-track magnetic tape unit to it and it can cooperate in groupings with the SM-3 and SM-4 models of the SMEP computer.

6285

CSO: 2400/501

POLAND

NATIONAL BUDGET FOR 1985

Warsaw DZIENNIK USTAW in Polish No 59, 29 Dec 84 Item 303 pp 729-776

[Law: "Budget Law for 1983, Dated 28 December 1984"]

[Text] Article 1. 1. Income of the state budget is set at the following amount (in thousands of zlotys): 3,692,801,601

Analysis (consisting of):

1) payments of enterprises and other economic units	2,947,429,905
2) payments of financial and insurance institutions	39,531,187
3) social insurance contributions	364,425,700
4) payments of units rendering social and cultural services	22,539,195
5) payments of units of state administration, administration of justice, prosecutor's office, public security, and national defense	23,644,939
6) taxes and fees from nonsocialized economy	83,847,100
7) taxes and fees collected from the population	58,400,400
8) other revenue	65,083,175
9) budget deposit remaining from funds of the State Vocational Activation Fund	57,000,000
10) income not distributed into various sections or divided up by prupose or voivodship	30,900,000

2. State budget expenditures are set at the following amount
(thousands of zlotys): 3,980,607,876

Analysis (consisting of):

- | | |
|---|---------------|
| 1) financing of enterprises and other economic units | 1,529,925,367 |
| 2) science | 31,284,901 |
| 3) education and development | 375,147,900 |
| 4) culture and art | 55,669,960 |
| 5) public health, social welfare, physical education and sports, and tourism and recreation | 418,452,874 |
| 6) social security | 343,545,127 |
| 7) national defense | 288,745,262 |
| 8) administration, administration of justice, prosecutor's office, and public security | 200,370,513 |
| 9) other ongoing expenditures | 111,890,332 |
| 10) special-purpose expenditures not assigned to sections and voivodships | 56,059,120 |
| 11) expenditures for investments and capital repairs | 539,516,520 |
| 12) reserves of the Council of Ministers | 30,000,000 |
| 3. The balance of changes in the income and expenditures of the state budget related to changes in wholesale and retail prices amounts to | 149,800,000 |
| 4. The budget shortfall is | 138,006,275 |

5. The Minister of Finance is authorized to obtain credit from the Polish National Bank to cover the budget shortage.

6. If the course of implementation of the state budget reveals that the shortage discussed in Paragraph 4 is being exceeded, the Council of Ministers will take action to raise the appropriate income and implement economies in the realm of budget expenditures. In this case the Council of Ministers is also authorized to alter the total subsidies for local budgets.

7. The income of budget-financed units, auxiliary economic units, special funds, special-purpose funds, and the funds of state organizational units which operate financially according to the principles set down in Article 13 of the law dated 3 December 1984, Budget Law (DZIENNIK USTAW No 56, Item 283), and included in the state budget amounts to 1,495,863,836,000 zlotys, including a budget-financed subsidy of 305,559,917,000 zlotys, and the expenditures amount to 1,342,119,696,000 zlotys, including a surplus of 58,696,345,000, to be transferred to the budget.

Article 2. 1. In the realm of the central budget, the following figures are set (in thousands of zlotys)

Income	3,349,133,353
Expenditures	3,636,939,628
Reserves of the Council of Ministers	30,000,000

in keeping with the detailed breakdown listed in Appendix I.

2. The income of budget-financed units, subsidiary economic units, special-purpose funds, special funds, and the funds of state organizational units which conduct their financial operations according to the principles set down in Article 13 of the Budget Law, which are included in the central budget, amounts to 1,206,259,585,000 zlotys, including a budget subsidy of 211,205,222,000 zlotys, and the expenditures amounts to 1,040,673,876,000 zlotys, including a surplus of 58,269,726,000 zlotys to be transferred to the budget.

Article 3. 1. The following figures are set for the voivodship budgets for 1985: (in thousands of zlotys) :

- 1) shares of central budget income established as a percentage of the value of retail sales of goods and services by units of the socialized economy included in the central and local plan amount to 355,759,435
- 2) total subsidies 120,127,544

in keeping with appendices nos 2 and 3.

2. The amount of the voivodships' direct budget income coming from their share of central budget income and the share of the wage tax representing the basis for the clearings of accounts discussed in Articles 21 and 95 of the Budget law is listed in Appendix 3.

Article 4. 1. The amount of the product subsidies established for state enterprises and cooperative organizations to finance the production of products and the rendering of services sold to domestic customers totals 689,797,216,000 zlotys.

2. The Council of Ministers is authorized to increase the amount specified in Paragraph 1 within the framework of the overall amount of expenditures established in this law.

3. The Council of Ministers will determine the groups of goods and services that will be subsidized.

4. The Minister of Finance will establish the rate of subsidy on goods and services discussed in Paragraph 3 and in appropriate parts of the budget will alter the amounts of the subsidies within the framework of the total established in Paragraph 1.

Article 5. 1. The amounts of the total subsidy and the percentages to be used in calculating shares of central budget income as specified in Appendix 2 are compulsory for the voivodship people's councils.

2. The amounts of total subsidies and shares of direct income in local budgets, resulting from the budget resolutions of the voivodship people's councils are obligatory and binding for the people's councils at the lowest level.

Article 6. Employment slots are established for:

1) state administration included in the central budget, the administration of justice, and the prosecutor's office,

2) state administration included in local budgets,

in keeping with Appendix 4.

Article 7. The Council of Ministers will establish the maximum aid to come out of the budget in repaying bank credit for specified central investments or the investments of enterprises that can be awarded in 1985 even if it is not possible to repay the entire credit out of the development fund of the debtor.

Article 8. 1. The size of product subsidies granted to state enterprises in 1985 is reduced by the level of the reserve fund as of 31 December 1984.

2. In determining the amount of product subsidies on goods and services and the funds for financing investments, the Minister of Finance may take into account the commitment of part of the funds in reserves, but not more than 50 percent of the level of that fund as of 31 December 1984.

In this event reserve funds may be designated for the purposes given in the previous sentence.

Article 9. 1. State enterprises that in 1985 undertake investments consisting of construction of installations having spatial capacity are required to pay a deposit, with the exception of the instances specified in Paragraphs 3 and 3.

2. Enterprises do not pay a deposit on the following investments:

1) investments undertaken for the following purposes:

- a) public health, in the realm specified by the Minister of Health and Social Welfare,
- b) environmental protection, in the realm specified by the Minister and Director of the Office of Environmental Protection and Water Administration,
- c) improvement of occupational health and safety, in the realm specified by the Minister of Labor, Wages, and Social Affairs;
- 2) housing investments along with installations of the neighborhood infrastructure,
- 3) investments consisting of the construction of bakeries, commercial and service installations, warehouses and storage facilities at procurement centers and in the food and agriculture industry, and also in ports,
- 4) investments consisting of the construction of telephone exchanges and production and overhauling facilities of rolling stock repair plants,
- 5) investments with systematic investment provision benefits in the income tax, as specified in the implementing regulations of the law on the taxation of units of the socialized economy and investments undertaken following the award of individual exemptions from this tax,
- 6) the part of investment outlays financed out of the special-purpose funds created solely out of contributions from the population,
- 7) investments financed through a budget subsidy.

3. The Council of Ministers may designate investments besides those specified in Paragraph 2 for which enterprises do not pay a deposit, and instances in which the exemption from paying a deposit is revoked for failure to carry out the investment in keeping with the purposes upon which the granting of the tax exemption or budget subsidy is based.

4. The deposit amounts to 20 percent of the buildings' cost-estimate value, if the investment is in keeping with preferred economic targets as listed by the Chairman of the Planning Commission of the Council of Ministers. On

other investments the amount of the deposit is 50 percent of the cost-estimate value of the buildings.

5. The enterprises pays the deposit out of the development fund, with the exception mentioned in Paragraph 6.

6. If the enterprise undertakes a plant social investment financed out of the plant social fund or other funds, except for the development fund, it pays a deposit out of the plant social fund.

7. The enterprise pays the deposit on a noninterest-bearing account which it has to have opened in the bank branch appropriate for the enterprise, not later than the final day of the quarter preceding the quarter in which the investment is to begin. If the investment is to begin in the first quarter of 1985, the enterprise pays the deposit by 20 January 1985.

8. The bank returns the deposit to the enterprise upon request within 3 months of the day the investment is signed over for use, or, if the enterprise has planned that as a result of the investment there would be a rise in production or service, within 3 months of the planned deadline for reaching the projected production or service capacity, in keeping with the conditions set down in Paragraph 9. Along with the request for a refund of the deposit, the enterprise presents the bank with documentation confirming that the conditions have been met.

9. A condition to a refunding of the deposit is that

1) the following deadlines specified before the investment begins are not exceeded:

a) the deadline for signing the investment over for use,

b) the deadline for reaching full projected production or service capacity;

2) the employment sizes specified in the technical-economic specifications or documentation of a single state are not exceeded

10. In the event any of the conditions specified in Paragraph 9 is not upheld, the deposit is transferred to the income of:

1) the central budget revenue, if the enterprise's founding body is a supreme or central body of state administration,

2) the appropriate voivodship budget, if the enterprise's founding body is a local body of state administration.

11. The bank transfers the deposit to the budget revenue on the basis of a decision by the appropriate treasury chamber for the enterprise's headquarters. The treasury chamber issues the decision within 2 weeks of receiving from the

bank notice that the enterprise has not met the conditions for having the deposit returned. The enterprise may appeal the treasury chamber decision to the Minister of Finance within 2 weeks of the day the decision is handed down.

12. The bank transfers the deposit to budget revenue after 3 weeks have elapsed from the day the treasury chamber decision was received, or, if the enterprise has entered an appeal, from the day it receives the decision that the appeal has been denied.

13. The regulations of Paragraphs 1-12 apply to the following correspondingly, with the reservations listed in Paragraphs 14 and 15:

- 1) investments of associations of enterprises and other organizations joining state enterprises together,
- 2) investments of enterprises of mixed capital, created by state enterprises,
- 3) investments of commercial companies in which the state treasury or units of the socialized economy have invested a capital share exceeding 50 percent,
- 4) investments of cooperatives and their unions, except that they are also exempt from deposits on investments of blind cooperatives and those of cooperatives of invalids or those financed out of invalid rehabilitation funds,
- 5) investments of units of social economic organizations.

14. Deposits on the investments mentioned in Paragraph 13 are paid out of the appropriate investment funds out of which these investments are to be financed.

15. If any of the conditions specified in Paragraph 9 are not met, the deposit paid

- 1) on the investments discussed in Paragraph 13, Points 3 and 5, is transferred to state budget revenues,
- 2) on the investments discussed in Paragraph 13, Point 4, is transferred to the fund of the appropriate central cooperative union helping to finance the investments.

Article 10. State enterprises can transfer free funds from the development fund to finance investments of other state enterprises which are being continued or undertaken in order to begin or expand the production of goods or services which the enterprises transferring the funds need. These funds may be transferred as nonrepayable grants or transferred as loans to be repaid out of the development fund. The conditions for the transfer of funds and the amount of any interest to be paid are specified in agreements signed by the enterprises involved.

Article 11. Enterprises of the municipal housing economy that administer government space allocations will make a deduction of 1 percent of the initial value of the buildings to put into the repairs fund in 1985.

Article 12. 1. Clearings between units of the socialized economy stemming from the transfer of fixed assets in connection with an alteration in the economic structure are transacted according to the value established in conventional prices, but these shall not be higher than actual purchase prices during the period of their purchase, less depreciation. The fixed asset's value thereby computed may be increased by any investment outlays put into the assets, estimated according to the principles in effect and reduced by depreciation.

2. If the takeover or transfer of the asset pertains to property which has not been actually bought for money, the takeover or transfer does not involve any payment, except for the amount of the investment outlays put into the property, as estimated according to principles in effect, less any depreciation.

Article 13. The statutory and reserve funds of the Polish National Bank do not receive any supplement out of the profit of the Polish National Bank in 1985.

Article 14. 1. Units of the socialized economy mentioned in Article 1, Paragraph 1 of the law dated 26 February 1982 on the taxation of units of the socialized economy (DZIENNIK USTAW 1984, No 16, Item 75), except for those mentioned in Paragraph 4, make an additional income tax payment in 1985 amounting to a surcharge of 5 percent of the basic tax set in Article 35, Paragraph 1 of this law.

2. The regulation of Paragraph 1 does not apply to the following:

- 1) units of the socialized economy that are entirely exempt of income tax,
- 2) the state enterprises "Polish State Railways" (Polskie Koleje Państwowe) and State Motor Transport Enterprise in the realm of passenger transportation,
- 3) invalids' cooperatives,
- 4) dairy cooperatives and dairy establishments run by unions of these cooperatives,
- 5) state enterprises of local industry and labor cooperatives in which the existential services, property supervision, and cottage industry represent more than 90 percent of the total value of sales of production and services.

3. In units of the socialized economy rendering existential services or property supervision, and conducting cottage industry, not mentioned in Paragraph 2, Point 5, the profit from this activity is excluded from the basic calculation of the income tax surcharge mentioned in Paragraph 1, but if this is not possible, that part of the profit which on the basis of separate regulations represents an exemption from taxable income for the rendering of services is excluded.

4. Units of foreign trade that are socialized, including trade rights companies, will pay in 1985 an income tax amounting to 75 percent of the tax base. These units are entitled to an income tax exemption of 8 percent of the tax base, if they transfer the equivalent of this exemption to a separate bank account available to the Minister of Foreign Trade, in cooperation with the Minister of Finance for investments serving the needs of export and its development in the national economy.

Article 15. The regulations of the law pertaining to

- 1) voivodship people's councils also apply to the people's councils of the Capital City of Warsaw, to Krakow, and Lodz,
- 2) voivodship presidents also apply to the presidents of the Capital City of Warsaw, of Krakow, and Lodz.

Article 16. The law is effective as of 1 January 1985.

Chairman of the Council of State: H. Jablonski
Secretary of the Council of State: J. Szymanek

Appendix No 1 to the Budgetary Law for the Year 1985
(Item 303)

BUDGET FOR THE YEAR 1985 BY DIVISION OF THE GOVERN-
MENT ADMINISTRATION

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 01	OFFICE OF THE SEJM AND OFFICE OF THE COUNCIL OF STATE			
	GRAND TOTAL	1	3,550	3,493,739
91	STATE ADMINISTRATION	2	3,550	1,295,245
	Central units	3	3,550	734,788
77	SCIENCE (Research library)	4		22,746
89	MISCELLANEOUS ACTIVITY	5		1,315,748
	Social organizations	6		370,527
	Miscellaneous tasks	7		945,221
97	MISCELLANEOUS CLEARINGS OF ACCOUNTS (General reserves)	8		450,000
00	INVESTMENTS AND CAPITAL REPAIRS	9		410,000
	Investments	10		350,000
	Capital repairs	11		60,000
	SUBSIDIARY ECONOMIC UNITS AND SPECIAL RESOURCES			
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	1	149,968	149,968
	SPECIAL RESOURCES			
	Income and expenditures	2	19,901	19,901
PART 02	SUPREME CHAMBER OF CONTROL			
	GRAND TOTAL	1	14,050	837,460
91	STATE ADMINISTRATION	2	14,050	821,179
	Central units	3	14,050	817,709

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
89	MISCELLANEOUS ACTIVITY (Specific tasks)	4		20
00	INVESTMENTS AND CAPITAL REPAIRS	5		16,261
	Investments	6		4,761
	Capital repairs	7		11,500
PART 03	SUPREME COURT			
	GRAND TOTAL	1	650	135,718
92	ADMINISTRATION OF JUSTICE (Supreme Court units)	2	650	132,768
89	MISCELLANEOUS ACTIVITY (Separate tasks)	3		50
00	INVESTMENTS AND CAPITAL REPAIRS	4		2,900
	Investments	5		2,700
	Capital repairs	6		200
PART 04	STATE PROSECUTOR'S OFFICE	1	26,955	3,049,310
92	ADMINISTRATION OF JUSTICE AND PROSECUTOR'S OFFICE	2	26,550	2,904,649
	Supreme prosecuting units	3	520	190,800
	Voivodship and regional prosecutors' offices	4	26,030	2,700,810
61	DOMESTIC TRADE (Subsidy for subsidiary units)	5		800
77	SCIENCE (Institute for the Study of the Problems of Criminality)	6	405	17,985
81	HIGHER EDUCATION	7		976
	Scientific and didactic activity	8		276
	Material and social assistance for college students	9		700

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
89	MISCELLANEOUS ACTIVITY (Separate tasks)	10		700
00	INVESTMENTS AND CAPITAL REPAIRS	11		124,200
	Investments	12		74,000
	Capital repairs	13		50,200
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	1	2,096	2,096
	Budget subsidy	2	800	
PART 05	OFFICE OF THE COUNCIL OF MINISTERS			
	GRAND TOTAL	1	729,095	3,102,107
91	STATE ADMINISTRATION	2	38,300	1,159,262
	Central units	3	38,300	831,655
01	ECONOMIC ACTIVITY (State enterprises)	4	22,650	100,000
	Payroll tax	5	14,200	
70	MUNICIPAL ECONOMY	6		4,000
77	SCIENCE (Research units)	7	8,145	371,640
89	MISCELLANEOUS ACTIVITY (Social organizations)	8	660,000	240,205
00	INVESTMENTS AND CAPITAL REPAIRS	9		1,227,000
	Investments	10		927,000
	Capital repairs	11		300,000
	SUBSIDIARY ECONOMIC UNITS AND SPECIAL RESOURCES			
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	1	750,000	750,000
	SPECIAL RESOURCES			
	Income and expenditures	2	51,800	51,800

Section No	Item	Item No	Expendi- Income tures (in thousands of zlotys)	
			Income	Expendi- tures
PART 06	PLANNING COMMISSION OF THE COUNCIL OF MINISTERS			
	GRAND TOTAL	1	26,020	783,509
91	STATE ADMINISTRATION	2	26,020	602,677
	Central units	3	26,020	514,758
77	SCIENCE	4		100,613
	Ministry research units	5		47,234
	Subsidies for research fund	6		50,000
81	HIGHER EDUCATION (Scientific instruction and formation activity)	7		99
89	MISCELLANEOUS ACTIVITY (Separate tasks)	8		120
00	INVESTMENTS AND CAPITAL REPAIRS	9		80,000
	Investments	10		13,100
	Capital repairs	11		66,906
PART 07	MINISTRY OF SCIENCE, HIGHER EDUCATION AND TECHNOLOGY			
	GRAND TOTAL	1	6,360,771	64,105,049
77	SCIENCE	2	113,752	3,854,900
	Ministry and industrial-branch research units	3	43,534	
	Scientific, Technical, and Economic In- formation Center (CINTE)	4	4,500	123,000
	Subsidy for research fund	5		3,173,000
	Reserves	6		293,000
	Bonuses for completing research and development projects	7		20,000
81	HIGHER EDUCATION	8	4,858,000	55,522,820
	Scientific instruction and formation	9	4,858,000	43,961,330
	Material and social assistance on behalf of students	10		8,112,400
	Capital repairs to higher education buildings and facilities	11		2,650,000
	Miscellaneous activity	12		799,090
	Reserves	13		300,000
01	ECONOMIC ACTIVITY (State enterprises)	14	1,388,369	398,287
	Turnover tax	15	9,000	
	Income tax	16	854,322	

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	Payroll tax	17	378,000	
	Depreciation payments	18	147,047	
	Miscellaneous subsidies for enterprises	19		398,287
31	CONSTRUCTION (budget-financed tasks)	20		2,515
89	MISCELLANEOUS ACTIVITY	21	200	507,350
	Social organizations	22	200	507,170
	Separate tasks	23		180
91	STATE ADMINISTRATION	24	450	184,177
	Central units	25	450	161,396
00	INVESTMENTS AND CAPITAL REPAIRS	26		3,635,000
	Investments	27		3,530,000
	Capital repairs	28		105,000
INSTITUTIONS OF HIGHER EDUCATION, RESEARCH UNITS, BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS AND SPECIAL RESOURCES				
INSTITUTIONS OF HIGHER EDUCATION				
	Income and costs	1	67,431,000	66,445,600
	Budget subsidy	2	46,225,600	
RESEARCH UNITS				
	Income and costs	3	1,020,827	886,691
BUDGET-FINANCED UNITS				
	Income and expenditures	4	285,340	284,316
	Budget subsidy	5	139,100	
SUBSIDIARY ECONOMIC UNITS				
	Income and expenditures	6	11,774	11,774
	Budget subsidy	7		862
SPECIAL RESOURCES				
	Income and expenditures	8	4,480	2,340
	Contribution to budget	9		2,240

Section No	Item	Item No	Expendi- Income tures (in thousands of zlotys)	
PART 08	MINISTRY OF FINANCE			
	GRAND TOTAL	1	75,011,074	119,452,642
94	FINANCE	2	56,698,389	102,425,899
	Foreign credit operations	3	53,250,000	22,520,000
	Revaluation of savings deposits	4		79,706,513
	Bonuses for consistent savings	5		123,936
	Property and personnel insurance insti- tutions	6	3,161,340	
	Lotteries and games of chance	7	128,749	
	CEMA bank deposits	8	88,400	
	Miscellaneous activity	9	69,900	74,450
91	STATE ADMINISTRATION	10	349,200	7,328,884
	Central units	11	8,160	322,788
	Foreign units	12		5,792
	Scientific-technical and economic coop- eration with foreign countries	13		8,073
	Local units subordinate to central bodies (treasury offices and chambers)	14	288,540	6,617,509
	Miscellaneous activity	15	52,500	324,722
	Subsidies for budget-financed units	16		50,000
01	ECONOMIC ACTIVITY (State enterprises)	17	21,000	
	Income tax	18	12,000	
	Payroll tax	19	9,000	
74	HOUSING ECONOMY	20	390	8,002,200
	Guarantee bonuses on housing deposits	21		8,000,000
77	SCIENCE	22	430,395	129,000
	Ministry research units	23		22,430
	Scholarly associations	24	430,395	106,400
81	HIGHER EDUCATION	25		2,408
	Scientific instruction and formation	26		2,100
	Material and social assistance on behalf of students	27		308
89	MISCELLANEOUS ACTIVITY	28	91,700	879,351
	Trade union organizations	29	90,100	138,172
	Social organizations	30	1,600	706,159
	Separate tasks	31		20
	Miscellaneous tasks	32		35,000

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
99	INCOME FROM NONSOCIALIZED ECONOMIC UNITS AND FROM THE POPULATION	33	17,420,000	
	Taxes on enterprises of Poles abroad	34	17,000,000	
	Taxes on foreign enterprises	35	420,000	
00	INVESTMENTS AND CAPITAL REPAIRS	36		684,900
	Investments	37		640,000
	Capital repairs	38		44,900
	SPECIAL RESOURCES AND BUDGET-FINANCED ESTABLISHMENTS			
	SPECIAL RESOURCES			
	Income and expenditures	1	987,842	903,599
	Contribution to budget	2		284,160
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	3	667,132	603,470
	Budget subsidy	4	50,000	
PART 09	MINISTRY OF LABOR, WAGES, AND SOCIAL AFFAIRS			
	GRAND TOTAL	1	422,048,304	321,189,127
95	SOCIAL SECURITY	2	364,777,380	319,546,947
	Social Security Agency Central Office	3		434,448
	Social Security Agency local offices	4		4,511,465
	Physicians' committees on disability verification	5		351,211
	Preventive treatment for insured persons	6		159,835
	Family benefits	7		161,808,000
	Other benefits and services	8		54,812,300
	Subsidy for retirement fund	9		30,843,900
	Subsidy for farmers' social security	10		59,849,700
	Subsidy for alimony fund	11		1,560,300
	Social security deductions paid by the socialized economy	12	356,703,000	
	Social security deductions paid by the nonsocialized economy	13	7,722,700	
01	INDUSTRY (Print-shops)	14	12,404	78,660

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
77	SCIENCE	15	8,200	205,971
	Ministry and industrial branch research units	16	8,200	33,584
	Subsidy for research fund	17		162,000
80	VOCATIONAL EDUCATION (Center for the Training of Foreigners in Gdansk)	18		125,322
89	MISCELLANEOUS ACTIVITY	19		12,156
	Local vocational counselling and orientation centers	20		11,000
	Separate tasks	21		100
91	STATE ADMINISTRATION	22	250,320	424,771
	Central units	23	1,000	181,868
	Foreign scientific-technical and eco- nomic cooperation	24	249,320	238,005
97	MISCELLANEOUS CLEARINGS OF ACCOUNTS (Budget account for surplus of income over expenditures of State Vocational Activation Fund)	25	57,000,000	
00	INVESTMENTS AND CAPITAL REPAIRS	26		795,300
	Investments	27		723,200
	Capital repairs	28		72,100
	SPECIAL-PURPOSE FUNDS, SPECIAL RESOURCES, BUDGET-FINANCED ESTABLISH- MENTS AND RESEARCH UNITS			
	RETIREMENT FUND			
	Income and expenditures	1	733,614,300	574,306,000
	Social security contributions from the socialized economy	2	666,552,000	
	Social security contributions from the nonsocialized economy	3	20,477,200	
	Budget subsidy	4	30,843,900	
	Miscellaneous income	5	15,741,200	
	Retirement pay and pensions	6		564,742,000
	Funeral benefits and other allowances	7		6,408,000
	Adjustments to make up for price increases	8		3,156,000
	FARMERS' SOCIAL SECURITY FUND			
	Income and expenditures	9	77,850,300	82,327,800
	Farmers' contributions	10	17,400,000	
	Budget subsidy	11	59,849,700	

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	Miscellaneous revenues	12	600,600	
	Pensions and retirement benefits	13		77,585,500
	Accident benefits & lump-sum awards	14		4,697,900
	Price-increase adjustments	15		44,400
	ALIMONY FUND			
	Income and expenditures	16	4,262,100	2,800,300
	Budget subsidy	17	1,560,300	
	Alimony benefits	18		2,560,300
	Cash benefits and compensation	19		240,000
	STATE VOCATIONAL ACTIVATION FUND			
	Income and expenditures	20	60,050,000	82,355,761
	Budget account of funds from income in excess of expenditures	21		57,000,000
	VOLUNTEER LABOR TEAM FUND			
	Income and expenditures	22	5334,645	5,510,541
	SPECIAL RESOURCES			
	Income and expenditures	23	437,054	434,434
	Contribution to budget	24		249,320
	Budget subsidy	25	13,885	
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	26	12,000	11,602
	RESEARCH UNITS			
	Income and costs	27	153,550	128,262
PART 11	MINISTRY OF MINING AND POWER			
	GRAND TOTAL	1	134,730,757	240,097,707
01	ECONOMIC ACTIVITY (State Enterprises)	2	134,444,000	207,328,499
	Turnover tax	3	380,000	
	Income tax	4	64,960,000	
	Payroll tax	5	62,750,000	
	Depreciation payments	6	6,109,000	
	Miscellaneous clearings of accounts	7	245,000	
	Product subsidies	8		153,660,000
	Return on accumulation for mining indus- try	9		52,700,000
	Miscellaneous subsidies for enterprises	10		968,499
01	INDUSTRY (Budget-financed tasks)	11		12,400
31	CONSTRUCTION (Non-investment geological projects)	12		14,500,000

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
77	SCIENCE	13	279,517	1,017,700
	Ministry and branch research units	14	279,517	
	Subsidies for research project fund	15		980,000
	Bonuses for completion of research and development projects	16		37,700
80	VOCATIONAL EDUCATION	17	2,340	2,585,902
	Basic vocational schools and equivalent	18	30	1,147,645
	Plant schools	19	90	220,539
	Vocational secondary schools and techni- cal schools	20	1,990	529,056
	Post-secondary vocational schools	21	60	34,264
	Boarding schools and scholarships for pupils of vocational schools	22	140	528,694
89	MISCELLANEOUS ACTIVITY (Specified tasks)	23		77,400
91	STATE ADMINISTRATION	24	4,900	331,206
	Central units	25	4,900	294,950
	Foreign economic and scientific- technical cooperation	26		33,132
00	INVESTMENTS AND CAPITAL REPAIRS	27		14,244,600
	Investments	28		14,190,700
	Capital repairs	29		53,900
	BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	76,452	76,345
	SUBSIDIARY ECONOMIC UNITS.			
	Income and expenditures	2	23,817	23,817
	SPECIAL RESOURCES			
	Income and expenditures	3	46,248	64,458
	Budget subsidy	4	5,850	
	RESEARCH UNITS			
	Income and costs	5	6,090,406	5,280,310

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 13	MINISTRY OF METALLURGY AND ENGINEERING INDUSTRY			
	GRAND TOTAL	1	475,009,100	60,551,443
01	ECONOMIC ACTIVITY (STATE ENTERPRISES)	2	473,940,400	38,444,000
	Turnover tax	3	145,700,000	
	Income tax	4	238,645,000	
	Payroll tax	5	55,265,400	
	Depreciation payments	6	29,330,000	
	Income from overestimating reserves	7	5,000,000	
	Product subsidies	8		17,444,000
	Other subsidies			21,000,000
01	INDUSTRY (Budget-financed tasks)	10	116,000	227,115
77	SCIENCE	11	950,000	2,680,357
	Ministry and branch research units	12	950,000	
	Subsidy for research project fund	13		2,570,000
	Bonuses for completion of research and development projects	14		100,000
80	VOCATIONAL EDUCATION	15	800	210,631
	Basic schools and equivalent	16		1,510
	Vocational secondary schools and technical schools	17	220	106,800
	Post-secondary vocational schools	18		3,255
	Centers for the training, continuing education, and upgrading of personnel	19	550	
	Boarding schools and scholarships for pupils of vocational schools	20	30	94,681
89	MISCELLANEOUS ACTIVITY	21		176,170
	Specified tasks	22		155,170
91	STATE ADMINISTRATION	23	1,900	611,570
	Central units	24	1,700	325,356
	Various units of state administration	25		14,109
	Local units subordinate to central bodies	26		99,395
	Foreign economic and scientific- technical cooperation	27	200	167,558

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
00	INVESTMENTS AND CAPITAL REPAIRS	28		18,201,600
	Investments	29		18,154,000
	Capital repairs	30		47,600
	BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	48,003	46,480
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	2	7,300	7,300
	SPECIAL RESOURCES			
	Income and expenditures	3	60,090	63,110
	Budget subsidy	4	19,320	
	RESEARCH UNITS			
	Income and costs	5	27,200,000	22,500,000
PART 15	MINISTRY OF CHEMICAL AND LIGHT INDUSTRY			
	GRAND TOTAL	1	587,498,317	55,842,405
01	ECONOMIC ACTIVITY (State Enterprises)	2	586,227,432	49,651,100
	Turnover tax	3	328,063,013	
	Income tax	4	192,503,700	
	Payroll tax	5	35,981,219	
	Depreciation contributions	6	24,368,000	
	Income from over-estimating reserves	7	3,556,000	
	Product subsidies	8		49,610,000
	Miscellaneous subsidies for enterprises	9		41,100
01	INDUSTRY (Budget-financed tasks and units)	10	495,000	74,325
	Offices of Minister's plenipotentiaries	11		38,015
	Bonuses for specified projects	12		340
31	CONSTRUCTION (Budget-financed tasks)	13		55

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
77	SCIENCE	14	772,910	303,722
	Ministry and branch research units	15	772,850	
	Scientific, technical, and economic information units	16	60	23,722
	Subsidy for research project fund	17		260,000
	Bonuses for completing research and development projects	18		20,000
80	VOCATIONAL EDUCATION	19	120	59,163
	Vocational secondary and technical schools	20	20	24,347
	Post-secondary vocational schools	21		1,500
	Boarding schools and scholarships for vocational school pupils	22	100	31,016
89	MISCELLANEOUS ACTIVITY	23		77,090
	Specified tasks	24		76,985
91	STATE ADMINISTRATION	25	2,855	307,395
	Central units	26	2,855	239,764
	Various units of central administra- tion	27		5,597
	Foreign economic and scientific- technical cooperation	28		57,908
97	MISCELLANEOUS CLEARINGS OF ACCOUNTS (Total reserves)	29		33,300
00	INVESTMENTS AND CAPITAL REPAIRS	30		5,336,255
	Investments	31		5,335,155
	Capital repairs	32		1,100
	BUDGET-FINANCED ESTABLISHMENTS, SPEC- IAL RESOURCES, SPECIAL-PURPOSE FUNDS, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	71,355	66,401
	SPECIAL RESOURCES			
	Income and expenditures	2	13,236	13,181
	Budget subsidy	3	4,732	
	Contribution to budget	4		32

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	SILK INDUSTRY DEVELOPMENT FUND			
	Income and expenditures	5	34,500	44,600
	RESEARCH UNITS			
	Income and costs	6	13,531,949	11,455,708
PART 18	MINISTRY OF CONSTRUCTION AND BUILDING MATERIALS INDUSTRY			
	GRAND TOTAL	1	104,655,820	5,355,910
01	ECONOMIC ACTIVITY (State Enterprises)	2	104,334,200	3,710,000
	Turnover tax	3	5,700,000	
	Income tax	4	62,262,500	
	Payroll tax	5	28,075,000	
	Depreciation payments	6	7,592,700	
	Product subsidies	7		3,600,000
	Various subsidies for enterprises	8		110,000
31	CONSTRUCTION (Budget-financed units and tasks)	9	20	44,835
	Silesian Construction Administration	10	20	32,135
77	SCIENCE	11	316,000	581,000
	Ministry and branch research units	12	308,000	
	Scientific, technical, and economic information units	13	8,000	36,000
	Subsidy for research project fund	14		537,000
	Bonuses for completion of research and development projects	15		8,000
80	VOCATIONAL EDUCATION	16	100	28,275
	Basic schools and equivalent	17	100	16,690
	Boarding schools and scholarships for vocational school students	18		9,185
	Miscellaneous activity	19		2,400
89	MISCELLANEOUS ACTIVITY (Specified tasks)	20	2,000	25,100
91	STATE ADMINISTRATION	21	3,500	271,500
	Central units	22	3,150	212,948
	Ministry Labor Standards Center	23	300	13,014
	Foreign economic and scientific-technical cooperation	24	50	15,064
	Local units subordinate to central bodies	25		27,658

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
00	INVESTMENTS AND CAPITAL REPAIRS	26		695,200
	Investments	27		664,400
	Capital repairs	28		28,800
	BUDGET-FINANCED UNITS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	391,344	389,294
	Budget subsidy	2	36,000	
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	3	54,100	52,800
	SPECIAL RESOURCES			
	Income and expenditures	4	5,300,000	
	RESEARCH UNITS			
	Income and costs	5	3,667,900	3,068,500
PART 19	MINISTRY OF AGRICULTURE AND FOOD INDUSTRY			
	GRAND TOTAL	1	646,346,483	273,225,888
01	ECONOMIC ACTIVITY (State Enterprises)	2	645,377,420	184,479,864
	Turnover tax	3	546,000,000	
	Income tax	4	68,968,700	
	Payroll tax	5	22,290,000	
	Depreciation payments	6	3,669,700	
	Product subsidies	7		168,589,080
	Other subsidies	8		1,500,000
	Various subsidies for enterprises	9		14,390,784
31	CONSTRUCTION (Budget-financed projects)	10		4,760
40	AGRICULTURE (Budget-financed units and tasks)	11	650,060	64,262,370
	Livestock-raising facilities	12		2,750,000
	Support for livestock production	13		2,364,450
	Bank credit clearing	14		18,074,635
	Reserves	15		38,697,787
	Refund of social security contribu- tions paid for employees of socialized farms	16		30,700,000
	Additions for cooperative bank credit operations	17		7,747,787

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
77	SCIENCE	18	304,033	6,065,904
	Ministry and branch research units	19	302,421	
	Subsidy for research project fund	20		6,000,000
	Bonuses for completion of research and development projects	21		5,000
80	VOCATIONAL EDUCATION	22	1,150	29,215
81	HIGHER EDUCATION (Instruction and formation)	23		100
89	MISCELLANEOUS ACTIVITY (Specific tasks)	24		9,010
91	STATE ADMINISTRATION	25	13,820	937,465
	Central units	26	3,220	288,780
	Foreign economic and scientific- technical cooperation	27	100	420,430
00	INVESTMENTS AND CAPITAL REPAIRS	28		17,437,200
	Investments	29		17,316,900
	Capital repairs	30		120,300
BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, SPECIAL-PURPOSE FUNDS, AND RESEARCH UNITS				
BUDGET-FINANCED ESTABLISHMENTS				
	Income and expenditures	1	5,624,850	5,802,996
	Budget subsidy	2	2,750,000	
SUBSIDIARY ECONOMIC UNITS				
	Income and expenditures	3	50,050	50,050
SPECIAL RESOURCES				
	Income and expenditures	4		5,000
AGRICULTURAL LAND PROTECTION FUND				
	Income and expenditures	5	840,000	860,000
RESEARCH UNITS				
	Income and costs	6	7,118,714	6,342,186

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 20	MINISTRY OF FORESTRY AND TIMBER INDUSTRY			
	GRAND TOTAL	1	56,033,370	7,575,044
01	ECONOMIC ACTIVITY	2	55,861,400	6,083,000
	Turnover tax	3	23,557,000	
	Income tax	4	16,000,000	
	Payroll tax	5	12,971,000	
	Depreciation payments	6	3,333,400	
	Product subsidies	7		6,083,000
01	INDUSTRY (Budget-financed tasks)	8		1,014
40	AGRICULTURE (Surpluses from subsidiary units)	9	30	
45	AGRICULTURE (Budget-financed tasks and units)	10	73,149	265,990
	National parks	11	73,149	258,892
77	SCIENCE	12	55,310	64,041
	Ministry and branch research units	13	55,310	
	Scientific, technical, and economic units	14		1,516
	Scientific, technical, and economic information units	15		59,000
	Subsidy for research project fund	16		3,500
80	VOCATIONAL EDUCATION	17	2,181	196,728
	Vocational secondary and technical schools	18	1,669	63,741
	Post-secondary vocational schools	19	15	2,640
	Boarding houses and scholarships for vocational school pupils	20	497	128,806
89	MISCELLANEOUS ACTIVITY	21	37,500	7,532
	Social organizations	22	37,500	
	Specified tasks	23		7,510
91	STATE ADMINISTRATION	24	3,800	121,439
	Central units	25	3,800	112,904
	Foreign economic and scientific-technical cooperation	26		6,603

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
00	INVESTMENTS AND CAPITAL REPAIRS	27		835,300
	Investments	28		751,000
	Capital repairs			84,300
	BUDGET-FINANCED ESTABLISHMENTS, SUB- SIDIARY ECONOMIC UNITS, SPECIAL RE- SOURCEs, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	59,454	59,405
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	2	325,890	325,890
	Budget subsidy	3	22,000	
	Contribution to budget	4		65,879
	SPECIAL RESOURCES			
	Income and expenditures	5		
	Budget subsidy	5	143,481	143,973
		6	57,211	
	RESEARCH UNITS			
	Income and costs	7	904,218	793,822
PART 21	MINISTRY OF TRANSPORTATION			
	GRAND TOTAL	1	67,305,611	196,124,412
01	ECONOMIC ACTIVITY (State Enterprises)	2	62,793,600	96,157,000
	Income tax	3	28,489,000	
	Payroll tax	4	28,123,000	
	Depreciation payments	5	4,857,000	
	Product subsidies	6		95,807,000
	Miscellaneous subsidies for enterprises	7		350,000
31	CONSTRUCTION (Budget-financed tasks)	8		80
50	TRANSPORTATION AND COMMUNICATIONS (Bud- get-financed tasks and units)	9	4,388,914	44,646,279
	Railway car inspectorate	10	6,000	17,183
	Inland navigation inspectors' offices	11	225	25,129
	General Directorate of Civil Aviation	12	55	76,632
	Air Traffic and Airport Administration	13	79,884	
	State public road units	14	4,302,750	42,709,000

Section No	Item	Item No	Expendi- Income tures (in thousands of zlotys)	
			Income	tures
77	SCIENCE	15	17,386	83,260
	Ministry and branch research units	16	17,386	
	Scientific, technical, and economic information units	17		8,760
	Subsidy for research project fund	18		69,000
	Bonuses for completions of research and development projects	19		5,500
79	GENERAL EDUCATION AND FORMATION	20	5	612,645
	Urban preschool	21	4	610,853
80	VOCATIONAL EDUCATION	22	7,550	1,326,326
	Basic schools and equivalent	23	1,260	57,408
	Plant schools	24		269,099
	Vocational secondary and technical schools	25	3,900	623,192
	Post-secondary vocational schools	26		14,581
	Boarding schools and scholarships for vocational school pupils	27	90	255,304
	Air Personnel Training Center	28	2,300	106,742
81	HIGHER EDUCATION (Instruction and formation)	29		350
85	PUBLIC HEALTH	30	6,931	9,811,400
	General medical treatment	31	1,582	3,716,224
	Railway hospitals	32	3,142	2,606,480
	Tuberculosis sanitariums	33	554	427,332
	Prophylactic treatment centers	34	46	94,034
	Nurseries	35		80,470
	Health spas	36	700	667,688
	Prescription drugs for insured	37	875	1,589,720
89	MISCELLANEOUS ACTIVITY (Specified tasks)	38	90,000	982,700
91	STATE ADMINISTRATION	39	1,225	206,072
	Central units	40	1,225	187,349
	Ministry Labor Management and Standards Center	41		5,984
	Foreign economic and scientific-technical cooperation	42		5,562

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
95	SOCIAL SECURITY	43		2,322,000
	Non-recurring allowances and benefits	44		2,130,000
97	MISCELLANEOUS SETTLEMENTS (General reserves)	45		88,300
00	INVESTMENTS AND CAPITAL REPAIRS	46		39,888,000
	Investments	47		12,644,000
	Capital repairs	48		27,244,000
	BUDGET-FINANCED ESTABLISHMENTS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	1,987,224	1,968,317
	Budget subsidy	2	693,115	
	Contribution to budget	3		79,884
	SPECIAL RESOURCES			
	Income and expenditures	4	210,034	192,254
	Budget subsidy	5	38,500	
	Contribution to budget	6		100
	RESEARCH UNITS			
	Income and costs	7	273,731	247,308
PART 23	MINISTRY OF COMMUNICATIONS			
	GRAND TOTAL	1	29,405,658	3,005,458
01	ECONOMIC ACTIVITY (State Enterprises)	2	29,259,000	
	Turnover tax	3	424,000	
	Income tax	4	22,019,000	
	Depreciation payments	5	316,000	
	Payroll tax	6	6,445,000	
50	TRANSPORTATION AND COMMUNICATIONS (Bud- get-financed tasks and 8units)	7	84,000	989,935
77	SCIENCE	8	48,085	168,800
	Ministry and branch research units	9	48,085	
	Subsidy for research project fund	10		162,000
	Bonuses for completing R & D projects	11		6,800

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
89	MISCELLANEOUS OPERATIONS	12	13,973	261,620
	Specified tasks	13	13,973	256,530
	Social organizations	14		5,090
91	STATE ADMINISTRATION	15	600	142,403
	Central units	16	600	132,364
	INVESTMENTS AND CAPITAL REPAIRS	17		1,442,700
	Investments	18		1,441,000
	Capital repairs	19		1,700
	BUDGET-FINANCED ESTABLISHMENTS AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	31,732	31,090
	RESEARCH UNITS			
	Income and costs	2	930,500	802,250
PART 24	MINISTRY OF DOMESTIC TRADE AND SERVICES			
	GRAND TOTAL	1	55,442,233	8,064,524
01	ECONOMIC OPERATIONS (State Enterprises)	2	55,425,000	7,004,000
	Turnover tax	3	1,666,000	
	Income tax	4	41,838,000	
	Depreciation payments	5	1,072,000	
	Income from overestimating reserve stock	6	1,850,000	
	Payroll tax	7	8,999,000	
	Product subsidies	8		5,954,000
	Miscellaneous subsidies for enterprises	9		1,050,000
77	SCIENCE	10	8,088	50,600
	Ministry and branch research units	11	8,088	
	Subsidy for research projects fund	12		50,000
	Bonuses for carrying out research and development projects	13		600
81	HIGHER EDUCATION (Social and material aid to students)	14		50

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
89	MISCELLANEOUS ACTIVITY (Specified tasks)	15		48,533
91	STATE ADMINISTRATION	16	9,145	932,741
	Central units	17	7,459	279,729
	Various units of central administration (State Trade Inspectorate)	18	1,686	645,324
	Foreign economic and scientific-technical cooperation	19		5,121
00	INVESTMENTS AND CAPITAL REPAIRS	20		28,600
	Investments	21		21,000
	Capital repairs	22		7,600
	BUDGET-FINANCED ESTABLISHMENTS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	26,552	25,573
	SPECIAL RESOURCES			
	Income and expenditures	2		204
	RESEARCH UNITS			
	Income and costs	3	111,945	102,965
PART 25	MINISTRY OF FOREIGN TRADE			
	GRAND TOTAL	1	251,091,860	149,465,396
01	ECONOMIC OPERATIONS (State Enterprises)	2	241,621,000	142,500,000
	Turnover tax	3	201,365,000	
	Income tax	4	39,015,000	
	Payroll tax	5	1,039,000	
	Depreciation payments	6	202,000	
	Interest on foreign bank credit	7		87,500,000
	Subsidy to balance foreign trade	8		55,000,000
31	CONSTRUCTION (Budget-financed tasks)	9		40,000
64	FOREIGN TRADE (Budget-financed tasks)	10		3,115,660
	Bonuses for specified projects	11		3,081,500

Section No	Item	Item No	Expendi- Income tures (in thousands of zlotys)	
			Income	Expenditures
77	SCIENCE	12	50	51,791
	Ministry and branch research units	13	50	41,769
80	VOCATIONAL EDUCATION (Personnel training, continuing education, and renewal centers)	14	1,940	
89	MISCELLANEOUS ACTIVITY	15	72,000	73,678
	Specified tasks	16		550
	Social organizations	17	72,000	475
91	STATE ADMINISTRATION	18	896,870	3,643,167
	Central units	19	40,950	328,570
	Facilities abroad	20	172,300	1,715,048
	Local units subordinate to central bodies (Main Customs Administration)	21	683,620	1,411,382
99	INCOME FROM NONSOCIALIZED ECONOMY AND FROM POPULATION (Customs fees)	22	8,500,000	
	INVESTMENTS AND CAPITAL REPAIRS	23		41,000
	Investments	24		20,900
	Capital repairs	25		20,200
	BUDGET-FINANCED ESTABLISHMENTS AND SPECIAL RESOURCES			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	215,390	214,440
	Contribution to budget	2		42,740
	SPECIAL RESOURCES			
	Income and expenditures	3	3,900	500
PART 26	MINISTRY OF REGIONAL ECONOMY AND ADMINISTRATION			
	GRAND TOTAL	1	25,526,328	29,526,284
	ECONOMIC OPERATIONS (State Enterprises)	2	25,273,628	
	Turnover tax	3	283,600	
	Income tax	4	1,964,400	

Section No	Item	Item No	Expendi- tures	
			Income	(in thousands of zlotys)
	Payroll tax	5	20,143,628	
	Depreciation payments	6	182,000	
	Miscellaneous settlements	7	2,700,000	
31	CONSTRUCTION (Budget-financed tasks)	8		1,950,970
	Surveying	9		1,948,050
	Bonuses for specified projects	10		1,600
70	MUNICIPAL ECONOMY (Budget-financed tasks)	11	5,000	7,278,620
	Employee allotment garden plots	12		350,000
	Bonuses for	13		3,100
	Reserves	14		6,900,000
74	HOUSING ECONOMY AND NONMATERIAL MUNICI- PAL SERVICES	15	120,000	4,410,000
	Bank credit settlements	16		4,040,000
	Reserves	17		370,000
77	SCIENCE	18	75,500	143,449
	Ministry and branch research units	19	75,500	38,939
	Subsidy for research projects fund	20		103,000
	Bonuses for completing research pro- jects	21		1,130
80	VOCATIONAL EDUCATION	22		130
81	HIGHER EDUCATION (Instruction and for- mation)	23		300
89	MISCELLANEOUS OPERATIONS	24	31,000	16,490
	Specified tasks	25		4,890
	Social organizations	26		11,600
91	STATE ADMINISTRATION	27	21,200	315,825
	Central units	28	21,200	249,493
	Various units of central administra- tion (Main Administration of Survey- ing and Cartography)	29		39,733
	Foreign economic and scientific- technical cooperation	30		12,459

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
97	MISCELLANEOUS SETTLEMENTS (General reserves)	31		30,000
00	INVESTMENTS AND CAPITAL REPAIRS	32		15,380,500
	Investments	33		14,598,000
	Capital repairs	34		782,500
	BUDGET-FINANCED ESTABLISHMENTS AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	98,520	98,029
	Contribution to budget	2		5,000
	RESEARCH UNITS			
	Income and costs	3	1,081,408	973,322
PART 27	OFFICE OF MARITIME ECONOMY			
	GRAND TOTAL	1	26,995,820	13,034,553
01	ECONOMIC ACTIVITY (State Enterprises)	2	26,687,000	6,050,000
	Income tax	3	19,125,000	
	Payroll tax	4	4,720,000	
	Depreciation payments	5	2,802,000	
	Product subsidies	6		6,050,000
50	TRANSPORTATION AND COMMUNICATIONS (Budget-financed units and tasks)	7	182,000	3,006,112
	Maritime offices	8	116,446	2,659,256
	Shipbroking companies	9	65,554	4,236
	Miscellaneous operations	10		341,820
	SCIENCE	11	28,544	52,376
	Ministry and branch research units	12	28,544	
	Subsidy for research project fund	13		40,000
80	VOCATIONAL EDUCATION	14	2,100	145,600
	Basic schools and equivalent	15	1,750	63,600
	Vocational secondary and technical schools	16	350	51,000
	Boarding schools and scholarships for vocational school students	17		31,000

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
81	HIGHER EDUCATION	18	71,000	1,057,290
	Instruction and formation	19	71,000	872,390
	Social and material assistance to students	20		151,900
	Capital repairs to college buildings and structures	21		32,500
89	MISCELLANEOUS OPERATIONS	22	1,500	50,858
	Specified tasks	23	1,500	45,526
	Social organizations	24		5,332
91	STATE ADMINISTRATION	25	23,676	327,317
	Central units	26	4,764	106,886
	Facilities abroad	27	6,912	32,201
	Local units subordinate to central bodies (Maritime Chambers)	28	12,000	15,879
00	INVESTMENTS AND CAPITAL REPAIRS	29		2,345,000
	Investments	30		1,935,000
	Capital repairs	31		410,000
	BUDGET-FINANCED ESTABLISHMENTS, SUB- SIDIARY ECONOMIC UNITS, SPECIAL RE- SOURCES, RESEARCH UNITS, AND INSTITU- TIONS OF HIGHER EDUCATION			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	2,242	2,224
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	2	34,495	34,100
	Budget subsidy	3	800	
	SPECIAL RESOURCES			
	Income and expenditures	4	25,956	25,767
	Budget subsidy	5	6,190	
	RESEARCH UNITS			
	Income and costs	6	785,577	730,739

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
INSTITUTIONS OF HIGHER EDUCATION				
	Income and costs	7	1,157,700	1,149,100
	Budget subsidy	8	904,890	
PART 28	ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT OFFICE			
	GRAND TOTAL	1	1,544,600	22,884,532
01	ECONOMIC ACTIVITY (State Enterprises)	2	1,316,180	
	Income tax	3	940,000	
	Payroll tax	4	369,400	
	Depreciation payments	5	3,580	
	Turnover tax	6	3,200	
31	CONSTRUCTION (Budget-financed units and tasks)	7	220	19,794
	Directorate for Construction of Upper Vistula Cascade	8	220	19,594
66	MISCELLANEOUS MATERIAL SERVICES (Budget-financed units)	9	122,800	12,835,402
	District Water Management Directorates	10	92,900	10,540,274
	Odra Waterway Administration	11	4,700	1,056,805
	State Hydrological-Meteorological Service	12		1,100,000
77	SCIENCE	13	105,400	825,900
	Branch and ministry research units	14	105,400	
	Subsidy for research projects fund	15		825,000
80	VOCATIONAL EDUCATION (Personnel training, continuation, and improvement centers)	16		1,768
89	MISCELLANEOUS ACTIVITY	17		100,720
	Separate specified tasks	18		99,740
	Social organizations	19		980
91	STATE ADMINISTRATION	20		155,848
	Central units	21		100,785
	Foreign economic and scientific-technical cooperation	22		54,033

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
00	INVESTMENTS AND CAPITAL REPAIRS	23		8,945,100
	Investments	24		8,889,000
	Capital repairs	25		56,100
	SPECIAL-PURPOSE FUNDS, BUDGET- FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	ENVIRONMENTAL PROTECTION FUND			
	Income and expenditures	1	5,250,000	5,500,000
	WATER MANAGEMENT FUND			
	Income and expenditures	2	2,900,000	3,010,400
	BUDGET-FINANCED TASKS			
	Income and expenditures	3	23,459	21,222
	Budget subsidy	4	1,768	
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	5	109,220	109,220
	SPECIAL RESOURCES			
	Income and expenditures	6	399,741	398,293
	RESEARCH UNITS			
	Income and costs	7	1,679,759	1,558,452
PART 30	MINISTRY OF NATIONAL DEFENSE			
	GRAND TOTAL	1	3,933,684	306,970,609
	CURRENT EXPENDITURES	2		288,770,609
	INVESTMENT OUTLAYS	3		18,200,000
PART 31	MINISTRY OF INTERNAL AFFAIRS			
	GRAND TOTAL	1	271,900	112,305,140
	CURRENT EXPENDITURES	2		103,469,340
	INVESTMENT OUTLAYS	3		8,835,800

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 32	MINISTRY OF FOREIGN AFFAIRS			
	GRAND TOTAL	1	2,497,400	7,755,711
91	STATE ADMINISTRATION	2	2,487,130	7,305,335
	Central units	3	2,750	430,832
	Foreign posts and agencies	4	2,484,380	2,035,580
	Foreign economic and scientific- technical cooperation	5		2,812,485
77	SCIENCE (Research units)	6	1,825	58,723
79	GENERAL EDUCATION AND FORMATION	7	8,445	18,709
	Boarding schools and scholarships for pupils of general schools	8	2,564	11,969
	Camps and vacation centers	9	5,881	608
81	HIGHER EDUCATION (Instruction and formation)	10		2,259
85	PUBLIC HEALTH AND SOCIAL WELFARE (Con- sular care)	11		6,644
89	MISCELLANEOUS ACTIVITY	12		198,041
	Social organizations	13		197,821
	Specified tasks	14		220
00	INVESTMENTS AND CAPITAL REPAIRS	15		166,000
	Investments	16		100,000
	Capital repairs	17		66,000
PART 33	MINISTRY OF EDUCATION AND FORMATION			
	INCOME AND EXPENDITURES OF SUBORDINATE UNITS AND OF UNITS SUPERVISED OR COORDINATED	1	1,698,996	307,523,172
	Local budgets	2	550,858	275,262,667
	Central budget	3	1,148,138*	32,260,505*
	GRAND TOTAL	4	1,121,024	25,927,242

*These items include income and expenditures in Part 33: Ministry of Education and Formation, and income and expenditures in other ministries' general and vocational education sections (income: 27.1 million zlotys, expenditures: 5,588.3 million zlotys), as well as other unallocated reserves in Part 83 (745 million zlotys).

Section No	Item	Item No	Expendi- Income tures (in thousands of zlotys)	
79	GENERAL EDUCATION AND FORMATION	5	2,100	20,215,026
	General secondary schools for youth and adults	6		92,716
	Educational and development associations	7	2,100	2,174,944
	Camps and vacation centers	8		73,479
	Deductions for plant social fund	9		440,000
	Central purchase of instruction aids	10		3,050,000
	Reserves	11		11,853,000
80	VOCATIONAL EDUCATION	12	140,980	3,021,641
	Deductions for plants social fund	13		132,500
	Reserves	14		2,783,000
01	ECONOMIC ACTIVITY (State Enterprises)	15	930,413	
	Turnover tax	16	18,000	
	Income tax	17	696,000	
	Payroll tax	18	203,413	
	Depreciation payments	19	13,000	
31	CONSTRUCTION (Budget-financed tasks)	20		230
74	HOUSING ECONOMIC AND NON-MATERIAL MUNICIPAL SERVICES (Subsidies for subsidiary economic units)	21		3,340
77	SCIENCE	22	2,731	252,987
	Ministry and branch research units	23	2,731	232,497
	Subsidy for research project fund	24		20,000
81	HIGHER EDUCATION	25		3,070
87	PHYSICAL EDUCATION AND SPORTS	26		90,550
88	TOURISM AND RECREATION	27		54,220
89	MISCELLANEOUS ACTIVITY (Specified task tasks)	28	40,000	620
91	STATE ADMINISTRATION	29	4,800	135,458
	Central units	30	4,800	130,934
00	INVESTMENTS AND CAPITAL REPAIRS	31		2,150,100
	Investments	32		1,300,000
	Capital repairs	33		850,100

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS				
BUDGET-FINANCED ESTABLISHMENTS				
	Income and expenditures	1	79,511	80,072
	Budget subsidy	2	73,479	
SUBSIDIARY ECONOMIC UNITS				
	Income and expenditures	3	6,147	7,000
	Budget subsidy	4	3,340	
SPECIAL RESOURCES				
	Income and expenditures	5	214,000	213,627
RESEARCH UNITS				
	Income and costs	6	30,000	25,200
PART 34	MINISTRY OF CULTURE AND ART			
	GRAND TOTAL	1	11,794,147	58,030,040
83	CULTURE AND ART	2	2,890,000	53,600,000
	Artistic institutions and entertain- ment enterprises	3	1,837,600	
	Film production enterprises	4	688,700	
	Graphic art enterprises and Office of Art Exhibitions	5	301,200	
	Music, artistic, and cultural associa- tions	6	62,500	
	Cultural Development Fund's share of state budget income	7		53,600,000
01	ECONOMIC ACTIVITY (State enterprises)	8	8,687,000	
	Turnover tax	9	687,000	
	Income tax	10	5,521,000	
	Payroll tax	11	2,246,000	
	Depreciation payments	12	233,000	
31	CONSTRUCTION (Budget-financed tasks)	13		320
61	DOMESTIC TRADE (Subsidy for subsidiary economic units)	14		1,828

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
77	SCIENCE	15	26,747	337,959
	Ministry and branch research units	16	15,500	29,489
	Scholarly libraries	17	11,247	316,876
	Bonuses for completing research projects	18		1,500
00	VOCATIONAL EDUCATION	19	380	48,716
	Vocational secondary and technical schools	20		860
	Post-secondary vocational schools	21		35,026
	Boarding schools and scholarships for vocational school students	22		1,392
81	HIGHER EDUCATION	23	174,000	2,099,170
	Instruction and formation	24	174,000	1,701,540
	Material and social assistance for students	25		273,800
	Capital repairs to college buildings and structures	26		117,500
89	MISCELLANEOUS ACTIVITY	27	15,270	21,882
	Specified tasks	28		5,910
91	STATE ADMINISTRATION	29	750	185,465
	Central units	30		154,412
00	INVESTMENTS AND CAPITAL REPAIRS	31		1,694,700
	Investments	32		1,619,000
	Subsidy for Cultural Development Fund	33		766,700
	Capital repairs	34		75,700

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
SPECIAL-PURPOSE FUNDS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, INSTITUTIONS OF HIGHER EDUCATION, RESEARCH UNITS, AND BUDGET- FINANCED ESTABLISHMENTS				
CULTURAL DEVELOPMENT FUND				
	Income and expenditures	1	55,066,700	54,053,129
	Cultural Development Fund's share of state budget income	2	53,600,000	
	Budget subsidy for investments	3	766,700	
LITERATURE FUND				
	Income and expenditures	4	50,000	152,000
GRAPHIC ARTS DEVELOPMENT FUND				
	Income and expenditures	5	75,000	97,650
SUBSIDIARY ECONOMIC UNITS				
	Income and expenditures	6	46,102	46,046
	Budget subsidy	7	1,828	
SPECIAL RESOURCES				
	Income and expenditures	8	2,182	2,202
HIGHER EDUCATION INSTITUTIONS				
	Income and costs	9	2,012,500	2,009,000
	Budget subsidy	10	1,819,000	
RESEARCH UNITS				
	Income and costs	11	346,800	311,400
BUDGET-FINANCED ESTABLISHMENTS				
	Income and expenditures	12	4,209	4,240

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 35	MINISTRY OF HEALTH AND SOCIAL WELFARE			
	INCOME AND EXPENDITURES OF SUBORDINATE UNITS AND OF UNITS SUPERVISED OR COORDINATED	1	12,159,280	433,467,296
	Local budgets	2	1,204,941	256,069,846
	Central budget	3	10,954,339*	177,397,450*
	GRAND TOTAL	4	10,946,908	160,556,106
85	PUBLIC HEALTH AND SOCIAL WELFARE	5	1,623,977	131,372,835
	Clinics	6	25,326	21,013,838
	Spa treatment	7	174,018	15,590,717
	Treatment center of the Ministry of Health and Social Welfare	8	1,180	497,010
	Health resorts	9	1,390,066	
	General treatment and health care	10	300	71,834
	Antiepidemic fund	11		40,000
	Prescription drugs for insured	12		37,966,000
	Fight against alcoholism	13		5,580,000
	Social assistance homes	14	87	55,273
	Social organizations	15	33,000	10,126,822
	Reserves	16		37,126,000
01	ECONOMIC ACTIVITY (State Enterprises)	17	8,141,424	1,342,650
	Turnover tax	18	3,250,000	
	Income tax	19	3,400,000	
	Payroll tax	20	1,377,597	
	Depreciation payments	21	113,827	
	Various subsidies for enterprises	22		1,342,650
31	CONSTRUCTION (Budget-financed tasks)	23		7,977
77	SCIENCE	24	322,149	2,760,190
	Subsidy for research projects fund	25		2,600,000
80	VOCATIONAL EDUCATION	26	3	30,080

*These items include the income and expenditures of Part 35: Ministry of Health & Social Welfare, and the income and expenditures in the other ministries' public health and social welfare section (income: 7.4 million zlotys, expenditures: 16,841 million zlotys).

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
81	HIGHER EDUCATION	27	843,000	9,140,160
	Scholarly instruction and development	28	843,000	7,855,560
	Social and material assistance for students	29		990,000
	Major repairs to college buildings and structures	30		274,000
89	MISCELLANEOUS ACTIVITY	31		1,454,778
	Specified tasks	32		538,780
	Social organizations (Subsidy for National Public Health Fund)	33		910,000
91	STATE ADMINISTRATION	34	16,355	516,469
	Central units	35	16,105	202,094
97	MISCELLANEOUS SETTLEMENTS (General reserves)	36		69,167
00	INVESTMENTS AND CAPITAL REPAIRS	37		13,861,900
	Investments	38		12,851,900
	Capital repairs	39		1,010,000
BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, SPECIAL-PURPOSE FUNDS, INSTITUTEIONS OF HIGHER EDUCATION, AND RESEARCH UNITS				
BUDGET-FINANCED ESTABLISHMENTS				
	Income and expenditures	1	266,578	275,471
	Budget subsidy	2	100,904	
SUBSIDIARY ECONOMIC UNITS				
	Income and expenditures	3	392,791	392,214
	Budget subsidy	4	93,000	
	Contribution to budget	5		600
SPECIAL RESOURCES				
	Income and expenditures	6	65,539	121,145
	Contribution to budget	7		5,881
FUND TO COMBAT ALCOHOLISM				
	Income and expenditures	8	5,580,000	5,725,951
	Budget subsidy	9	5,580,000	

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	VOLUNTEER PROJECTS FUND			
	Income and expenditures	10		90,603
	INSTITUTIONS OF HIGHER EDUCATION			
	Income and costs	11	10,790,200	10,597,900
	Budget subsidy	12	8,118,160	
	RESEARCH UNITS			
	Income and costs	13	2,452,425	2,242,965
PART 37	MINISTRY OF JUSTICE			
	GRAND TOTAL	1	15,129,550	26,660,039
92	ADMINISTRATION OF JUSTICE	2	13,045,000	23,391,919
	Supreme judiciary units	3	1,720	257,906
	General courts	4	9,340,300	7,196,761
	Labor and social-security courts	5	1,200	292,757
	Notaries	6	1,990,000	956,108
	Miscellaneous units for administration of justice	7	380	100,568
	Administrative Supreme Court	8	30,000	100,346
	Jails and prisons	9	1,670,550	13,380,635
	Institutions for minors	10	10,850	1,004,391
	Damages	11		9,500
01	ECONOMIC ACTIVITY (State Enterprises)	12	2,012,000	162,000
	Turnover tax	13	752,000	
	Income tax	14	900,000	
	Payroll tax	15	360,000	
	Direct subsidies	16		84,000
	Miscellaneous subsidies for enterprises	17		128,000
01	INDUSTRY (Contribution of surpluses from subsidiary economic units)	18	56,500	
31	CONSTRUCTION (Contribution of surpluses from subsidiary economic units)	19	3,550	
61	DOMESTIC TRADE (Subsidy for subsidiary economic units)	20		4,500
81	HIGHER EDUCATION	21		1,600
	Scholarly instruction and development	22		200
	Social and material assistance to students	23		1,400

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
89	MISCELLANEOUS OPERATIONS	24	12,500	14,220
	Specific tasks	25		10,220
	Social organizations	26		4,000
00	INVESTMENTS AND CAPITAL REPAIRS	27		3,085,800
	Investments	28		1,794,400
	Capital repairs	29		1,291,400
	BUDGET-FINANCED ESTABLISHMENTS, SPECIAL RESOURCES, SPECIAL-PURPOSE FUNDS, AND SUBSIDIARY ECONOMIC UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	222,477	221,477
	Budget subsidy	2	25,400	
	SPECIAL RESOURCES			
	Income and expenditures	3	1,640,196	1,674,000
	Budget subsidy	4	90,000	
	Contribution to budget	5		45,500
	HOUSING FUND			
	Income and expenditures	6	170,000	150,000
	Budget subsidy	7	135,000	
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	8	5,046,185	4,961,973
	Budget subsidy	9	4,500	
	Contribution to budget	10		60,050
PART 37	OFFICE OF VETERAN AFFAIRS			
	GRAND TOTAL	1	377	21,786,225
95	SOCIAL SECURITY (Subsidy for State Veterans Fund)	2		21,676,180
89	MISCELLANEOUS ACTIVITY	3	377	71,925
91	STATE ADMINISTRATION	4		36,620
	Central units	5		35,476
00	INVESTMENTS	6		1,500

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	SPECIAL-PURPOSE FUND			
	STATE VETERANS FUND			
	Income and expenditures	1	21,676,180	21,676,180
	Budget subsidy	2	21,676,180	
PART 38	POLISH ACADEMY OF SCIENCES			
	GRAND TOTAL	1	999,633	9,556,255
77	SCIENCE	2	558,849	8,811,069
	Polish Academy of Sciences research units	3	546,059	327,037
	Secretariate of Polish Academy of Sciences	4	9,305	360,053
	Scientific societies and other social organizations	5	600	130,000
	Subsidy for research projects fund	6		6,700,000
01	ECONOMIC ACTIVITY (State Enterprises)	7	440,284	140,000
	Turnover tax	8	3,000	
	Income tax	9	291,000	
	Payroll tax	10	123,000	
	Depreciation payments	11	22,798	
	Miscellaneous subsidies for enterprises	12		140,000
01	INDUSTRY (Bonuses for specific projects)	13		300
61	DOMESTIC TRADE (Subsidies for subsidiary economic units)	14		1,000
81	HIGHER EDUCATION	15		96,179
	Scholarly instruction and development	16		80,480
85	PUBLIC HEALTH AND SOCIAL WELFARE (Houses of public assistance)	17	500	23,300
89	MISCELLANEOUS ACTIVITY (Specified tasks)	18		370
00	INVESTMENTS AND CAPITAL REPAIRS	19		484,037
	Investments	20		353,237
	Capital repairs	21		130,800

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	BUDGET-FINANCED ESTABLISHMENTS, SUBSIDIARY ECONOMIC UNITS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	53,200	52,364
	Budget subsidy	2	14,200	
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	3	56,842	55,000
	Budget subsidy	4	14,300	
	SPECIAL RESOURCES			
	Income and expenditures	5	8,200	15,491
	RESEARCH UNITS			
	Income and costs	6	7,606,000	7,106,000
PART 39	OFFICE OF MATERIALS MANAGEMENT			
	GRAND TOTAL	1	7,413,036	432,966
01	ECONOMIC ACTIVITY (State Enterprises)	2	7,375,671	
	Turnover tax	3	2,200,000	
	Income tax	4	4,260,000	
	Payroll tax	5	561,000	
	Depreciation payments	6	99,700	
	Income from overestimating reserve stock	7	214,000	
	Miscellaneous clearings of accounts	8	40,971	
01	INDUSTRY	9		100,000
61	DOMESTIC TRADE (Budget-financed tasks)	10		4,000
77	SCIENCE	11	14,365	130,300
	Ministry research units	12	14,365	
	Subsidy for research projects fund	13		130,000
	Bonuses for completion of research and development projects	14		300
89	MISCELLANEOUS ACTIVITY	15	6,300	330
	Specified tasks	16		330

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
91	STATE ADMINISTRATION	17	16,700	192,236
	Central units	18	16,700	118,052
	Miscellaneous units of state administra- tion (Inspectorate of Materials Manage- ment)	19		69,617
	Foreign scientific-technical and economic cooperation	20		3,887
00	INVESTMENTS AND CAPITAL REPAIRS	21		6,100
	Investments	22		6,000
	Capital repairs	23		100
	SPECIAL-PURPOSE FUNDS AND RESEARCH UNITS			
	CENTRAL THRIFT FUND			
	Income and expenditures	1	30,000	80,000
	RECYCLED RAW MATERIALS FUND			
	Income and expenditures	2	900,000	150,000
	TIRE TREAD DEVELOPMENT FUND			
	Income and expenditures	3	1,040,000	300,000
	RESEARCH UNITS			
	Income and costs	4	240,528	211,953
PART 40	STATE ECONOMIC ARBITRATION			
	GRAND TOTAL	1	480,000	286,643
92	ADMINISTRATION OF JUSTICE	2	480,000	282,383
	Main Arbitration Commission	3	83,000	61,415
	District arbitration committees	4	397,000	220,906
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		60
00	INVESTMENTS	6		4,200
PART 41	PRICE OFFICE			
	GRAND TOTAL	1	1,100	224,558
91	STATE ADMINISTRATION	2	1,100	199,742
	Central units	3	1,100	198,074

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
77	SCIENCE	4		17,776
	Research units	5		11,833
	Miscellaneous activity	6		2,943
	Subsidy for research projects fund	7		3,000
89	MISCELLANEOUS ACTIVITY (Specific tasks)	8		40
00	INVESTMENTS	9		7,000
PART 42	CHIEF INSPECTORATE OF ENERGY AND POWER MANAGEMENT			
	GRAND TOTAL	1	11,250	251,532
01	INDUSTRY (Budget-financed tasks)	2		1,890
77	SCIENCE	3	9,250	25,000
	Ministry research units	4	9,250	
	Subsidy to fund research projects	5		25,000
91	STATE ADMINISTRATION	6	2,000	219,642
	Central units	7	2,000	51,430
	Local units subordinate to central bodies	8		165,304
	Foreign scientific-technical and economic cooperation	9		2,678
00	INVESTMENTS AND CAPITAL REPAIRS	10		5,000
	Investments	11		4,000
	Capital repairs	12		1,000
	RESEARCH UNITS			
	Income and costs	1	950,000	924,870
PART 43	STATE LABOR INSPECTORATE			
	GRAND TOTAL	1	455	527,237
91	STATE ADMINISTRATION	2	455	561,137
	Central units	3	455	559,720
00	INVESTMENTS AND CAPITAL REPAIRS	4		11,100
	Investments	5		8,100
	Capital repairs	6		3,000
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	26,005	26,005

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 44	"POLSKIE RADIO I TELEWIZJA" RADIO AND TELEVISION COMMITTEE			
	GRAND TOTAL	1	591,697	2,770,637
83	CULTURE AND ART	2	112,225	2,069,960
	Board of the Radio and TV Committee	3	8,000	412,642
	Radio and Television Technical Group	4	104,225	
	Subsidy for budget-financed establish- ments (Polish Radio Group and Polish Television Group)	5		1,657,318
01	ECONOMIC ACTIVITY (State Enterprises)	6	479,472	
	Turnover tax	7	111,000	
	Income tax	8	224,015	
	Payroll tax	9	116,682	
	Depreciation payments	10	27,775	
61	DOMESTIC TRADE (Subsidies for subsidiary economic units)	11		3,354
66	MISCELLANEOUS MATERIAL SERVICES (Sub- sidies for subsidiary economic units)	12		500
74	HOUSING ECONOMY AND NONMATERIAL MUNI- CIPAL SERVICES (Subsidies for subsid- iary economic units)	13		2,443
77	SCIENCE	14		30,800
	Subsidy to fund research projects)	15		30,000
	Bonuses for completion of research and development projects	16		800
81	HIGHER EDUCATION (Social and material assistance for students)	17		120
89	MISCELLANEOUS ACTIVITY (Specified tasks)	18		11,360
00	INVESTMENTS AND CAPITAL REPAIRS	19		652,100
	Investments	20		601,900
	Capital repairs	21		50,200
	BUDGET-FINANCED ESTABLISHMENTS, SUB- SIDIARY ECONOMIC UNITS, SPECIAL RESOURCES			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	11,170,894	10,860,894

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	SPECIAL RESOURCES*			
	Income and expenditures	2	10,955,714	10,955,714
	Budget subsidy	3	1,657,318	
	SUBSIDIARY ECONOMIC UNITS			
	Income and expenditures	4	174,576	173,167
	Budget subsidy	5	6,297	
PART 45	MAIN COMMITTEE ON PHYSICAL EDUCATION AND SPORTS			
	INCOME AND EXPENDITURES OF SUBORDINATE UNITS AND OF UNITS SUPERVISED OR COORDINATED	1	1,332,759	15,243,810
	Local units	2	8,470	7,666,440
	Central budget	3	1,324,289**	7,577,370**
	GRAND TOTAL	4	1,324,289	7,486,820
87	PHYSICAL EDUCATION AND SPORTS	5	234,940	4,951,711
	Tasks for popularization of physical education	6	250	80,211
	Subsidy for Central Physical Education Development Fund	7		4,871,500
	Sports organizations	8	234,690	
01	ECONOMIC ACTIVITY (State Enterprises)	9	104,732	
	Turnover tax	10	12,710	
	Income tax	11	56,754	
	Payroll tax	12	29,536	
	Depreciation payments	13	5,732	
31	CONSTRUCTION (Budget-financed tasks)	14		156
77	SCIENCE	15	6,144	60,130
	Research units	16	6,144	130
	Subsidy to fund research projects	17		60,000

*Special resources are a redistribution account to accumulate income from radio and television subscription fees and budget subsidies and to transfer funds to budget-financed units.

**These items include income and expenditures in Part 45: Main Committee on Physical Education and Sport along with expenditures in other ministries' physical education and sports section--90.6 million zlotys.

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
81	HIGHER EDUCATION	18	154,000	2,230,310
	Scholarly instruction and development	19	154,000	1,658,110
	Social and material assistance to students	20		349,200
	Major repairs to college buildings and structures	21		223,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	22		20
91	STATE ADMINISTRATION	23	1,005	74,493
	Central units	24	1,005	74,075
94	FINANCE AND INSURANCE (State "Sports Lottery" Enterprise)	25	823,468	
00	INVESTMENTS	26		170,000
	SPECIAL-PURPOSE FUNDS, BUDGET-FINANCED ESTABLISHMENTS, INSTITUTIONS OF HIGHER EDUCATION, AND RESEARCH UNITS			
	CENTRAL PHYSICAL EDUCATION DEVELOPMENT FUND			
	Income and expenditures	1	8,015,500	8,180,567
	Budget subsidy	2	4,871,500	
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	3	1,505,485	1,502,485
	INSTITUTIONS OF HIGHER EDUCATION			
	Income and costs	4	2,448,500	2,429,000
	Budget subsidy	5	1,881,110	
	RESEARCH UNITS			
	Income and costs	6	80,250	73,900
PART 47	MAIN TOURISM COMMITTEE			
	INCOME AND EXPENDITURES OF SUBORDINATE UNITS AND OF UNITS SUPERVISED OR COORDINATED			
		1	5,312,380	1,578,226
	Local budgets	2	923,301	312,033
	Central budget	3	4,389,079*	1,266,193*

*These items include the income and expenditures of Part 47: Main Tourism Committee and the expenditures in other ministries' tourism and recreation section, amounting to 54.2 million zlotys.

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	GRAND TOTAL	4	4,389,079	1,211,978
88	TOURISM AND RECREATION	5	3,884,440	1,098,895
	Subsidy for Central Tourism and Re- creation Fund	6		1,050,000
	Tasks in the promotion of tourism	7		43,895
	Touristic organizations	8	254,000	
	Touristic enterprises	9	3,595,840	
01	ECONOMIC ACTIVITY (State Enterprises)	10	500,779	
	Turnover tax	11	467,850	
	Income tax	12	16,200	
	Payroll tax	13	16,669	
	Depreciation payments	14	60	
31	CONSTRUCTION (Budget-financed tasks)	15		100
77	SCIENCE	16	3,360	40,000
	Research units	17	3,360	
	Subsidy to finance research projects	18		40,000
91	STATE ADMINISTRATION	19	500	69,978
	Central units	20		69,572
00	INVESTMENTS	21		8,000
	SPECIAL-PURPOSE FUNDS AND RESEARCH UNITS			
	CENTRAL TOURISM AND RECREATION FUND			
	Income and expenditure	1	6,700,000	6,945,000
	Budget subsidy	2	1,050,000	
	RESEARCH UNITS			
	Income and costs	3	45,500	42,293
PART 49	POLISH NATIONAL BANK			
	GRAND TOTAL	1	28,543,778	8,460
94	FINANCE	2	27,960,778	
	Banks	3	27,960,778	
	Contributions from profits	4	4,289,850	
	Income tax	5	20,677,700	
	Payroll tax	6	1,641,078	
	Shares and dividends	7	1,352,150	

Section No	Item	Item No	Income Expendi- (in thousands of zlotys) tures	
01	ECONOMIC ACTIVITY (State Enterprises)	8	583,000	
	Turnover tax	9	200,000	
	Income tax	10	216,000	
	Payroll tax	11	112,000	
	Depreciation payments	12	55,000	
77	SCIENCE	13		250
89	MISCELLANEOUS ACTIVITY (Specified tasks)	14		8,210
	RESEARCH UNITS			
	Income and costs	1	168,200	157,500
PART 50	MAIN STATISTICAL ADMINISTRATION			
	GRAND TOTAL	1	87,000	3,614,118
91	STATE ADMINISTRATION	2	5,688	1,316,813
	Central units	3	565	313,134
	Local statistical offices	4	5,123	942,403
01	INDUSTRY (Printing establishments)	5	21,812	146,346
66	MISCELLANEOUS MATERIAL SERVICES	6	59,500	1,376,094
	Data-processing units	7	56,000	607,000
	Other information service units	8	3,500	769,094
77	SCIENCE	9		46,037
	Ministry and branch research units	10		20,471
	Economic, scientific, and technical information units	11		16,224
	Research libraries	12		9,342
81	HIGHER EDUCATION (Social and material assistance to students)	13		344
89	MISCELLANEOUS ACTIVITY	14		210,716
	General census and other censuses	15		210,606
	Specified tasks	16		110
00	INVESTMENTS AND CAPITAL REPAIRS	17		517,768
	Investments and capital repairs	18		387,768
	Capital repairs	19		130,000

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	SPECIAL RESOURCES AND BUDGET-FINANCED ESTABLISHMENTS			
	SPECIAL RESOURCES			
	Income and expenditures	1	186,500	186,500
	Budget subsidy	2		50,600
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	3	16,887	16,887
PART 51	CENTRAL GEOLOGY OFFICE			
	GRAND TOTAL	1	1,892,900	228,342
01	ECONOMIC ACTIVITY (State Enterprises)	2	1,847,490	
	Turnover tax	3	3,000	
	Income tax	4	1,167,000	
	Payroll tax	5	472,000	
	Depreciation payments	6	191,000	
	Income from overestimating reserve stock	7	8,250	
31	CONSTRUCTION (Budget-financed tasks)	8		100,273
77	SCIENCE	9	45,000	70,700
	Ministry and branch research units	10	45,000	
	Subsidy for research projects fund	11		70,000
	Bonuses for completion of research and development projects	12		700
80	VOCATIONAL EDUCATION	13		250
89	MISCELLANEOUS ACTIVITY (Specified tasks)	14		1,340
91	STATE ADMINISTRATION	15	410	52,779
	Central units	16	410	47,922
	Foreign economic and scientific- technical cooperation	17		4,709
00	CAPITAL REPAIRS	18		3,000

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	SPECIAL-PURPOSE FUNDS, RESEARCH UNITS, AND SPECIAL RESOURCES			
	FUND TO FINANCE GEOLOGICAL WORK			
	Income and expenditures	1	6,500,000	7,860,000
	RESEARCH UNITS			
	Income and costs	2	1,350,000	1,170,000
	SPECIAL RESOURCES			
	Income and expenditures	3		1,248
PART 52	STATE ATOMIC ENERGY AGENCY			
	GRAND TOTAL	1	1,427,078	1,478,716
01	ECONOMIC ACTIVITY (State Enterprises)	2	1,249,547	
	Turnover tax	3	1,670	
	Income tax	4	1,071,000	
	Payroll tax	5	124,877	
	Depreciation payments	6	52,000	
01	INDUSTRY (Budget-financed establish- ments)	7		12,000
77	SCIENCE	8	177,531	1,388,500
	Ministry and branch research units	9	177,531	
	Scientific societies	10		300
	Subsidy for research projects fund	11		840,000
	Foreign scientific and technical co- operation	12		546,900
	Bonuses for completion of research and development projects	13		1,300
89	MISCELLANEOUS TASKS (Specified tasks)	14		290
91	STATE ADMINISTRATION	15		75,926
	Central units	16		33,909
	Agencies abroad	17		6,070
	Foreign economic and scientific- technical cooperation	18		34,387
00	INVESTMENTS	19		2,000

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	RESEARCH UNITS			
	Income and costs	1	3,794,900	3,381,352
PART 53	HIGHER MINING OFFICE			
	GRAND TOTAL	1	14,325	297,710
91	STATE ADMINISTRATION	2	14,325	282,450
	Central units	3	14,325	281,556
	Foreign economic and scientific- technical cooperation	4		790
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		60
00	INVESTMENTS AND CAPITAL REPAIRS	6		15,200
	Investments	7		9,000
	Capital repairs	8		6,200
PART 54	PATENT OFFICE OF THE POLISH PEOPLE'S REPUBLIC			
	GRAND TOTAL	1	221,815	322,485
91	STATE ADMINISTRATION	2	193,341	115,852
	Central units	3		108,039
77	SCIENCE (Scientific, technical, and economic information units)	4	28,474	172,623
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		10
00	INVESTMENTS	6		34,000
PART 55	MAIN OFFICE FOR CONTROL OF PUBLICATIONS AND PERFORMANCES			
	GRAND TOTAL	1	1,142	189,726
91	STATE ADMINISTRATION	2	1,142	185,006
	Central units	3	1,142	184,681
89	MISCELLANEOUS ACTIVITY (Specified tasks)	4		20
00	INVESTMENTS	5		4,700
PART 56	POLISH PRESS AGENCY			
	GRAND TOTAL	1		75,135
66	MISCELLANEOUS MATERIAL SERVICES (Sub- sidy for budget-financed establishment)	2		42,105
89	MISCELLANEOUS ACTIVITY (Specified task)	3		30

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
00	INVESTMENTS AND CAPITAL REPAIRS	4		33,000
	Investments	5		30,000
	Capital repairs	6		3,000
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	552,001	547,309
	Budget subsidy	2	42,105	
PART 59	POLISH COMMITTEE FOR STANDARDIZATION, MEASURES AND QUALITY			
	GRAND TOTAL	1	453,782	469,468
91	STATE ADMINISTRATION	2	1,585	159,495
	Central units	3	1,585	128,269
	Foreign economic and scientific- technical cooperation	4		30,796
01	ECONOMIC ACTIVITY (State Enterprises)	5	54,000	
	Income tax	6	40,000	
	Payroll tax	7	12,000	
	Depreciation payments	8	2,000	
66	MISCELLANEOUS MATERIAL SERVICES	9	392,078	110,875
	Standards and measures offices and assayers' offices	10	376,878	
	Metrological institutions	11	15,200	110,875
77	SCIENCE	12	6,119	67,515
	Main Standardization and Metrological Information Center	13	350	26,235
	Subsidy for research project fund	14		41,000
81	HIGHER EDUCATION (Scholarly instruction and development)	15		53
89	MISCELLANEOUS ACTIVITY (Specified tasks)	16		30
00	INVESTMENTS	17		131,500
	BUDGET-FINANCED ESTABLISHMENTS, SPECIAL RESOURCES, AND RESEARCH UNITS			
	BUDGET-FINANCED ESTABLISHMENTS			
	Income and expenditures	1	1,075,399	1,062,516
	Budget subsidy	2		376,878
	SPECIAL RESOURCES			
	Income and expenditures	3	10	7,274

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
	RESEARCH UNITS			
	Income and costs	4	95,721	80,092
PART 60	CENTRAL UNION OF COOPERATIVES FOR THE BLIND			
	GRAND TOTAL	1	64,000	190
01	ECONOMIC ACTIVITY	2	64,000	
	Income tax	3	10,000	
	Payroll tax	4	47,000	
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		190
PART 61	CENTRAL UNION OF "PEASANT SELF-HELP" COOPERATIVES			
	GRAND TOTAL	1	37,200,000	42,328,850
01	ECONOMIC ACTIVITY	2	37,200,000	42,310,000
	Turnover tax	3	5,500,000	
	Income tax	4	14,800,000	
	Payroll tax	5	14,800,000	
	Product subsidies	6		42,270,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	7		18,850
PART 62	CENTRAL UNION OF LABOR COOPERATIVES			
	GRAND TOTAL	1	14,392,000	289,646
01	ECONOMIC ACTIVITY	2	14,392,000	289,306
	Turnover tax	3	860,000	
	Income tax	4	102,000	
	Payroll tax	5	12,915,000	
	Product subsidies	6		205,136
	Other subsidies	7		84,170
89	MISCELLANEOUS ACTIVITY (Specified tasks)	8		340
PART 63	"SPOLEM" CENTRAL UNION OF CONSUMERS COOPERATIVES			
	GRAND TOTAL	1	34,550,000	4,410,000
01	ECONOMIC ACTIVITY	2	34,550,000	4,408,000
	Turnover tax	3	2,300,000	
	Income tax	4	17,500,000	
	Payroll tax	5	14,000,000	
	Miscellaneous settlements	6	200,000	
	Income from overestimating reserve stock	7	550,000	
	Product subsidies	8		4,408,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	9		2,000

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 64	CENTRAL UNION OF DAIRY COOPERATIVES			
	GRAND TOTAL	1	6,792,000	108,000,700
01	ECONOMIC ACTIVITY	2	6,792,000	108,000,000
	Income tax	3	2,300,000	
	Payroll tax	4	4,492,000	
	Product subsidies	5		108,000,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	6		700
PART 65	CENTRAL UNION OF VEGETABLE AND BEE-KEEPING COOPERATIVES			
	GRAND TOTAL	1	8,042,000	590
01	ECONOMIC ACTIVITY	2	8,042,000	
	Turnover tax	3	3,800,000	
	Income tax	4	2,100,000	
	Payroll tax	5	2,142,000	
89	MISCELLANEOUS ACTIVITY (Specified tasks)	6		590
PART 66	"PRASA-KSIAZKA-RUCH" PUBLISHING COOPERATIVE			
	GRAND TOTAL	1	4,140,300	1,330
01	ECONOMIC ACTIVITY	2	4,140,300	
	Income tax	3	369,000	
	Payroll tax	4	3,771,300	
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		1,330
PART 67	CENTRAL HANDICRAFTS UNION			
	GRAND TOTAL	1	3,497,000	50
01	ECONOMIC ACTIVITY	2	3,497,000	
	Turnover tax	3	62,000	
	Income tax	4	2,900,000	
	Payroll tax	5	505,000	
89	MISCELLANEOUS ACTIVITY (Specified tasks)	6		50
PART 68	CENTRAL UNION OF INVALIDS' COOPERATIVES			
	GRAND TOTAL	1	9,980,000	118,110
01	ECONOMIC ACTIVITY	2	9,980,000	117,000
	Turnover tax	3	3,387,000	
	Income tax	4	2,577,000	
	Payroll tax	5	3,706,000	
	Product subsidies	6		117,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	7		1,110

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 69	"CEPELIA" CENTRAL UNION OF FOLK AND ARTISTIC HANDICRAFT COOPERATIVES			
	GRAND TOTAL	1	2,120,000	
01	ECONOMIC ACTIVITY	2	2,120,000	
	Turnover tax	3	1,300,000	
	Income tax	4	6,000	
	Payroll tax	5	792,000	
PART 70	GENERAL FINANCE ADMINISTRATION			
	GRAND TOTAL	1	1,000,000	18,065,226
	ONGOING EXPENDITURES	2		17,876,226
	OUTLAYS FOR INVESTMENTS AND CAPITAL REPAIRS	3		189,000
	Investments	4		163,500
	Capital repairs	5		25,500
PART 71	NATIONAL UNION OF FARMERS, AGRARIAN CIRCLES, AND AGRICULTURAL ORGANIZATIONS			
	GRAND TOTAL	1	1,683,278	12,450,298
01	ECONOMIC ACTIVITY	2	1,683,278	11,935,718
	Payroll tax	3	1,320,000	
	Settlements for bank credit and for subsidies granted to agrarian circle organizations	4		11,808,718
89	MISCELLANEOUS ACTIVITY (Specified tasks)	5		450
00	INVESTMENTS	6		514,130
PART 73	CENTRAL UNION OF HOUSING CONSTRUCTION COOPERATIVES			
	GRAND TOTAL	1	1,310,000	141,100,260
01	ECONOMIC ACTIVITY	2	1,310,000	50,100,000
	Payroll tax	3	1,310,000	
	Subsidy for housing economy	4		50,100,000
74	HOUSING ECONOMY	5		91,000,000
	Bank credit settlements	6		91,000,000
89	MISCELLANEOUS ACTIVITY (Specified tasks)	7		260
PART 80	CENTRAL UNION OF CONSTRUCTION LABOR COOPERATIVES			
	GRAND TOTAL	1	409,000	
01	ECONOMIC ACTIVITY	2	409,000	
	Payroll tax	3	406,000	

Section No	Item	Item No	Income (in thousands of zlotys)	Expendi- tures
PART 81	RESERVE FUNDS			
	GRAND TOTAL	1		30,000,000
97	COUNCIL OF MINISTERS RESERVES	2		30,000,000
PART 82	COMPENSATORY FUNDS AND PAYROLL TAX INCOME FOR LOCAL BUDGETS			
	GRAND TOTAL	1		778,955,979
97	Shares of central budget income defined as a percentage of the value of retail sales of goods and services by units of the socialized economy included in the central and local plans	2		355,759,435
	General subsidies	3		120,127,544
	85% of payroll tax (direct income of voivodship budgets)	4		303,069,000
PART 83	UNALLOCATED INCOME AND EXPENDITURES			
	GRAND TOTAL	1	164,600,000	170,847,289
01	ECONOMIC ACTIVITY (State Enterprises)	2	130,000,000	35,460,000
	Turnover tax	3	15,000,000	
	Income tax	4	70,000,000	
	Depreciation payments	5	10,000,000	
	Income from overestimating reserve stock	6	35,000,000	
	Product subsidies*	7		28,000,000
	Miscellaneous subsidies for enterprises	8		7,460,000
01	INDUSTRY	9		500,000
40	AGRICULTURE	10		35,000
50	TRANSPORTATION AND COMMUNICATIONS	11		3,700,000
79	GENERAL EDUCATION AND DEVELOPMENT	12		525,000
80	VOCATIONAL EDUCATION	13		220,000
89	MISCELLANEOUS ACTIVITY	14		350,000
91	STATE ADMINISTRATION	15		1,660,588
92	ADMINISTRATION OF JUSTICE	16		1,597,691
97	MISCELLANEOUS CLEARINGS OF ACCOUNTS	17	30,900,000	45,174,910
	Income not allocated by section or line	18	30,900,000	
	Special-purpose expenditures not allocated by section or voivodship	19		28,874,910

*26 billion zlotys of this resulting from anticipated profit increase in the sale of food (food trade).

Section No	Item	Item No	Income	Expendi- tures
			(in thousands of zlotys)	
	Reserves to finance anticipated increases in remuneration in budget sphere	20		19,000,000
	Effects of increases in radio and television subscription fees	21		2,700,000
99	INCOME FROM POPULATION	22	3,700,000	
00	INVESTMENTS AND CAPITAL REPAIRS	23		81,624,100
	Investments	24		80,924,100
	Capital repairs	25		700,000

Appendix No 2 to Budget Law for 1985: Percentage Share of Central Budget Income & Total Subsidies

Item No	Voivodship	Share of Central Budget Income	Total Subsidy (1,000 zlotys)	Item No	Voivodship	Share of Central Budget Income	Total Subsidy (1,000 zlotys)
1	Capital			25	Nowy Sacz	8.91	1,847,467
	Warsaw	0.99	1,103,349	26	Olsztyn	10.98	5,210,470
2	Biala Podlaska	16.42	1,820,420	27	Opole	6.96	2,652,712
3	Bialystok	10.48	4,529,308	28	Ostroleka	14.08	1,645,805
4	Bielsko Biala	4.97	1,522,161	29	Pila	11.68	3,461,885
5	Bydgoszcz	6.54	4,183,649	30	Piotrkow	7.72	1,911,937
6	Chełm	17.00	1,848,178	31	Plock	8.85	1,805,206
7	Chiechanow	13.62	1,633,224	32	Poznan	5.49	2,970,775
8	Czestochowa	6.58	1,346,427	33	Przemysl	15.35	1,838,391
9	Elblag	11.34	1,338,220	34	Radom	10.94	3,099,303
10	Gdansk	4.51	3,683,917	35	Rzeszow	8.51	3,053,958
11	Gorzow	13.49	2,758,610	36	Siedlce	9.33	2,548,282
12	Jelenia Gora	10.46	1,859,087	37	Sieradz	11.15	1,542,735
13	Kalisz	7.08	1,758,785	38	Skiernewice	9.81	1,188,012
14	Katowice	---	2,231,822	39	Slupsk	10.48	2,328,388
15	Kielce	7.05	3,839,678	40	Suwalki	13.81	3,375,120
16	Konin	10.54	1,238,686	41	Szczecin	8.85	4,252,952
17	Koszalin	10.56	2,846,915	42	Tarnobrzeg	9.46	1,412,053
18	Krakow	5.35	4,053,391	43	Tarnow	9.60	1,532,402
19	Krosno	11.47	2,186,371	44	Torun	7.73	3,125,577
20	Legnica	7.11	2,189,192	45	Walbrzych	7.47	2,813,424
21	Leszno	10.34	1,685,792	46	Wloclaw	9.60	768,163
22	Lublin	6.44	3,109,026	47	Wroclaw	7.07	4,388,987
23	Lomze	15.20	1,755,667	48	Zamosc	13.03	1,708,131
24	Lodz	5.26	2,278,867	49	Zielona Gora	8.78	2,844,667
	Total						120,127,544

Note: Percentage rates given above are the basis for calculating central budget shares in relation to the value of retail sales of goods and services by units of socialized economy.

Appendix No 3 to Budget Law for 1985: Voivodship Budget Income From Payroll Tax and Shares of Central Budget (in thousands of zlotys)

Item No	Voivodship	Payroll tax	Share of Central Budget Income	Item No	Voivodship	Payroll tax	Share of Central Budget Income
1	Capital			25	Nowy Sacz	2,715,000	7,635,287
	Warsaw	30,905,000	4,518,176	26	Olsztyn	4,315,000	11,200,509
2	Biala Podlaska	792,000	5,927,822	27	Opole	6,627,000	9,612,906
3	Bialystok	3,762,000	9,490,485	28	Ostroleka	1,257,000	5,663,737
4	Bielsko Biala	6,109,000	6,392,780	29	Pila	2,130,000	7,265,716
5	Bydgoszcz	7,636,000	9,845,330	30	Piotrkow	4,091,000	5,634,423
6	Chelm	923,000	5,017,148	31	Plock	2,577,000	5,717,579
7	Chiechanow	1,328,000	6,842,254	32	Poznan	12,136,000	11,567,935
8	Czestochowa	4,395,000	6,228,717	33	Przemysl	1,445,000	6,478,051
9	Elblag	2,292,000	7,168,132	34	Radom	4,123,000	9,099,182
10	Gdansk	13,390,000	9,608,018	35	Rzeszow	4,773,000	6,840,662
11	Gorzow	2,679,000	8,477,574	36	Siedlce	2,124,000	6,111,852
12	Jelenia Gora	3,532,000	7,311,710	37	Sieradz	1,510,000	5,534,990
13	Kalisz	3,542,000	6,698,528	38	Skiernewice	1,675,000	4,955,199
14	Katowice	65,422,000	---	39	Slupsk	2,169,000	5,873,566
15	Kielce	7,064,000	9,179,415	40	Suwalki	1,790,000	8,029,129
16	Konin	2,431,000	5,765,722	41	Szczecin	8,495,000	12,769,515
17	Koszalin	2,973,000	7,831,311	42	Tarnobrzeg	3,532,000	5,908,045
18	Krakow	13,724,000	9,472,826	43	Tarnow	2,819,000	6,782,900
19	Krosno	2,658,000	5,746,923	44	Torun	3,766,000	6,811,984
20	Legnica	4,335,000	4,750,690	45	Walbrzych	6,286,000	7,613,943
21	Leszno	1,359,000	5,381,331	46	Wloclaw	1,906,000	5,321,464
22	Lublin	8,602,000	8,493,508	47	Wroclaw	11,888,000	12,069,196
23	Lomze	961,000	5,839,845	48	Zamosc	1,632,000	7,289,011
24	Lodz	11,975,000	10,225,101	49	Zielona Gora	4,499,000	7,759,308
				Total		303,069,000	355,759,435

Notes: Amounts in "Payroll Tax" column represent 85 percent of income from payroll tax.

Amounts in "Share of Central Budget Income" column include central budget income shares established as a percentage of the value of retail sales of goods and services by units of the socialized economy.

Appendix No 4 to Budget Law for 1985: Table of State Administration Slots Included
in Central Budget and of Those of the Administration of Justice and Prosecutor's Office

	Slots as of 31 December 1985
I. Central Administration:	
Office of the Sejm and Office of the Council of State	424
Supreme Chamber of Control	1,562
State Labor Inspectorate	1,223
Main Office for Control of Publications and Public Performances	458
central offices of other ministries and central agencies	15,012
units subordinate to central offices of ministries and central agencies	31,847*
general reserves available to the Chairman of the Council of Ministers	348
II. Administration of Justice and Prosecutor's Office	
Supreme Court	301
General Prosecutor's Office	372
Ministry of Justice	389
Main Arbitration Commission	123
subordinate units	52,370

*Slots for consular posts can be increased by the Minister of Finance in keeping with expansion in consular duties and the corresponding increase in foreign-currency income.

10790
CSO: 2600/702

*1. Total reserves available to Minister of
Local Administration and Economy -- 336
2. Special reserves for civil defense -- 117

POLAND

POPULATION CHANGES ALTER LONG-TERM ECONOMIC PICTURE

Warsaw RZECZPOSPOLITA in Polish 29-30 Jun 85 p 4

[Article by Iwona Czechowska: "Problems to Be Solved"]

[Text] Each variant of achieving a better economy presented in the assumptions of the National Economic Plan for the years 1986-1990 determines the rate of growth of the national income available for distribution and, this, for accomplishing society's objectives. Social policy has been faced for many years with problems of choice, and it must solve difficult equations this time too. Luckily, many elements are known. This, however, does not make the problems any easier.

The known elements are the demographic forecasts up to the year 2,000 and for the following 20 years. Also known is the backlog of unsatisfied social needs, such as housing, schools, hospitals and kindergartens which must be enlarged because of population growth and changes in population structure. It should be added that the changes are cyclical and that there are high and low points which must be considered in the planning process so that they will be satisfied at the appropriate times.

During the next 20 years (starting in 1980) there will be more of us by almost 5 million (4.9) and the increase will be unevenly spread. The greatest increase will take place during the most difficult years from the economic point of view, i.e. during this 5-year period and it will amount to 1.629 million. In the successive five year period it will be: 1,238 million, 992,000 and one million (this is the net gain, after allowing for migration).

Natural growth can be best predicted because it is determined by the distribution of women of child-bearing age calculated to bear until the year 2000. Almost 13 million children will be born (12.9 exactly). The increase of population in the post-productive age bracket will be large and uneven. A lower increase, also uneven, will be of population in the productive age group and this will result in a definite outcome. Changes in the pattern of population growth are illustrated in the table below. That prediction foretells higher economic burden on the working population and an increasing burden on the national income because of the growing social cost of supporting these population groups not yet working and those who have worked in the past.

Demographic predictions delineate definite requirements in infrastructure and social services and facilities. They point out that the planning of social policy must extend past 5-year periods and they determine priorities in the planning periods. The past pattern of high and low births predetermined that after the year 2010 we will enter a period of basically irreversible decline of the number of people in the productive age group and a fast increase of non-working population.

Two Decades

These decades will have specific features and common characteristics. During the current 10 years, the population of Poland will increase by 2.9 million and in the next 10 years by 2 million. By the end of the '80's there will be 5.3 million children of primary school age, an increase of 1.1 million. This is a higher peak than in the '60's. After the year 1985, there will be successive high points of youth 15-17 years old and this will continue until the end of the century. The number of persons in the post-productive age will grow by 735,000.

Let us enumerate increased requirements: food, clothing, medical care, housing, schools, school books, teachers and social services and facilities. Also, there are two low points expected in the '80's. The group starting family households (assumed to consist of people between 20 and 29 years of age) will decrease from 6.670 million in 1980 to 5.1 million in 1990, i.e. by 1.5 million.

The Structure of Population Increase by Three Basic Age Groups during the Years 1981 - 2000

Year	Population Increase				Number of persons of pre-productive and post-productive age per 1,000 person increase of persons in productive age
		By Age Groups			
	Total	0-17	18 - 59/64	60/65 and Over	
	In Thousands				
1981-1985	1,635	786	571	278	1,663
1986-1990	1,230	444	338	456	2,663
1991-1995	992	-145	712	425	393
1996-2000	1,003	-227	1,000	280	3
1981-2000	4,868	808	2,621	1,439	857

This low point may help reduce the growing backlog of housing requirements but it will last only a short time. The other low point, that is the increase by only 340 persons of the productive group, does not help the economy and we must search for reserves. Luckily, we have them. One reserve capacity is the increasing proportion of working age population.

In the 90's, the age composition of the population will be more favorable from the socio-economic policy point of view. In the majority of districts, the primary school population will decrease (it will remain unchanged in 12 districts) but the number of youth will remain high. High numbers of young people getting married will appear again, this group is expected to reach 895,000. The post-productive group will increase by 705,000. In the year 2000 that group will reach 5.7 million (14 percent of the total population). During this decade it will be necessary to create jobs for the additional 1.7 million people of working age, who will improve the ratio of the productive to the passive population.

Levels of Aggregation

The above is the prediction at macro level. All the elements of that prediction will be present in all districts but will not be of equal importance. The predictions by the district will be determined by the current composition of population by age and sex and that composition is often different, sometime very different, from the national average. Natural growth will be high in some districts, low in others and negative in some. The urban district of Lodz will decline by 40,000 and the capital district of Warsaw by 32,000 while both will gain 38,000 and 65,000 old persons, respectively, by the end of this century. The aging process of the population will be slower in those districts where at this time there are more older people and the rate will be higher in the currently demographically young districts. In this sense, the youngest district is the Legnica district and the oldest the Sieradz district (7.4 percent and 15.7 percent of older people, respectively). Also, there will be differences in the proportion of the young and fit for work to the total population.

For the long range planning, the demographic situation by area is of great importance. It will affect the labor market and social needs. For instance, from the education point of view, the national average increase will be about 25 percent. For the capital district of Warsaw it will be 36 percent and similarly for the district of Zielona Gora, for the Katowice district it will be just a little less. A higher than the national average increase will also take place in the following districts: Legnica, Poznan, Szczecin, Wroclaw and Walbrzych.

For the discussion of the plan assumptions and then of the plan itself, it is not without significance to review the high and low points as they affect long range benefits. Above all, this applies to primary schools. The question is how to build them, there is no doubt that they must be built on priority basis. Youth cannot be postponed. Therefore, those schools must be built in such a manner that they can be quickly adapted, as the demographic changes demand, to become post-primary schools of various types, kindergartens, boarding homes,

perhaps outposts of higher education and, if necessary, returned to their original use. Such strategy was used before but in many instances it was difficult to regain those buildings even when the need was apparent. There are no other places to which the current occupants can be moved. The multi-purpose use of those buildings must be planned ahead.

This is not the only problem to be solved; it is just a signal from one group of needs. Already, at the initial phase of preparation of the 5-year plan, it is clear that all needs cannot be fully satisfied and choices will have to be made. The National Socio-Economic Plan assumes that no social services may deteriorate below the 1985 level. The new classrooms, spaces in kindergartens, hospital beds, health centers and clinics are planned to provide for the population growth (there is a debate going on how well they provide) but per person there will be no more of anything.

The reasons are provided by the demography and the economy. According to the plan, a significant economic growth will be noticeable at the end of the 90's when the economy will return to the level of that of the year 1978 and consumption to that of 1980. At that time, the population will have increased by almost 5 million.

8801

CSO: 2600/904

POLAND

MINISTRY GIVES PROGRESS REPORT ON FOOD PROGRAM

Warsaw PRZEMYSŁ SPOŻYWCZY in Polish No 10, Oct 84, No 1, Jan 85

[Article by Kazimierz Placzkiewicz, member, Economics and Planning Department, Ministry of Agriculture and Food Industry: "The First year of realization of the food program"]

[No 10 Oct 84]

[Text] In adopting in 1983 the government's food and agriculture program for 1990, the Sejm also decided to annually monitor the realization of that program. The first government report on the state of agriculture and the food industry in 1983 was reviewed by the Sejm at the beginning of 1984. With regard to the great scope of problems covered in the report, their discussion on the pages of PRZEMYSŁ SPOŻYWCZY will be presented in two parts dealing separately with the problems of agriculture and food industry.

Agriculture

Polish agriculture in 1983 showed the positive results achieved in overcoming the crisis in this sector of our economy. The basis for such an assessment is the fact that the amount of national income generated by agricultural production in 1983 reached its pre-crisis level of 1978. In the other sectors of the economy, the income still remained 19 percent below the 1978 level. This means that the regression in agricultural production was milder than in other industries. The resources and means of agricultural production were also used more efficiently because the consumption of materials (calculated as the ratio of material investments) in relation to production output fell from 44 percent in 1978 to 38 percent in 1982 and 34 percent in 1983. These results were achieved under conditions in which there was less supply of many primary production resources for both agriculture and industry.

It can therefore be said that agriculture at this time adopted itself very well to the changing conditions by eliminating less efficient enterprises and by using its available resources more economically. However, expert evaluations show that the growth in production and the greater efficiency achieved through reducing material consumption has its limits and is possible only for short periods. In the nearest future, we can count on further

progress mainly through the improvement of factors affecting the growth in labor productivity.

In 1983, positive changes were noted in the structure of agricultural production. In accordance with the program's provisions, the proportion between livestock and plant cultivation which had been lost in the 1970's has now been restored. Restrictions on the importation of grains and fodder has forced agriculture to adapt the dimension of livestock production to the fodder reserves that can only be supplemented by indispensable importation of high-protein feeds and corn that cannot be grown in sufficient amounts in Poland because of climactic reasons. The expression of these changes is the growth in 1983 of overall agricultural production by 3.6 percent. Plant cultivation increased as much as 6 percent while livestock production went up by only 0.9 percent. In the crop structure, there was in 1983 an increased amount of grains and legumes of such great importance in solving the grain and fodder shortage. Due to good harvests (27.3 q/ha) and growth in cultivated surface area, grain harvests increased (by 0.9 million tons) to 22.1 million tons while purchases went up by 5.2 million tons, i.e. 40 percent in relation to the preceding year. In order to encourage the production of legumes for fodder, the Ministry of Agriculture and Food Industry began in 1984 to fund and contract legume planting. In the coming 5 years, it is planned to increase the production of legume seeds from 220,000 tons in 1983 to 500,000 tons in 1988. Increased cultivation of rape is of great importance to the national balance of fats and fodder protein. Thanks to the large harvest (22.55 g/ha), 540,000 tons of rape were sold in 1983. About 40 percent more rape than in 1983 has been sown for harvest in 1984. More actions will be concentrated to increase the cultivation of nonerucic rape which will improve the quality of oil and increase our supplies of protein feeds.

In the last two years, the potato harvests have been less than planned (147 q/ha in 1982 and 155 q/ha in 1983) and this has worsened the fodder situation, especially on privately-owned farms. However, studies have shown that agricultural technology does have real means for increasing the size of these harvests. During the very same period, the sugar beet harvests were very good. With the large harvests taken in in 1983 (336 q/ha) and the high sugar content of these beets, a record sugar production level of 1,981,000 tons was achieved. This figure exceeded the production level planned in the program for 1990 (1,900,00-1,950,000 tons).

Combined harvests of plant products per hectare increased from 30.5 units of grain in 1982 to 32.6 in 1983 (see table).

These figures give some general indication of the successful realization of tasks in plant cultivation. The Sejm positively evaluated consistent government action taken since 1982-83 to hasten the growth of overall and commercial plant cultivation, especially grain and fodder, oily plants and legumes in order to limit their importation and to create the proper base of fodder supplies. Many factors have contributed to the favorable results in plant production. Above all, these were progress in soil liming, production,

storage and use of seeds, plant protection, preventing any drop in the production of nitrogen and phosphorus fertilizers and beneficial atmospheric conditions.

The realization of tasks in the area of fertilization requires special attention. In 1983, the total consumption of fertilizers amounted to only 170 kg of NPK per hectare as compared to the 205 kg provided in the 1985 program. There have therefore been some serious lags in this area and that may hinder the fulfillment of this task and in turn detrimentally affect the planned growth of plant production. In connection with this situation, actions have been taken to make more efficient use of fertilizers including those less willingly bought by farmers such as ammonium sulfate, superphosphate, phosphorus meal and potassium salts. In connection with the growth in the supplies of these fertilizers, seasonal price credits were introduced in 1983 and 1984 and this increased their demand.

The 12.5 percent increase (that is, as much as 143 kg CaO per hectare) in the use of fertilizer lime in 1983 should enhance fertilizing efficiency. The increase to 148 kg CaO per hectare called for in the 1985 program should be realized in full. In 1983, there was some improvement in agriculture's supply of herbicides and pesticides despite the fact that their production was 11.5 percent lower than in 1982. This was achieved by the introduction to production of the most advanced pesticides used in lower dosages.

Considering the poor progress made in fertilization and plant protection, the Sejm recognized the need for the government to encourage the growth of agricultural chemistry in Poland. A special program which has been worked out creates the necessary conditions for the expansion and modernization of chemical production for agriculture and the food industry. The past year saw a complete turn-around in the situation with agricultural supplies of seeding materials. Due to changes in the system of farm supply and the restoration of seed funding, the supplies of grain seed increased in autumn 1983 and spring 1984 by 21 percent in relation to 1982/1983.

In 1983, less positive results were achieved in livestock production. This was mainly due to a shortage of power feeds because of a drop in the importation of high-protein fodder materials. Agricultural supplies of power feeds in 1983 amounted to only 3.8 million tons which was 17.4 percent lower than planned for that year and as much as 57.5 percent lower than 1981.

The fulfillment of the plan for high-protein feeds fell particularly short (only 47.5 percent). The shortage of these fodders hindered the use of national stocks of energy feeds and therefore, aside from the poorer potato harvests, was one of the main causes of the lower number of pigs.

Because of the overall improvement of the national economy, funds were increased to raise the importation of high-protein feeds to a level of 125,000,000 tons as compared to the previous year's figure of 466,000 tons. According to figures from June 1983, the total number of heads of cattle in Poland decreased from 11.9 million in 1982 to 11.3 million or 5 percent while the number of pigs decreased from 19.5 million to 15.6 million or 20 percent.

In the fourth quarter of 1983, there was a tendency for herd sizes to increase after crops were harvested. This tendency was even stronger in 1984 because of supportive government decisions to increase supplies of high-protein power feeds and coal, to restore funding for livestock material and to reduce the interest on credits for the purchase of breeding animals.

The reduced amount of livestock has hindered the purchase of meat. In 1983, 1,786,000 tons of meat were purchased which was 5.6 percent less than 1982. The effects of the lower amount of livestock will also be felt in 1984, especially in the first three quarters of the year. Being less dependent on imports and the purchase of power feeds, milk production amounted to 15.7 billion liters in 1983 and this 0.9 billion liters higher than the previous year. The 1985 program's plan for 16.5 billion liters should be achieved. The purchase of milk has exceeded planning. In 1983, 10.7 billion liters were purchased while the 1985 program assumed the purchase of 10.5 billion liters. The increment in purchases has exceeded the growth in milk production because of the good supply of fodder, limitations on milk grazing by the reduced herds and the increase in the price of milk. The results of the production of livestock and the current trends for growth show that the spasmodic vacillations have been followed by a natural process of growth in the production which has been adapted to the fodder base and economic conditions.

The level of meat production planned for 1985 will nevertheless be hard to achieve as shown by the following data:

	<u>production of cattle (thousand tons)</u>
1982	3630
1983	3482
1984 (plan)	3270
1985 (according to the provisions of the plan)	3770

Despite a drop in meat production that was greater than foreseen, the public supply of meat products will remain at the level stated in the program.

The government report states that in 1983, the national economy began to be oriented in a pro-agricultural direction. The results so far have still not kept up with needs but there has in the last few years been a growth in industrial production for agricultural needs. An important role in this has been played by operational programs that have since 1982 covered the production and supply of technical resources for agriculture and the food industry. These programs made possible an increase in the production of certain types of agricultural machinery and equipment despite a simultaneous reduction in production by other branches of industry. In 1983, the plan for delivery of tractors, rotary tillers, dung spreaders, potato planters, rotary reapers, potato and beet combines, trailers and certain horse-drawn implements was exceeded. However, this did not entirely cover the demand for tractors and tractor-drawn equipment. The quality of agricultural machinery has worsened due to the use of alternate materials of worse parameters or poor observance of technological requirements.

In recent years, there has been a significant growth in the supply of spare parts for agricultural equipment. However, there still are great shortages of some assortments. In order to hasten the pace of agricultural equipment production, the government has worked out a long-term program for reconstruction and modernization of the agricultural machinery industry.

The pace of growth of the food industry has been influenced by a growth in investments that is less than planned. In 1983, the investment was about 24 percent while the program called for 28.1 percent. Assessing the current realization of investment tasks, it must be said that achievement of a figure of a 30-percent portion of the food complex in overall expenditures planned for 1985 is too unrealistic.

Any further growth of this figure requires the introduction of economic incentives and greater concentration of the efforts of founding organs, investors and executors.

In agricultural, the basic directions for investment are soil amelioration and rural irrigation, both of which have their effect on the achievement of production tasks and improvement of the standard of living of rural inhabitants. Realization of the program's provisions in this area have been delayed. In 1983, however, some progress was made over last year in that about 90 thousand hectares of arable land were ameliorated (7-percent increase) and about 228 water pipelines (30 percent more) with a total length of about 2175 kilometers were opened.

Some of the main difficulties in accelerating the realization of investments on soil amelioration and rural irrigation are material shortages. For that reason, the government in 1983 ordered the realization of amelioration work and the production of drain pipes. This will provide better conditions for the implementation of the tasks for 1984-1985. The supply of technical equipment to amelioration firms has been increased but there continue to be some great shortages. In order to alleviate the shortage of water in agriculture, the government will also order investments on irrigation, production of deep-well pumps as well as irrigation pipes and fittings. A government report has indicated that in 1983 the rural market's supply of construction materials was too low even though there had been some increase in supplies and a visible improvement in the amount of cement available but there is still a great shortage of items such as construction lime, roofing materials, woodwork and foundry products.

Agriculture's supply of coal has improved. A problem is beginning to emerge in the obsolete power network which causes interruptions in the power supply and production losses. The favorable economic conditions brought about more than anything by the system of prices on agricultural products and agricultural production costs, the system of financial taxation and the credit policy all had a strong influence on agriculture in 1981-1983. Over the past three years, agricultural production has been made more profitable and agricultural salaries have been brought into their proper relation to other salaries.

The 1983 differentiated price increases for agricultural production resources were supposed to increase production, especially of necessary resources, both among existing producers and those starting to produce. Within the framework of the 1 July 1983 purchase price increases, preferences were given to grain to increase its purchase and to limit imports. This task was quantitatively fulfilled but the structure of grain purchases was unsatisfactory from the point of view of the balance of bread grains. The low share of wheat indicated insufficient differentiation of the prices between categories of grain that should be corrected during the next price change. Certain corrections should also be made to improve the price relations of pork and beef cattle to grain. In 1983, credit policy was an important tool of economic policy to encourage the development of certain directions of production and support required changes in agriculture. With the application of the principle of equal interest on credits for all sectors of agriculture, a preference is being given to actions aimed at improving the agrarian structure such as reduction of the interest on credits for the purchase of land to 5 percent and special conditions for financing biological progress. As a result of these measures, the interest on credits for the purchase of qualified seeding material seed potatoes as well as breeding material was lowered to 5 percent.

The government report has stated that a still more active credit policy on agriculture and especially on financing economically justifiable production investments is necessary. In recent years, as a result of the economic reform, changes were introduced to the system of agricultural funding. These consisted of ending many types of payments for production activity in socialized farms, placing special emphasis on supporting biological progress in all sectors of agriculture, development of amelioration investment and agricultural and rural irrigation.

The economic conditions of 1981-1983 also reversed the current trends in nonsocialized agricultural employment. In the last three years, there has been noted in this sector a growth of employment by about 112,000 persons (2.8-percent increase). At the same time, there has been a corresponding decrease in socialized agriculture in connection with the change in the level and structure of production is a result of economic reform. In the last two years, the tempo of the reduction of the area of agricultural lands in Poland has been slowed. The yearly loss of croplands in 1981-1983 was about 20,000 hectares, i.e. less than half of the annual loss in 1975-1981 (about 50,000 hectares). This is connected both with less investment as well as with stronger regulations protecting agricultural lands. Land losses and the growing population of Poland caused a reduction in the amount of cropland per capita from 0.56 hectare in 1975 to 0.54 in 1978 and 0.52 in 1983.

The process of fragmentation of the agrarian structure has been slowed down and the average size of peasant farms is growing, if only slowly. There has also been an increase in the number of larger and economically stronger farms. In 1978-1982, the overall number of farms was reduced by 7.3 percent while the number of farms larger than 10 hectares increased by 6.7 percent. As a result of these changes, the average size of private farms in Poland increased from 4.61 to 4.94 hectares, that is, by 7.2 percent.

A very necessary phenomenon has been the reduction in average age of farmers. In 1978-1982, there was observed an increase in the percent of farmers older than 35, from 10.9 to 15.4 percent. Meanwhile, the portion of farmers over age 60 has decreased by about 6 percent. In relation to 1982, there was a 22-percent growth in the so-called turnover of generations and this was a first effect of the action of the December 1982 law on social security for farmers. A particular difficulty in efficient use of land is the burdensome checkerboard of plots still found in private farms in some provinces (mainly in the central, eastern-central regions and to some extent in the Northeast and Southeast). The reintegration and exchange of lands conducted consistently since 1968 has made it possible to liquidate the fragmentation of fields by about 4.9 million hectares. There are still about 1.5 million hectares awaiting reintegration.

In sum, despite the current difficulties, we can positively assess the results of agriculture during the first year in which the government program has been realized. On the basis of this report, the Sejm stressed in its resolution that basic tasks aimed at gradual achievement of food self-sufficiency have been consistently realized. At the same time, in order to reduce the present dangers and restrictions, the Sejm recommended that the government consider in the Central Agricultural Plan for 1985 and the National Economic Plan for 1986-1990 the tasks determined in particular programs to equalize the disproportion in agricultural production conditions.

1 Uprawy	2 Lata	3 Plony (q/ha)				4 Zbiory (mln t)			
		1976-80	1982	1983	1985 (avg pro- gram)	1976-80	1982	1983	1985 (avg pro- gram)
6 Zboża		24.8	26.1	27.5	28.0	19.5	21.2	22.1	23.0
7 Rzepak		19.3	16.8	22.5	19.0	0.64	0.43	0.56	0.84
8 Ziemniaki		177	147	155	205	42.7	32.0	31.5	44.1
9 Buraki cukrowe		280	306	336	320	14.1	15.1	16.1	16.0
10 Produkty roślinne									
11 Razem w jedn. zboż.		30.7	30.5	32.6	33.5	18.5	17.6	18.6	19.0

Achieved yields and harvests of cultivated crops in comparison to program plans. Key: 1. crops; 2. years; 3. yields (q/ha); 4. harvests (million tons); 5. (according to program); 6. grain 7. rape; 8. potatoes; 9. sugar beets; 10. plant products; 11. [razem w jedn. zboż.]

[No 1 Jan 85]

[Text] After the regression of 1981 and 1982, there was a 4.1-percent growth in 1983 in overall agricultural and food production. The level of production achieved in 1983 is still 13.1 percent lower than that of 1980.

In particular branches agriculture and food industry, the results were very varied and were generally in keeping with the changes that occurred in the supply of both domestic and imported raw materials and materials.

It has been estimated that in 1983 the total supplies of agricultural products (along with imported products) to the agricultural and food industries were about 15 percent lower than in 1978, a year in which these supplies were highest. There has been an especially sharp drop in imported supplies and animal products with the exception of milk and eggs.

It is worth pointing out that the domestic supply of plant products has exceeded the 1978 level. A faster growth of the production and supply of these materials has been in keeping with the provisions of the government program.

Due to greater restriction on the importation of grain and fodder components, the greatest drop in production in the last three years occurred in the fodder industry (more than 40 percent) and in the processing of animal products (17 percent) including meat and poultry (more than 30 percent).

In order to adapt itself to the limitations on materials, the food industry made some important changes in 1983 to the structure of the production of different foods and increased the production of many substitute products including those meant to replace imports.

For example, under the drop in production of meat and the greater share in its structure of beef, the production of more processed products, i.e. sausages and canned meat, has been enlarged.

In connection with the large amount of rye included in the purchase of grains, the production of rye bread flour has been increased and this provided a larger share of rye and rye-wheat bakery goods. In view of the limited supplies of imported soy and fine oils made from edible seeds, the fats industry has increased its production of oil and margarine made from rape.

A considerable reduction in the importation of cacao beans has restricted the production of chocolate products, mainly of full chocolates that use a large amount of beans, in favor of the production of poured chocolate products. Furthermore, to prevent any excessive drop in the market supply, there has been expanded the production of chocolate-like products mainly using domestic materials and the addition of cacao.

The food concentrates industry has also undertaken the production of products with a reduced amount of imported material or its total replacement by domestic materials.

As particular branches of the industry are adapting themselves to the material conditions, it is worth pointing out the broader use being made of production by-products. An evaluation of this showed that food by-products are already

being used to a much greater degree for food, fodder, pharmaceuticals and for export. Increasingly greater use is being made of meat by-products such as blood, bones and fats.

The dairy industry is working to expand industrial use of whey for the production of lactose. Increasing use is being made of apple extractions for the production of pectin. By-products the sugar industry (such as molasses, extractions) and the potato industry (peelings) have now come under full use.

The tobacco industry has started the experimental production of paper from tobacco dust to be used to make cigarettes.

Part of the food industry's difficulty in making better use of by-products is a lack of the necessary equipment but this shortage will gradually be made up for in modernization and refitting projects.

Aside from the material barriers hindering the growth of production, there are in certain branches of the food industry also some material shortages that are felt most keenly in the production of highly-processed foods and export products. In recent years, the greatest limitations on material supplies have been on packaging, the production of which meets the industry's needs by only 40-60 percent. The shortage of packaging limits production of many articles, reduces their shelf life and makes it hard to improve their quality. In 1983, material supplies were generally sufficient for branches producing flour, bakery products, sugar, potatoes, vegetables, fruit and dairy products.

In branches processing imported food materials and animal products (meat, poultry, sugar, concentrates and fodder), a considerable shortage of raw materials and materials has limited production and full use of these industries' abilities.

However, the greatest problem in the last three years has been a shortage of canning facilities in many of the branches that must supply both the domestic and export markets. Considering the relatively low investments made in the 1970's on the branches processing vegetable raw materials, there is now an especially keen shortage of these facilities in the branches producing flour, bakery products, fats, sugar, potatoes, refrigerators and tobacco.

Despite its growth, the dairy industry is also continuing to feel great shortages. Poor adjustment of potential to material resources has also been a problem in the storage of food. For example, the highest daily purchase of grain in 1983 was about 200,000 tons whereas the storage facilities of the PZZ [expansion unknown] could only hold about 140,000 tons while it could dry only 98,000 tons.

Another danger in some branches is the high degree to which machinery is being used up and this has reduced the productivity of all other machinery. Physical aging of the machine park is also accelerated by too-intensive operation. The hardest situation in terms of the wearing-out of machinery is found in the fats, sugar, milling, dairy, tobacco, fruit and vegetable branches.

It must be pointed out that in spite of the economic problems, it is necessary to enlarge our ability to can or process all basic vegetable materials and milk and to develop our base in refrigerators and storage facilities (especially for grain). This is also necessary for better and fuller use of agricultural products as well as the production of food products for public needs.

In 1983, the branches producing meat, poultry, fodder and sugar (in the production of chocolate products) all possessed sufficient production capacities that were not even fully used.

Despite serious organizational difficulties, there was noted in the growth of production by the agricultural and food industries in 1983 a gradual stabilization of the food market. Above all, there was achieved a growth in the supply of basic articles, several of which (such as sugar and vegetable oils) even exceeded the level of supply of 1980. On the basis of some studies it was determined that market demand was satisfied for articles such as baked goods, milk, sour cream, eggs, cottage cheeses, fresh-water fish, potatoes, beans, peas, fresh and canned fruit and vegetables, honey and stimulants.

The supply of rationed articles was also satisfactory. In 1983, ration cards for sugar, cigarettes and alcoholic beverages were abolished.

A difficult situation has arisen on the market for meat articles but rationing needs were fully covered. The meat and meat products consumption per capita was kept at last year's level but there was increased consumption of milk, dairy products, fish and fish products, animal fats, butter and sugar.

The total nutritional and energy value of average per capita food consumption was higher than last year and amounted to about 14,455 kJ (3450 calories) and 92 g of protein per day. These figures correspond to food standards and satisfy biological needs (see table).

Worth pointing out is the achievement in 1983 of the level of meat consumption set for 1990 (according variant I) and a higher than planned consumption of fish and animal fat. The consumption of butter and sugar has already exceeded variant II. The consumption of milk and dairy products is very close to planned figures.

The figures for consumption of vegetable oils are now the farthest from the provisions for 1990. In 1983, the consumption of these oils did not increase. Meanwhile, the level of carbohydrate consumption stabilized. The public's accommodation to a "cheaper" model of food consumption has so far concerned for the most part changes in the proportion of animal protein consumed, however, it is not enough to increase consumption of legumes to increase the portion of protein in milk and canned foods.

In 1981-1983 there was a considerable reduction in the foreign trade deficit in agricultural and food articles. In 1981, this amounted to about 133 billion zlotys (at current prices), 67 billion in 1982 and 16.5 billion zlotys

in 1983 whereas the program's provision for 1985 is 27.9 billion. This means that we are reaching a balance in food export and import more quickly than planned. It is worth pointing out that the reduction of this deficit with countries of the second-payments area has occurred despite the unfavorable figures of the terms of trade in 1982 and 1983. In 1982, this figure was 87.7 and in 1983 it was 88.4. If in 1983 the prices for agricultural and food products had remained the same as the year before, the negative trade balance would have been even less.

The negative trade balance in 1981-1983 was the result both of considerable reduction of food importation (by 48 percent) and a strong increase in exports (by 43 percent). Therefore the percentage of food imports out of total imports in the same years was reduced from 19.9 percent in 1981 to 10.3 percent while food exports (out of total exports) increased from 6.8 to 7.8 percent. This great reduction of imports was due to the fact that the planned import of oily ground grains, protein grains and corn was not implemented.

The purchase of fodder grain went down from 3.8 million tons in 1981 to 1.1 million in 1983 while that of ground grains and meals was reduced from 1.3 million tons to 400,000 tons. This made it impossible for the fodder industry to provide the planned supplies of different fodders and therefore any improvement in grazing efficiency.

In order to accelerate the growth of meat production, decisions were made to restore the importation of high-protein feeds to a level stated in the program.

In 1983, there was much growth (40 percent) in accumulation but unfortunately this did not do anything to improve the financial situation of the agricultural and food industry. The reason for this was less funding and increased taxes. For that reason, the overall financial results of the food industry in 1983 was 15 percent lower than in 1982 and profits went down from 9.8 to 6.8 percent of the natural sale cost and from 60.8 to 37.7 percent of production cost.

Despite the fact that the food industry's payments to the state budget and the PFAZ [expansion unknown] were reduced to 56 percent in 1983 (from 72 percent in 1982), the remaining capital was insufficient to pay for restoration of production property and pay worker incentives. In the main branches of the industry, the development funds covered only about 60 percent of the needs. In 1983 the pay situation worsened. The difference between the average pay for workers in other industries and those in the agricultural and food industry increased.

Assessing the realization of the program for development and agriculture and food industry, the Sejm fully confirmed the appropriateness of actions taken to expand and modernize the production capabilities of this industry and mainly in the branches handling domestic food materials and with much influence on the domestic and export markets. These branches are the dairy, milling, baking fats, potato, sugar, tobacco, refrigerator and food-storage industries.

In order to create the best conditions for growth in some branches, certain economic and organizational measures will be improved to encourage growth in the agricultural and food industry's potential and in the tempo at which the increment can be raised for production of agricultural produce requiring canning, processing and proper storage.

1	Grupa wyrobów	2.	3			
			Poziom spożycia			
			1982 r.	1983 r.	4 wg programu 1990 r.	5
					6	7
					5	6
7	Mięso i przetwo-					
8	ry	kg	58,5	58,2	58,5	62
8	Mleko i przetwo-					
9	ry (bez masła)	l	247	277	285	285
9	Ryby i przetwo-					
10	ry	kg	6,0	7,0	5,9	7,6
10	11	szk.	200	198	222	222
11	Tłuszcze roślinne	kg	7,3	6,7	9,5	9,5
12	Tłuszcze					
13	zwierzęce	kg	6,8	7,0	6,6	7,2
13	Masło	kg	7,4	8,3	7,5	8,0
14	Przetwory					
14	zbożowe z ryżem	kg	122	124	128	128
15	Ziemniaki	kg	155	154	160	160
16	Cukier	kg	41,7	45,0	41,8	43,0
17	Sól	kg	42,8	38,0	45	48
18	Wody	kg	107	103	125	130

Consumption of basic food articles in 1983 in comparison to 1982 and the provisions of the program accepted for 1990. Key: 1. group; 2. [j.m.]; 3. level of consumption; 4. according to the program for 1990; 5. variant I; 6. variant II; 7. meat and meat products; 8. milk and milk products (except butter); 9. fish and fish products; 10. eggs; 11. vegetable oils; 12. animal fats; 13. butter; 14. grain products and rice; 15. potatoes; 16. sugar; 17. fruit; 18. vegetables.

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POLAND

POLISH-SOVIET COOPERATIVE CASE STUDIES

Chmielnicki Nuclear Power Plant

Warsaw RZECZPOSPOLITA in Polish 18 Jun 85 p 3

[Article by Tomasz Bartoszewicz: "The Subject Is Energy. Coal versus Nuclear Power. Polish Contribution to the Chmielnicko-Rzeszow Line"]

[Text] Despite appearances, cooperation within CEMA is not a well known subject in our country. Disregarding the misinformation spread by diversionary radio stations, there are many misunderstandings resulting from the lack of information about multilateral economic cooperation. A common error (quite often amplified by the press) is to consider the CEMA activities to be synonymous with total economic cooperation among its member countries.

For this reason, while writing about multilateral economic cooperation initiated and implemented within the institutional framework of RWPG, it is necessary to define the subject.

First, multilateralism is a necessary precondition. This means that at least three member countries must be involved in a project. Otherwise, we have a bilateral cooperation which is outside the CEMA scope.

Second, cooperative effort should be based on an agreement concluded under the RWPG auspices. Inter alia, there are so called common investments which are supervised by the appropriate permanent commission of the Council.

Third, in principle, only such cooperative efforts are considered to be within the RWPG framework which eventually serve all member countries rather than only some of them. For instance, common exploitation of some raw material, even if it is done by only a few of the member countries, should assure deliveries to all members although, understandably, the direct participants may agree among themselves to retain some advantages, such as guaranteed annual deliveries.

Central Power Control

A good example of the multilateral cooperation of CEMA countries is provided by the operation of Central Power Control of united energy systems of Bulgaria,

Czechoslovakia, GDR, Poland, Romania, Hungary and the USSR. The agreement to establish the Central Power Control was signed in Moscow on 25 Jul 1962 on recommendation of a permanent RWPG commission of electrical energy. In accordance with the agreement, the Central Power Control is located in Prague.

According to the official CEMA publication, the unified energy system currently covers 1,828,000 square kilometers (which is less than the total area of all member countries because it includes only the European part of the USSR) where 165 million people live. The maximum system load is 101,365 MW.

Energy for Services

During the system's existence of more than 20 years, its transmitting capacity increased by a factor of 6.5 and the installed electrical power increased by a factor of 5.

Establishing energy connections between member countries provides several benefits. First, there is a time difference between countries (in relation to Warsaw time, a difference of 2 hours with the USSR and of 1 hour with Romania and Bulgaria) which causes the situation that the peak demands do not coincide. This permits a more rational use of the installed power by "short time" loans of energy. Second, the continually increasing transmission capability permits common energy investments with the repayment by continuing export of energy.

An interesting example of common energy investment may be the agreement of a few CEMA European countries regarding the construction of the Khmelnytsky Nuclear Power Plant in Western Ukraine. This agreement provides for repayment of the investment in construction by the delivery of electrical energy over a great number of years. For instance, Poland is guaranteed the import from USSR of 6 billion KWh (at destination) annually, which corresponds to 3.5 million tons of coal.

The electrical energy from the Khmelnytsky Nuclear Power Plant will be transmitted to Poland over the newly constructed line which is 400 km long. This is a high tension line (750 KV). On the Polish side it is extended to the Rzeszow substation from where imported energy will be delivered to the national power grid and, through a transit connecting system, to Czechoslovakia and Hungary.

This line is already operational and user tests have been conducted. Soon the electrical current should flow. There are certain delays in the agreed schedule but they are due to slippages encountered in plant construction. The RWPG experts, however, assure that the target delivery of 6 billion KWh annually, scheduled for 1988, should be achieved. Overall, by the year 2003 we will import from the USSR, as the repayment for Poland's investment in the construction of the plant, 108 billion KWh of electrical energy, which is the equivalent of over 60 million tons of coal.

It is also important that we will get clean energy without having to burn coal and polluting the environment. Thus, it is a very advantageous form of co-operation.

Basically, the Polish participation in the whole undertaking is the exporting of construction and assembly services. In fact, the multilateral agreement addresses only the construction of the Khmelnitskiy Nuclear Plant but, in accordance with executive understandings, Polish crews participate in the construction of three nuclear power plants in the USSR: Khmelnitskiy, Smolensk and Kursk. Simply, this permitted a better allocation of construction labor resources. In any event, all three power plants are connected with the unified RWPG energy system.

Future Plans

Until the end of 1984, our construction crews completed construction work at those three power plants worth 133 million of transferable rubles, i.e. 67 percent of the contract tasks. In 1985, construction should be completed at Smolensk and Kursk and in 1986 at the Khmelnitskiy. Overall, our contribution will amount to 200 million transferable rubles. Our contribution consists of the work of 5,800 construction workers, most of whom are highly skilled specialists. Construction of a nuclear power plant imposes exceptionally high quality requirements, even a slightest error that could be tolerated at a "normal" construction, is unacceptable here.

The Soviet investor is satisfied with the quality of work performed by the Poles which was officially acknowledged by the USSR Ministry of Energy and Electrification. Consequently, a possibility of continuing cooperation based on similar principles is under consideration. In January 1985, the RWPG Executive Committee accepted an energy development program for the member countries until the year 2000. That program anticipates construction of other nuclear power plants using the principle of multilateral investments.

It may be expected that the agreement regarding construction of the Chmielnicki Nuclear Power Plant will be used as a good precedent. However, to assure that increased quantities of electrical energy can be imported from the USSR (as the payment for Polish contribution to the possible construction of other power plants), it will be necessary to construct other transmission lines. In this context, a possibility is discussed to construct such a line across Northern Poland which would make it possible to transmit energy to the German Democratic Republic.

Szczecin Shipyards

Warsaw RZECZPOSPOLITA in Polish 24 Jun 85 p 3

[Article by Krzysztof Pohl: "Cooperation on Skids"]

[Text] A ship consists of a few dozens of major systems and thousands of parts. A shipyard is basically a huge assembly plant where ships are built using components furnished by the supporting domestic industry. But not everything can be made, or economically made, in Poland. Some components are imported and their proportion depends on the type of ship and owner's desires. In some cases, system components and individual items (e.g. paints) are imported from abroad and used by the domestic shipyard partners. Until recently, all that

import cost many more dollars than rubles. Currently, many actions are under way aiming at reversing that proportion and establishing closer ties with CEMA member countries. Some effects of these efforts are visible in the A. Warski Shipyard in Szczecin.

Imports from the dollar zone were growing steadily for many years. Only the economic upheaval at the beginning of this decade, the economic reform and the strict accounting of convertible currency brought to the fore the extent of dollar amounts which until then did not bother anybody. But now, says Mr. Jakub Jankowski, Chief of the Szczecin Shipyard Technical Coordination Office, the hard currency costs will "follow" each ship. The shipyard must share the hard currency with its suppliers. The need to reorient the supplier network became urgent.

Step by Step

Thus, three years ago, a process was started to find suppliers and to establish cooperation with member countries of the Mutual Economic Aid Council who are close to us in the economic sense. First of all, this applies to the cooperation with the Soviet Union. This was not an accidental decision. The USSR is the largest customer of our shipbuilding industry. During the next 5-year plan period, the Szczecin Shipyard will devote two-thirds of their capacity to fulfill Soviet orders. Our eastern neighbor has a well-developed shipbuilding industry and impressive technical and technological capabilities.

In order to achieve success, it was extremely important to get to know each other's capabilities. In 1982, Soviet specialists came to our seashore, to Szczecin, in order to learn more about the already completed ship designs, review the documentation and collectively decide which of the components imported from the West could be replaced by Soviet-made equipment without additional costs and structural changes. Some possibilities have been found already, such as leakproofing of covers of the ship's main shafts.

A year later, the Ship Technical Center in Gdansk started a unique collection of technical documents. In that collection, the data are found on ship components produced in the USSR which can and should be of interest to our designers. It turned out that fittings (valves, compensators) and electrical harnesses are available for the taking and can be used in assembly at the yards without major problems. Also, it turned out that the Soviet offer is open to the yard suppliers for their own use and that the units of the shipping industry such as Elmor, Famor, Klimor, Warma and others can take advantage of it. This way, new possibilities have been opened about which our designers did not know before.

Now, in our plans for closer cooperation, the time has come for the next, possibly more difficult, step. Most of the main engines and many auxiliary engines being sold to the Soviet Union are built under the license from a company called Sulzer. But we also produce in Poland (in Gdansk and in Poznan) engines designed by Burmeister. USSR has also purchased the Burmeister licence. The question arises: Should the Burmeister engines be mounted on a large scale on the ships built for our partner, and to what extent would this be practical and justifiable? A positive answer probably will be followed by mutual deliveries of Ships' engines.

Measurable Benefits

Another item - The Soviet partner suggested that Poland start manufacturing equipment for several systems, including components of ship automation. There are many possibilities of increasing cooperation. It should be remembered that in addition to ships, our industry sells directly to Soviet shipyards many elements of ship accessories. Outside of the ship industry proper, our plants sell centrifugal filters for fuel and oil, turbo-compressors and windlasses.

Mr. Jankowski estimates that in the last 3 years much has been done to increase the cooperation of both ship industries and that the next 5-year period looks even better. A delegation of Soviet experts is expected to visit Szczecin and other shipyards in July. Together with the Polish counterparts, they will review carefully the designs of new units which will be built in the late '80's. This early phase of ship construction is the best time to look for new ways of cooperation.

Meanwhile, the measurable effects of cooperation are growing from year to year. The Chief of Technical Coordination Office estimates that thanks to the mutual efforts the convertible currency savings on each ship built in Szczecin for the USSR amount on the average to a quarter of a million dollars. And it should be noted that the Warski yards will build over 50 ships (including those already delivered).

Economic necessity and the benefits of the Polish-Soviet cooperation draw the experts' attention to the other fellow members of the Mutual Economic Aid Council. Ocean-going ships are built in the German Democratic Republic, Romania and Bulgaria. Our Western neighbor furnishes automatic controls for the refrigerating equipment. The short circuit breakers bought in Romania turned out to be no worse than those imported from Italy.

It is widely believed that the potential of mutual cooperation and supplies is not fully used. Certainly, there is latent potential among the shipping industries of the Mutual Economic Aid Council countries. According to Mr. Jankowski and others, one of the main problems is lack of full information about mutual requirements and capabilities. The breaking of that barrier would provide the necessary stimulus to cooperation.

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